

Ordinance for Enforcement of the Civil Aeronautics Act

(Ordinance of the Ministry of Transport No. 56 of July 31, 1952)

Chapter I General Provisions

(Aeronautical Navigation Facility)

Article 1 Aeronautical Navigation Facility under the provision of paragraph (5) of Article 2 of the Civil Aeronautics Act (Act No. 231 of 1952, hereinafter referred to as "the Act") shall be as follows:

- (i) Aeronautical Radio Navigation Facility that aids the navigation of aircrafts by means of radio wave
- (ii) Aeronautical Lights Facility that aids the navigation of aircrafts by means of lights
- (iii) Obstacle Markings Facility that is to make aircrafts recognize the existence of object which may pose an impediment of navigation by colors or signs for any aircraft flying during the daytime

(Length of Heliport Approach Area)

Article 1-2 The length of heliport approach area as specified by the Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (7) of Article 2 of the Act shall have a length of not more than 1,000 meters as specified by the Minister of Land, Infrastructure, Transport and Tourism.

(Gradient of Approach Surface)

Article 2 Gradient for horizontal plane of approach surface as specified by the Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (8) of Article 2 of the Act shall be as follows:

- (i) 1/50th in the case of a landing strip used for the landing, performed by using an instrument landing apparatus or performed in accordance with a landing guidance by using precision approach radar
- (ii) Gradients listed in the following table, with categorized according to aerodrome, etc. and classified according to landing strip in the case of landing strip (other than that listed in the preceding item) for land-based aerodrome, etc. and sea-based aerodrome, etc.

Category of Aerodrome	Class of Landing Strip	Gradient
Land-Based Aerodrome, etc.	From A to D	1/40th

	E and F	Gradient of more than 1/40th and not more than 1/30th as specified by the Minister of Land, Infrastructure, Transport and Tourism
	G	1/25th
	H and J	1/20th
Water-based Aerodrome, etc.	A and B	1/40th
	C and D	1/30th
	E	1/20th

(iii) Gradient of more than 1/8th as specified by the Minister of Land, Infrastructure, Transport and Tourism in the case of landing strip (other than that prescribed under item (i)) of heliport; provided however, that it is particularly determined to be necessary in consideration of site conditions of such heliport, gradient of more than 1/20th and not more than 1/8th as specified by the Minister of Land, Infrastructure, Transport and Tourism

(Radial Length of Horizontal Surface)

Article 3 Radial length of horizontal surface as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (9) of Article 2 of the Act shall be as follows:

(i) Length listed in the following table, with categorized according to aerodrome, etc. and classified according to landing strip (the longest landing strip in the case of aerodromes, etc. with more than 2 landing strips), in the case of land-based aerodrome, etc. and sea-based aerodrome, etc.

Category of Aerodrome	Class of Landing Strip	Radius
Land-Based Aerodrome, etc.	A	4,000 meters
	B	3,500 meters
	C	3,000 meters
	D	2,500 meters
	E	2,000 meters
	F	1,800 meters
	G	1,500 meters
	H	1,000 meters
	J	800 meters
	Water-based Aerodrome, etc.	A
B		3,500 meters
C		3,000 meters
D		2,500 meters
E		2,000 meters

(ii) Length of not more than 200 meters as specified by the Minister of Land, Infrastructure, Transport and Tourism in the case of heliports

(Gradient of Heliport Transitional Surface)

Article 3-2 (1) Gradient of heliport transitional surface as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (10) of Article 2 of the Act shall be 1/2th.

(2) Notwithstanding the provisions of the preceding paragraph, in the case where gradient of transitional surface at the one longer side of landing strip (hereinafter referred to as "Longer Side A" in this paragraph) includes another longer side (hereinafter referred to as "Longer Side B" in this paragraph) within double-distance of the shorter side of such landing strip at outside of Longer Side B of landing strip and no object is projected from the plane with gradient of 1/10th upward at outside of landing strip; it may be as follows;

- (i) In the case where there is no object projected from the horizontal plane including the highest point of the landing strip within 3/4th distance of diameter of the rotary wings of helicopters to be expected to use the heliport located at outside of Longer Side A, gradient of more than 1/2th as specified by the Minister of Land, Infrastructure, Transport and Tourism
- (ii) In the case of other than the preceding item, gradient of 1/2th through 1/1th as specified by the Minister of Land, Infrastructure, Transport and Tourism

(Aeronautical Lights)

Article 4 Aeronautical lights as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (11) of Article 2 of the Act shall be as follows:

- (i) Aeronautical beacon Facilities that aid the navigation of aircraft at night or under the instrument meteorological condition
- (ii) Aerodrome Lights Facilities that aid aircraft taking-off or landing as specified under Article 114
- (iii) Obstacle Lights Facilities that make aircrafts recognize the existence of object which may endanger aircraft operation

(Instrument Meteorological Conditions)

Article 5 Low meteorological visibility as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (15), of Article 2 of the Act shall be meteorological conditions (hereinafter referred to as "visual meteorological condition") other than those listed in the following items according to the classification of aircrafts listed in the following items:

- (i) Aircraft that flies at an altitude above 3,000 meters (excluding aircrafts listed in items (iii) and (iv)): Weather conditions that meet requirements;
 - (a) that flight visibility is over 8,000 meters

- (b) that no cloud is within the vertical distance of each 300 meters above and below the aircraft
 - (c) that no cloud is within the horizontal distance of 1,500 meters from the aircraft.
- (ii) Aircraft that flies at an altitude less than 3,000 meters (excluding aircrafts listed in the following item and item (iv)): Each listed weather condition according to the classification of aircrafts listed in the following items
- (a) Aircraft that flies in air traffic control area (hereinafter referred to as "control area"), air traffic control zone (hereinafter referred to as "control zone") or air traffic information zone (hereinafter referred to as "information zone"): Weather conditions that meet requirements;
 - 1. that flight visibility is over 5,000 meters
 - 2. that no cloud is within the vertical distance of 150 meters above and 300 meters below the aircraft
 - 3. that no cloud is within the horizontal distance of 600 meters from the aircraft.
 - (b) that aircraft flies in the airspace other than control area, control zone and information zone: Weather conditions that meet requirements;
 - 1. that flight visibility is over 1,500 meters.
 - 2. that no cloud is within the vertical distance of 150 meters above and 300 meters below the aircraft.
 - 3. that no cloud is within the horizontal distance of 600 meters from the aircraft.
- (iii) Aircraft that flies at an altitude less than 300 meters from the ground surface or the water surface in the airspace other than the control area, the control zone and the information zone (excluding aircrafts listed in the following item): Weather conditions that meet requirements; (Regarding helicopter that flies at the speed of which collision with other object is avoidable, excludes the item listed in (a))
- (a) that flight visibility is over 1,500 meters.
 - (b) that aircraft may fly away from clouds and that the pilot may visibly recognize the ground surface or the water surface.
- (iv) At aerodrome, etc. within control zone or information zone or at aerodrome, etc. outside control zone and information zone designated in the public notice by the Minister of Land, Infrastructure, Transport and Tourism, aircraft that tries to take-off or land: Weather conditions that meet requirements;
- (a) that ground visibility is more than 5,000 meters (more than 8,000 meters if aerodrome, etc. is the one within the control zone and the one designated in the public notice by the Minister of Land, Infrastructure, Transport and Tourism).
 - (b) that height of clouds is more than 300 meters (more than 450 meters if

aerodrome, etc. is the one designated in the public notice by the Minister of Land, Infrastructure, Transport and Tourism specified in (b) above) from the ground surface or water surface.

(Visual Flight Rules)

Article 5-2 Visual Flight Rules means a flight procedure other than instrument flight rules.

(Glider)

Article 5-3 The categories of gliders are following 4 categories:

- (i) Powered glider (it means a one of powered gliders specified as a powered glider in the airworthiness category by Annex 1)
- (ii) High class glider (it means a one of gliders specified as a acrobatic glider A and utility glider U in the airworthiness category by Annex 1 but it excludes middle class and primary class gliders)
- (iii) Middle class glider (among utility gliders U in the airworthiness category specified by Annex 1, it means a one of gliders not suitable for acrobatic flight and aircraft towing but suitable for winch towing (including car towing; the same shall apply in the following item))
- (iv) Primary class glider (among utility gliders U in the airworthiness category specified by Annex 1, it means a one of gliders not suitable for acrobatic flight, aircraft towing and winch towing)

(Flight Manual)

Article 5-4 Flight Manual shall mean the documents that state the following items:

- (i) Aircraft General
- (ii) Matters relating to Aircraft Operating Limitations
- (iii) Operating procedures of various systems and other procedures that shall be carried out in case of emergency
- (iv) Operating procedures of various systems under normal conditions
- (v) Aircraft performance
- (vi) Items relating to aircraft noise
- (vii) Items relating to engine emission

(Document for Maintenance procedure)

Article 5-5 Document for Maintenance procedure shall mean the documents that state the following items:

- (i) Description relating to aircraft structures and its equipments and systems
- (ii) Methods for periodical inspection aircraft, methods for restoration of malfunction occurred on aircraft and other items relating to aircraft

maintenances

(iii) Limit operation hours of engine, propeller, and equipments specified in paragraph (1) of Article 31 equipped to aircraft

(iv) Other necessary matters

(Maintenance and Alternation)

Article 5-6 Contents of maintenance or alteration work shall be as prescribed in the following table based on the category of work listed in the following table.

Category of Work		Contents of Work	
Maintenance	Preservation	Minor Preservation	Replacement for standard equipments or parts without adjustment of rigging or clearance and complex assembly work under simple preservation works
		General Preservation	Preservation works other Minor Preservation
	Repair	Slight Repair	Repair work that effects on airworthiness remain minor, which is not complex, and is not required operational check of power system and other complex checks for confirmation of the work
		Minor Repair	Repair work other than Slight Repair and Major Repair
	Major Repair	Either of the following repair works (i) Repair work listed in the followings and other complex repair work that has a significant effect on airworthiness (a) Stretching, splicing, welding or similar works that is likely to contribute to a considerable effect on strength of member of primary structure (b) Work that requires complex or special technique or equipment	

		(ii) Repair work that use equipments or parts for which is not approved its specification by the Minister of Land, Infrastructure, Transport and Tourism in accordance with paragraph (1) of Article 14 of the Act
Alteration	Minor Alteration	Alteration that does not have a significant effect to weight, strength, function of engine, flight characteristics, and other airworthiness of aircrafts and that uses equipments or parts for which is approved specification by the Minister of Land, Infrastructure, Transport and Tourism in accordance with paragraph (1) of Article 14 of the Act
	Major Alteration	Alteration other than Minor Alteration

(Design Change)

Article 6 Categories and contents of design change shall be as prescribed in the following table.

Category of Design Change	Contents of Design Change
Minor Change	Change that does not have a significant effect to weight, strength, engine operation, flight characteristics and other airworthiness of aircrafts
Major Change	Change other than Minor Change

Chapter II Aircraft Registration Certificate, etc.

(Aircraft Registration Certificate)

Article 7 Format of aircraft registration certificate under Article 6 of the Act shall be subject to Form No.3.

Article 8 Any person who has registered transfer or alteration of aircraft shall obtain a renewal of aircraft registration certificate.

Article 9 Any person who intends to apply for reissuance of aircraft registration certificate due to losing, breaking or smearing of the aircraft registration certificate shall submit a written application for the reissuance of the aircraft registration certificate (Form No.4) to the Minister of Land, Infrastructure,

Transport and Tourism along with the currently owned aircraft registration certificate (except in the case of loss of the certificate).

Article 10 In the case where a deletion of the registration is made to the Aircraft Register, an owner of a registered aircraft shall return the aircraft registration certificate immediately.

(Stamping Position of Registration Mark)

Article 11 The stamping pursuant to provisions specified in paragraph (1) of Article 8-3 under the Act shall be engraved on the frame of the aircraft.

Chapter III Safety of Aircraft

Section 1 Airworthiness Certification, etc.

Article 12 Gliders specified in paragraph (1), Article 10 of the Act shall be primary class gliders.

(Airworthiness Certification)

Article 12-2 (1) Any person who intends to apply for airworthiness certification specified in paragraph (1) of Article 10 of the Act or paragraph (1) of Article 10-2 of the Act shall submit an airworthiness certificate application form (Form No.7) to the Minister of Land, Infrastructure, Transport and Tourism or the airworthiness Inspector.

(2) Any document which should be attached to the application form under the preceding paragraph and the period for its submission shall be in accordance with the classification listed in the following table:

Classification			Documents to be attached	Period for Submission
(i)	Any aircraft which is different from that type certificated under paragraph (1), Article 12 of the Act (excluding aircrafts listed in (iii)).	Aircrafts manufactured in Japan	(i) Design plans	At the commencement of designing

(ii) Design documents (iii) Design drawing (iv) Parts List (v) Manufacturing Plans	Prior to the commencement of manufacturing
(vi) Flight Manual (vii) Document for maintenance procedure (viii) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft (ix) Documents certifying that the confirmation of inspection is completed pursuant to the provision of paragraph (1), Article 39-4 (limited to aircrafts listed in items (iv) and (v) under paragraph (5), Article 10 of the Act.).	Prior to the inspection on current condition

	(x) Documents that state reference matters, other than those listed in each of the preceding items	
Aircrafts other than those manufactured in Japan	<p>(i) Documents and drawings which can certify that aircrafts conform to the standards set forth in paragraph (4), Article 10 of the Act</p> <p>(ii) Flight Manual</p> <p>(iii) Documents issued by governmental institutions of a country of manufacture that certify airworthiness, noise level or engine emissions of aircrafts</p> <p>(iv) In case of used aircraft, documents that state the total flight hours and flight hours since last overhaul inspection as well as technical records of maintenance or alteration thereof</p>	By desired date of inspection

				(v) Document for maintenance procedures (vi) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft (vii) Documents that state reference matters, other than those listed in the preceding three items	
(ii)	Any aircraft with type certificate obtained under paragraph (1), Article 12 of the Act (excluding aircrafts listed in (iii))	Aircrafts manufactured in Japan	Aircrafts other than those listed in item (i) under paragraph (6), Article 10 of the Act	(i) Manufacturing Plans (ii) Flight Manual (iii) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft	Prior to the commencement of manufacturing Prior to the inspection of current condition

		(iv) Documents that state reference matters, other than those listed in the preceding three items	
	Aircrafts listed in item (i) under paragraph (6), Article 10 of the Act	(i) Aircraft Statement of Conformity delivered pursuant to the provision of paragraph (1), Article 41 (limited to the one which is delivered within 15 days prior to the desired date of inspection, hereinafter the same shall be applied in this table) (ii) Flight Manual (iii) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft (iv) Documents that state reference matters, other than those listed in the preceding three items	By desired date of inspection
	Aircrafts other than those manufactured in Japan	(i) Flight Manual	By desired date of inspection

		<p>(ii) Documents issued by governmental institutions of a country of manufacture that certify airworthiness, noise level or engine emissions of aircrafts</p> <p>(iii) In case of used aircraft, documents that state the total flight hours and flight hours since last overhaul inspection of aircraft as well as technical records of maintenance or alteration thereof</p> <p>(iv) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft</p> <p>(v) Documents that state reference matters, other than those listed in each of the preceding items</p>	
--	--	--	--

(iii))	Any aircraft which has obtained airworthiness certification set forth in paragraph (1), Article 10 or paragraph (1), Article 10-2 of the Act	Aircrafts other than aircraft listed in item (iii) under paragraph (6), Article 10 of the Act	<p>(i) Flight Manual</p> <p>(ii) Documents that state the total flight hours and flight hours since last overhaul inspection of aircraft as well as technical records of maintenance or alteration thereof</p> <p>(iii) Documents that state custodial conditions during the suspension of use</p> <p>(iv) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft</p> <p>(v) Documents that state reference matters, other than those listed in each of the preceding items</p>	By desired date of inspection
------------	--	---	---	-------------------------------

		Any aircraft listed in item (iii) under paragraph (6), Article 10 of the Act	(i) Aircraft Statement of Conformity delivered pursuant to the provision under paragraph (1), Article 41 (ii) Flight Manual (iii) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft (iv) Documents that state reference matters, other than those listed in the preceding three items
--	--	--	---

Article 12-3 (1) In the case where the purpose of aircraft use is designated as set forth in paragraph (3) of Article 10 of the Act (including the case where it applies mutatis mutandis to paragraph (2) of Article 10-2 of the Act; hereinafter the same shall apply in this Article), airworthiness category as specified in Annex No.1 shall be defined.

(2) Aircraft operating limitations as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (3) of Article 10 of the Act shall be matters of limitations of the aircraft under item (ii) of Article 5-4.

Article 13 Designation under paragraph (3) of Article 10 of the Act (including the case where it applies mutatis mutandis to paragraph (2) of Article 10-2 of the Act) shall be made by delivering documents stating the matter set forth in the preceding Article (hereinafter referred to as "Designation for operating limitation, etc.") to an applicant.

Article 14 (1) Standards provided in item (i) under paragraph (4) of Article 10 of the Act (including the case where it applies mutatis mutandis to paragraph (2)

of Article 10-2 of the Act) shall be standards specified by Annex No.1 (in the case of components and parts, they shall be standards specified by Annex No.1 or the types or the specifications approved by the Minister of Land, Infrastructure, Transport and Tourism (in the case of radio equipments of radio station subject to the Radio Act (Act No. 131 of 1950), they shall be technical standards specified by the same Act)).

- (2) Aircraft specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism with regard to matters provided in item (ii) under paragraph (4) of Article 10 of the Act (including the case where it applies *mutatis mutandis* to paragraph (2) of Article 10-2 of the Act; hereinafter the same shall apply in this paragraph) shall be the aircraft subject to Annex No.2 and standards of the said item shall be the standards as specified in Annex No.2.
- (3) Aircraft specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism with regard to matters provided in item (iii) under paragraph (4) of Article 10 of the Act (including the case where it applies *mutatis mutandis* to paragraph (2) of Article 10-2 of the Act; hereinafter the same shall apply in this paragraph) shall be the aircraft subject to Annex No.3 and standards of the said item shall be the standards as specified in Annex No.3.

Article 14-2 (1) Any person who intends to apply for approval of the types or the specifications under paragraph (1) of the preceding Article shall submit an application form for approval of type (specification) of components, etc. (Form No.7-2) to the Minister of Land, Infrastructure, Transport and Tourism.

- (2) The following documents shall be attached to the application form provided in the preceding paragraph:
 - (i) Documents that state type or specification
 - (ii) Documents and drawings certifying that any design pertaining to type or specification shall conform to the type or specification under the preceding item
 - (iii) Documents certifying that the uniformity of components or parts of type or specification is assured
 - (iv) Documents that state reference matters, other than those listed in the preceding three items
- (3) An approval of the type or specification under paragraph (1) of the preceding Article shall be made by delivering a certificate of approval for type (specification) of components, etc. (Form No.7-3) to an applicant.
- (4) Any person who is granted approval under paragraph (1) of the preceding Article shall obtain an approval from the Minister of Land, Infrastructure, Transport and Tourism when he/she intends to change previously approved

type or specification.

- (5) The provisions from paragraph (1) to paragraph (3) shall apply mutatis mutandis to the case of the preceding paragraph.
- (6) When any person who is granted approval under paragraph (1) of the preceding Article and is certified for the capability specified in item (v) under paragraph (1) of Article 20 of the Act is certified in accordance with the said paragraph has inspected pursuant to item (vii) of Article 35 with regard to change of design pertaining to type or specification as previously approved (limited to falling minor change of the category of design change listed in the table under Article 6) and has confirmed that they should conform to the type or specification pursuant to the provision of paragraph (2) of Article 40, an application of the provision under paragraph (4) shall be deemed to be approved by said paragraph.
- (7) Any person who could confirmed under the provision under the preceding paragraph shall submit a written notice stating the following matters to the Minister of Land, Infrastructure, Transport and Tourism without delay.
 - (i) The name and address
 - (ii) The name and location of approved organization
 - (iii) The number of a certificate of approval of type (specification) of components, etc., and the type or name of specification of component or parts
 - (iv) Contents of design change that the relevant confirmation is made
- (8) The following documents shall be attached to the written notice provided in the preceding paragraph:
 - (i) Documents listed in each item of paragraph (2) (limited to the changed part)
 - (ii) A copy of the statement of design conformity certificate as delivered pursuant to the provision under paragraph (2) of Article 41
- (9) The Minister of Land, Infrastructure, Transport and Tourism may cancel his/her approval when it is found that safety or uniformity of any components or parts of the type or specification approved pursuant to paragraph (1) of the preceding Article is not assured or when said components or parts is not be applied.
- (10) Any person who manufactures components or parts of the type or specification approved pursuant to paragraph (1) of the preceding Article shall provide the components or parts with an indication that they are approved in accordance with said paragraph.
- (11) Indication method to be implemented pursuant to the preceding paragraph shall be designated by a certificate of approval for types (specifications) of components, etc. under paragraph (3).

Article 15 (1) Upon an application, the Minister of Land, Infrastructure, Transport and Tourism shall inspect whether or not components or parts

conform to types of paragraph (1) of Article 14 and shall certify that they are in compliance with the types when the Minister finds that they conform to the types of said provision.

- (2) Types of inspection to be performed pursuant to the provision of the preceding paragraph shall be designated by a certificate of approval for types (specifications) of components, etc. under paragraph (3) of the preceding Article.
- (3) Components or parts certified pursuant to paragraph (1) shall be deemed to be conformed to the standards set forth in item (i) under paragraph (4) of Article 10 of the Act pursuant to inspections under paragraph (4) of Article 10 of the Act or paragraph (2) of Article 17 of the Act.

Article 16 Format of airworthiness certificate under paragraph (7) of Article 10 of the Act applied mutatis mutandis pursuant to paragraph (7) of Article 10 of the Act or paragraph (2) of Article 10-2 shall be as Form No.8.

Article 16-2 When any operator of aircraft who intends to apply for reissuance of airworthiness certificate due to losing, breaking or smearing thereof, he/she shall submit an application form for reissuance (Form No.8-2) to the person who delivered such airworthiness certificate, together with such airworthiness certificate (except in the case of loss of the certificate).

Article 16-3 Any person who owns or retains an airworthiness certificate which falls under any of the following items shall return such airworthiness certificate to the person who delivered it without delay. In this case, a document that states the reasons for returning shall be attached.

- (i) Airworthiness certificate that the validity period is expired
- (ii) Old airworthiness certificate where a new airworthiness certificate is delivered before the effective period of such airworthiness certification is expired
- (iii) Airworthiness certificate where airworthiness certification becomes invalid

(Airworthiness Inspector)

Article 16-4 Qualifications and experiences under paragraph (1) of Article 10-2 of the Act shall be as follows:

- (i) Qualifications
 - (a) Any person who attains the age of 23 until the date on which he/she applies for approval pursuant to paragraph (1) of Article 10-2 of the Act.
 - (b) Any person who has a competence certification for the qualification of first class aircraft maintenance technician or second class aircraft maintenance technician (limited to the certificate restricted to powered glider) or a competence certification (limited to the certificate restricted to

matters related to airframe, matters related to aircraft component, matters related to piston engine and matters related to propeller) for the qualification of aircraft overhaul technician, or has competence which is recognized as equal to or greater than the aforementioned qualifications.

(ii) Experiences

- (a) Any person who has two years or more of experience in manufacture, alteration or repair of glider;
- (b) Any person who completed the training performed by the Minister of Land, Infrastructure, Transport and Tourism regarding the standards specified in item (ii) and item (iii) under paragraph (4) of Article 10 of the Act.

Article 16-5 Gliders under paragraph (1) of Article 10 of the Act shall be middle class glider, high class glider and powered glider.

Article 16-6 None of the following person may apply for certification pursuant to paragraph (1) of Article 10-2 of the Act:

- (i) Any person who does not have Japanese nationality
- (ii) Any person whose qualification has been revoked pursuant to the provision under paragraph (11) of Article 16 of the Act and for whom two years has not passed since the date of that revocation
- (iii) Any person who has been sentenced to imprisonment or severer punishment and for whom two years has not passed since either execution of the sentence was completed or conclusion of being not subject to the execution of the sentence
- (iv) An adult ward or a person under guardianship

Article 16-7 (1) Any person who intends to apply for certification pursuant to paragraph (1) of Article 10-2 of the Act shall submit an application form for certification of airworthiness inspector stating the following matters to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name, date of birth and address (if he/she has business office other than the said address, its name and address shall be appended)
 - (ii) If he/she belongs to any company or other organizations, its name and location of main office
 - (iii) Category and number of qualification certificate
- (2) Application form specified in the preceding paragraph shall attach his/her two pictures (without posted and taken within the past six months and upper-body included without hats and caps, (3 cm height and 2.4 cm width); hereinafter the same shall be applied in this Chapter) and the following documents:
- (i) An abstract of his/her family register

- (ii) Certificate of registered matters provided by paragraph (1) of Article 10 of the Act of Guardianship Registration (Act No. 152 of 1999)
- (iii) Personal resume
- (iv) Documents certifying that he/she has experience provided by item (ii) of Article 16-4

Article 16-8 (1) The Minister of Land, Infrastructure, Transport and Tourism shall deliver an identification card that may identify his/her status (Form No. 8-3, hereinafter referred to as "Identification Card of Airworthiness Inspector") to airworthiness inspector when he/she approved matters set forth in paragraph (1) of Article 10-2.

(2) Airworthiness inspector shall, at the time of engagement, carry with himself/herself his/her identification card of airworthiness inspector specified in the preceding paragraph.

Article 16-9 When airworthiness inspector intends to apply for reissuance of identification card of airworthiness inspector due to losing, breaking or smearing thereof, or changing of his/her name or address, he/she shall submit an application form for reissuance stating the following matters to the Minister of Land, Infrastructure, Transport and Tourism together with his/her two pictures and such identification card of airworthiness inspector (except in the case of loss of the certificate).

- (i) Name and address
- (ii) Approved number
- (iii) Reasons to apply for reissuance thereof

Article 16-10 (1) Airworthiness inspector shall prepare a report and an inspection record stating matters listed in the following items, and submit them to the Minister of Land, Infrastructure, Transport and Tourism without delay when he/she granted airworthiness certification pursuant to paragraph (1) of Article 10-2 of the Act or performed inspection pursuant to paragraph (2) of Article 16 of the Act; provided, however, that submission of the inspection record shall only be made upon a request of the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Report
 - (a) Name and address
 - (b) Approved number
 - (c) Registration number of a glider
 - (d) Type, manufacturing number, name of manufacturer and date of manufacturing of a glider
 - (e) Name and address of an applicant

- (f) Date and place that inspection is performed
- (g) Issuance date of airworthiness certificate and number of airworthiness certificate (limited when an airworthiness certification is granted pursuant to paragraph (1) of Article 10-2 of the Act)
- (ii) Inspection record
 - (a) Airworthiness certification is granted pursuant to paragraph (1) of Article 10-2 of the Act
 - 1. Matters concerning inspection for materials, parts and assembling parts
 - 2. Matters concerning internal inspection, general assembling inspection and flight inspection
 - (b) When inspections pursuant to paragraph (2) of Article 16 of the Act is performed
 - 1. Matters concerning repair and alteration (documents and drawings for design shall be attached)
 - 2. Matters concerning inspection for materials, parts and assembling parts
 - 3. Matters concerning general assembling inspection and flight inspection
- (2) A copy of flight Manual of such glider shall be attached to the report under the preceding paragraph (limited to that pertaining to airworthiness certification pursuant to paragraph (1) of Article 10-2 of the Act); provided, however, that it shall not be applied to a glider that has been granted airworthiness certification pursuant to paragraph (1) of Article 10 of the Act or paragraph (1) of Article 10-2 of the Act and its flight manual has not been changed.
- (3) In the case where airworthiness certification is granted pursuant to paragraph (1) of Article 10-2 of the Act to a glider with the type different from the one granted the type certification pursuant to paragraph (1) of Article 12 of the Act, documents and drawings for design of the glider shall be attached to the report under paragraph (1).

Article 16-11 The Minister of Land, Infrastructure, Transport and Tourism may cancel his/her approval for an airworthiness inspector if he/she falls under any of the following:

- (i) if he/she has died or has become the subject of the adjudication of disappearance
- (ii) if he/she falls under item (i), (iii) or (iv) of Article 16-6
- (iii) if he/she has violated the provision of an order by laws or based on laws
- (iv) if he/she has obtained an approval by illegal means
- (v) if he/she becomes subject to cancellation of his/her competence certificate or suspension of aeronautics services
- (vi) if he/she commits a misdeed or serious error in performing his/her duties as an airworthiness inspector

Article 16-12 As regards identification card of airworthiness inspector, the Minister of Land, Infrastructure, Transport and Tourism shall give a notice that it is invalid in the case where he/she has received a notification of loss thereof pursuant to Article 283 or an application for reissuance thereof pursuant to paragraph (9) of Article 16 of the Act, or has canceled its certification pursuant to the provision of the preceding Article.

Article 16-13 When the cancellation under the preceding Article is applied to an airworthiness inspector or the lost identification card of airworthiness inspector is found after he/she received reissuance thereof, a person who owns or retains the certificate shall return it to the Minister of Land, Infrastructure, Transport and Tourism without delay, along with documents stating the reason for such event.

(Permission for Test Flights, etc.)

Article 16-14 Any person who intends to obtain a permission pursuant to the proviso under paragraph (1) of Article 11 of the Act (including cases where it is applied mutatis mutandis under paragraph (3) of the same Article, paragraph (3) of Article 16 under the Act and paragraph (3) of Article 19 of the Act) shall submit an application form stating the following matters to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name and address
- (ii) Type of aircraft and nationality and registration marks of aircraft
- (iii) Outline of flight plan (purpose of flight, date and time and route shall be specified)
- (iv) Name and qualification of an operator
- (v) Name of fellow passenger and his/her purpose
- (vi) Matters that are estimated to exceed the categories or the operating limitations as designated, in the case where any person who intends to obtain permission pursuant to the proviso under paragraph (1) of Article 11 applied mutatis mutandis under paragraph (3) of Article 11 of the Act
- (vii) In the case where any person who intends to obtain permission pursuant to the proviso under paragraph (1) of Article of the Act applied mutatis mutandis under paragraph (3) of Article 16 of the Act or paragraph (3) of Article 19 of the Act, matters related to repair, alteration or maintenance pertaining to the permission
- (viii) Any other matter that will be of reference

(Type Certification)

Article 17 (1) Any person who intends to apply for type certification provided in

paragraph (1) of Article 12 of the Act shall submit an application form for type certification (Form No. 9) to the Minister of Land, Infrastructure, Transport and Tourism.

(2) Any document which should be attached to the application form under the preceding paragraph and the period for its submission shall be in accordance with the classification listed in the following table:

Classification		Documents to be attached	Period for Submission
(i)	Aircrafts that any foreign state, a Contracting State to the Convention on International Civil Aviation, certified type certification or performed other acts in regard to designs of the relevant type	(i) Documents and drawings which can certify that aircrafts conform to the standards set forth in paragraph (4), Article 10 of the Act (ii) Documents certifying that governmental institutions of the country issued and that the said country certified type certification and performed other acts (iii) Drawing List (iv) Parts List (v) Specifications (vi) Flight Manual (vii) Document for Maintenance Procedures (viii) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft (ix) Documents that state reference matters, other than those listed in the preceding each item	By desired date of inspection
(ii)	Aircrafts other than those listed in item (i)	(i) Design Plans	The commencement of designing
		(ii) Design Document (iii) Drawing List (iv) Design Drawings (v) Parts List	Prior to the commencement of manufacturing

	(vi) Manufacturing Plans	
	(vii) Specifications	Prior to the inspection of current condition
	(viii) Flight Manual (ix) Document for Maintenance Procedures (x) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft (xi) Documents certifying that the confirmation of inspection is completed pursuant to the provision of paragraph (1), Article 39-4 (limited to aircrafts listed in items (ii) under paragraph (2) of the following Article) (xii) Documents that state reference matters, other than those listed in each of the preceding items	

Article 18 (1) Inspections to conduct type certification shall be performed for the design of the relevant type, and manufacturing process and current conditions of one of aircrafts pertaining to its design.

(2) Notwithstanding the provisions of the preceding paragraph, a part of inspection for design or manufacturing process may not be performed for aircrafts listed in the following:

- (i) Aircrafts that any foreign state, a Contracting State to the Convention on International Civil Aviation, certified type certification or performed other acts in regard to designs of the relevant type
- (ii) Aircraft of which a design and an inspection after the design has been made pertaining to the relevant certification pursuant to item (vii) of Article 35 by a person who applied for type certification specified in paragraph (1), Article 12 of the Act and is certified for the capability specified in item (i) under paragraph (1), Article 20 of the Act under the said paragraph

Article 19 Format of type certificate under paragraph (3) of Article 12 of the Act shall be the same format as Form No.10.

(Change of Type Certification)

- Article 20 (1) Any person who intends to obtain an approval pursuant to paragraph (1) of Article 13 of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written application for change of type design (Form No.11), together with the currently owned type certificate and an attached document stating matters pertaining to the relevant changes according to the classification of the table under paragraph (2) of Article 17.
- (2) The provisions of paragraph (2) of Article 17 shall apply mutatis mutandis to the period for submission of the attached document under the preceding paragraph.

Article 21 The provisions of Article 18 shall apply mutatis mutandis to the case under the preceding Article.

Article 22 An approval pursuant to paragraph (1) of Article 13 of the Act shall be made by newly delivering type certificate.

- Article 22-2 (1) Changes specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (4) of Article 13 of the Act shall be the minor change of the category of design change listed in the table under Article 6 and shall not be fallen under the following changes.
- (i) Design change as listed in following to be made for an aircraft pursuant to item (ii) under paragraph (4) of Article 10 of the Act and other design change to be likely to affect noise of the relevant aircraft
 - (a) Design change accompanying change of nacelle shape and other change of aircraft shape
 - (b) Design change pertaining to engine or its parts equipped with an aircraft (limited to noise absorbing materials and other parts to affect noise of aircraft)
 - (c) Design change accompanying any major change of takeoff and landing performance
 - (ii) Design change as listed in following to be made for an aircraft pursuant to item (iii) under paragraph (4) of Article 10 of the Act and other design change to be likely to affect engine emissions of the relevant aircraft
 - (a) Design change accompanying change for sharp of air intake of engines
 - (b) Design change pertaining to engine, fuel system or their parts (limited to combustion chamber and other parts to affect engine emissions) equipped with an aircraft
 - (c) Design change accompanying any major change of engine performance
- (2) Notwithstanding the provisions of the preceding paragraph, when any design change is to be made based on an order of the Minister of Land, Infrastructure,

Transport and Tourism under the provision of paragraph (1) of Article 13 of the Act, the said change shall not be included in the change pursuant to paragraph (4) of Article 13 of the Act.

Article 22-3 (1) Any person who intends to notify the fact that confirmation is made pursuant to paragraph (5) of Article 13 of the Act, he/she shall submit a written notice stating matters listed in the following to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
- (ii) The name and location of approved organization
- (iii) Number of type certificate and type of an aircraft
- (iv) Descriptions of design change that the relevant confirmation is made

(2) Written notice under the preceding paragraph shall attach the following documents (limited to the part pertaining to changes in the case of documents listed from item (i) to item (viii)).

- (i) Design documents
- (ii) Drawing lists
- (iii) Design drawings
- (iv) Parts list
- (v) Specifications
- (vi) Flight Manual
- (vii) Document for Maintenance Procedures
- (viii) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft
- (ix) A copy of Statement of Design Conformity Certificate as delivered pursuant to the provision under paragraph (1) of Article 41
- (x) Documents that state reference matters, other than those listed in each of the preceding items

(Approval for Supplemental Type Design)

Article 23 (1) For a partial change in designs of the aircraft by any person other than a holder of the type certificate for aircraft of the certified type (hereinafter referred to as "Supplemental Type Design"), a person who intends to apply for an approval pursuant to paragraph (1) of Article 13-2 of the Act shall submit an application form for approval of Supplemental type design (Form No.11-2) to the Minister of Land, Infrastructure, Transport and Tourism.

(2) Any document which should be attached to the application form under the preceding paragraph and the period for its submission shall be in accordance with the classification listed in the following table:

Classification	Documents to be attached	Period for Submission

(i)	Aircraft that any foreign state, a Contracting State to the Convention on International Civil Aviation, granted approval and performed other acts in regard to supplemental type design thereof	<p>(i) Documents and drawings which can certify that aircrafts conform to the standards set forth in paragraph (4), Article 10 of the Act (limited to the part pertaining to changes)</p> <p>(ii) Documents certifying that governmental institutions of the country issued and that the said country certified supplemental type design and performed other acts</p> <p>(iii) Drawing Lists</p> <p>(iv) Parts List</p> <p>(v) Specifications</p> <p>(vi) Flight Manual (limited to the part pertaining to changes)</p> <p>(vii) Document for Maintenance Procedures (limited to the part pertaining to changes)</p> <p>(viii) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft</p> <p>(ix) Documents that state reference matters, other than those listed in the preceding each item</p>	By the desired date of inspection
(ii)	Aircrafts other than those listed in item (i)	<p>(i) Design plans pertaining to supplemental type design</p> <p>(ii) Design documents</p> <p>(iii) Drawing Lists</p> <p>(iv) Design drawings</p> <p>(v) Parts List</p> <p>(vi) Manufacturing Plans</p> <p>(vii) Specifications</p>	<p>The commencement of designing</p> <p>Prior to the commencement of manufacturing</p> <p>Prior to inspection of current condition</p>

		(viii) Flight Manual (limited to the part pertaining to changes) (ix) Document for Maintenance Procedures (limited to the part pertaining to changes) (x) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft (xi) Documents certifying that the confirmation of inspection is completed pursuant to the provision of paragraph (1), Article 39-4 (limited to aircrafts listed in items (ii) under paragraph (2) of the following Article) (xii) Documents that state reference matters, other than those listed in each of the preceding items	
--	--	---	--

Article 23-2 (1) Inspections for approving supplemental type design shall be performed for the design pertaining to the applicable supplemental type design, and manufacturing process and current conditions of one of aircrafts pertaining to its design.

(2) Notwithstanding the provisions of the preceding paragraph, a part of inspection for design or manufacturing process may not be performed for designs pertaining to supplemental type design or aircrafts pertaining to those designs listed in the following:

(i) Aircraft that any foreign state, a Contracting State to the Convention on International Civil Aviation, granted approval and performed other acts in regard to supplemental type design thereof

(ii) Aircraft for which a design and an inspection after the design has been made pertaining to the relevant certification pursuant to item (vii) of Article 35 by a person who applied for approval specified in paragraph (1) of Article 13-2 of the Act and is certified for the capability specified item (i) under paragraph (1) of Article 20 of the Act for the capability under the said paragraph

Article 23-3 An approval under paragraph (1) of Article 13-2 shall be made by

delivering a written acknowledgment of supplement type design (Form No.11-3) to an applicant.

(Approval for Change of Supplemental Type Design)

Article 23-4 (1) Any person who intends to obtain an approval pursuant to paragraph (3) of Article 13-2 of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application form for change of supplemental type design (Form No.11-4), together with the currently owned a written acknowledgment of supplemental type design and an attached document stating matters regarding the relevant changes according to the classification of the table under paragraph (2) of Article 23.

(2) The provisions of paragraph (2) of Article 23 shall apply mutatis mutandis to the time for submission of the attached document under the preceding paragraph.

Article 23-5 The provisions of Article 23-2 shall apply mutatis mutandis to the case under the preceding Article.

Article 23-6 An approval pursuant to paragraph (3) of Article 13-2 of the Act shall be made by newly issuing a written acknowledgment of supplemental type design.

Article 23-7 (1) Changes specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (4) of Article 13-2 of the Act shall be the minor change among the category of design changes listed in the table under Article 6 and shall not fall under design changes listed in each of items under paragraph (1) of Article 22-2.

(2) Notwithstanding the provisions of the preceding paragraph, when any design change is made based on an order of the Minister of Land, Infrastructure, Transport and Tourism under the provision of paragraph (1), Article 13-3 of the Act, the said change shall not be included in the change pursuant to paragraph (4) of Article 13-2 of the Act.

Article 23-8 (1) Any person who intends to a notification that confirmation is made pursuant to paragraph (5) of Article 13 of the Act applied mutatis mutandis in paragraph (5) of Article 13-2 of the Act, he/she shall submit a written notice stating matters listed in the following to the Minister of Land, Infrastructure, Transport and Tourism.

(i) Name and address

(ii) The name and location of approved organization

(iii) Number of written acknowledgment of supplemental type design and its

descriptions

- (iv) Descriptions of design change that the relevant confirmation is made
- (2) Written notice under the preceding paragraph shall attach the following documents (limited to the part pertaining to changes in the case of documents listed from item (i) to item (viii)).
 - (i) Design documents
 - (ii) Drawing lists
 - (iii) Design Drawings
 - (iv) Parts list
 - (v) Specifications
 - (vi) Flight Manual
 - (vii) Document for Maintenance Procedures
 - (viii) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft
 - (ix) Copy of Statement of Design Conformity Certificate as delivered pursuant to the provision under paragraph (1) of Article 41
 - (x) Documents that state reference matters, other than those listed in each of the preceding items

(Submission of Type Certificate, etc.)

Article 23-9 Any person who obtained an approval type certification or supplemental type design (hereinafter referred to as "Type Certification, etc." in this Article) shall submit the type certificate or the written acknowledgment of supplemental type design pertaining to the type certification, etc. the Minister of Land, Infrastructure, Transport and Tourism immediately, when type certification, etc. is canceled pursuant to the provision in paragraph (2) of Article 13-3 of the Act.

(Initiation Date of Valid Period of Airworthiness Certification)

Article 23-10 Initiation date of valid period of airworthiness certification shall be the date of delivery of airworthiness certificate pertaining to the said airworthiness certification, provided, however, that it shall be the following day of expiration date of the valid period, in the case where an airworthiness certification is newly delivered for the period from one month before expiration date of the valid period to expiration date of the valid period.

(Submission of Airworthiness Certificate, etc.)

Article 23-11 (1) Any operator of an aircraft shall submit airworthiness certificate of the aircraft to the Minister of Land, Infrastructure, Transport and Tourism immediately when the effect of the airworthiness certification of the aircraft is suspended pursuant to paragraph (2) of Article 14-2 of the Act.

(2) Any operator of an aircraft shall present airworthiness certificate or designation for operating limitations, etc. of the aircraft to the Minister of Land, Infrastructure, Transport and Tourism immediately when the valid period of the aircraft is shortened or designated matter is modified pursuant to the provision of paragraph (2) of Article 14-2 of the Act.

(Aircrafts That Shall Not Used for Air Navigation)

Article 23-12 Aircrafts specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in item (ii), Article 15 of the Act shall be the aircrafts equipped with turbojet engine or turboprop engine not in conformity with the standards under paragraph (2) of Article 14 and shall exceed 34,000 kilograms of the maximum takeoff weight.

(Inspection for Repair and Alteration)

Article 24 Any repair or alteration which is to receive inspections to the extent specified by Ordinances of the Minister of Land, Infrastructure, Transport and Tourism which is to receive inspections pursuant to paragraph (1), Article 16 of the Act shall be listed in each item of the right column under the following table according to the classification of aircrafts listed in each item of left column under the same table.

Classification of Aircrafts	The extent of Repair or Alteration
(i) Aircrafts set forth in paragraph (1), Article 19 of the Act	Alteration of the category of work listed in the table set forth in Article 5-6
(ii) Aircrafts other than those listed in the preceding item	<p>(a) Any major repair or alteration of the category of work listed in the table set forth in Article 5-6 (Major repair or major alteration in the case of glider)</p> <p>(b) The following repair or alteration to be performed for an aircraft set forth in item (ii) under paragraph (4), Article 10 of the Act and other repair or alteration which is likely to affect noise of the aircraft</p> <ol style="list-style-type: none"> 1. Any repair or alteration accompanying change of nacelle shape and other major change of aircraft shape 2. Any repair or alteration accompanying change of engine or its parts equipped with an aircraft (limited to noise absorbing materials and other parts to affect noise of aircraft) 3. Any repair or alteration accompanying any major change of the takeoff and landing performance

	<p>(c) The following repair or alteration to be performed for an aircraft set forth in item (iii) under paragraph (4), Article 10 of the Act and other repair or alteration which is likely to affect engine emissions of the aircraft</p> <ol style="list-style-type: none"> 1. Any repair or alteration accompanying sharp of air intake of engines 2. Any repair or alteration accompanying change of engine, fuel system or their parts equipped with an aircraft (limited to combustion chamber and other parts which affect engine emissions) 3. Any repair or alteration accompanying any major change of an engine performance
--	---

Article 24-2 The scope of repair for which inspection is not required, as prescribed by Ministerial Ordinance for Transport under paragraph (1) of Article 16 shall be those repairs not falling into the subject of the repairs prescribed under the preceding Article, subparagraph 1.

Article 25 (1) Any person who intends to receive inspections specified in paragraph (1) or paragraph (2) of Article 16 of the Act shall submit an application form for inspection of repair and alteration (Form 12) to the Minister of Land, Infrastructure, Transport and Tourism or the airworthiness inspector.

(2) Any document which should be attached to the application form under the preceding paragraph and the period for its submission shall be in accordance with the following table:

Documents to be attached	Period for Submission
(i) Plans of repair or alteration	Prior to the commencement of work
(ii) Flight Manual (limited to the part pertaining to changes) (iii) Document for Maintenance Procedures (limited to the part pertaining to changes) (iv) Documents that state necessary matters for computing the weight and the center of gravity of an aircraft (v) Documents certifying that the confirmation of inspection is completed pursuant to the provision of paragraph (1), Article 39-4 (limited to aircrafts listed in paragraph (2) of the following Article) (vi) Documents that state reference matters, other than those listed in each of the preceding items	Prior to inspection of current condition

Article 26 (1) Inspections specified in paragraphs (1) or (2) of Article 16 of the Act shall be performed for plans, processes and current conditions after

completion of works of repair or alteration.

- (2) Notwithstanding the provisions of the preceding paragraph, an aircraft for which a design and an inspection after the design has been made pursuant to the provision of item (vii) of Article 35 by a person who is certified based on item (i) under paragraph (1) of Article 20 of the Act for the capability specified in the same paragraph may not perform a part of inspection for plans or processes of repair or alteration.

Article 26-2 When the Minister of Land, Infrastructure, Transport and Tourism or the airworthiness inspector finds, as a result of the inspection pursuant to paragraph (1) or (2) of Article 16 under the Act, that an aircraft conform to each standard listed in the right column of the following table according to the classification of aircrafts listed in the left column of the table and the extent of repair or alteration listed in the middle column of the same table, he/she shall pass the aircraft.

Classification of Aircrafts	The extent of Repair or Alteration	Standards
(i) Aircrafts set forth in paragraph (1), Article 19 of the Act	(a) Alteration listed in the right column under item (i), the table of Article 24 (excluding alterations listed in (b) and (c))	Standards set forth in item (i) under paragraph (4), Article 10 of the Act
	(b) Alteration listed in the right column (b) under item (ii), the table of Article 24	Standards set forth in items (i) and (ii) under paragraph (4), Article 10 of the Act
	(c) Alteration listed in the right column (c) under item (ii), the table of Article 24	Standards set forth in items (i) and (iii) under paragraph (4), Article 10 of the Act
(ii) Aircrafts other than those listed in the preceding item	(a) Repair or alteration listed in the right column (a) under item (ii), the table of Article 24 (excluding alterations listed in (b) and (c))	Standards set forth in item (i) under paragraph (4), Article 10 of the Act
	(b) Repair or alteration listed in the right column (b) under item (ii), the table of Article 24	Standards set forth in items (i) and (ii) under paragraph (4), Article 10 of the Act
	(c) Repair or alteration listed in the right column (c) under item (ii), the table of Article 24	Standards set forth in items (i) and (iii) under paragraph (4), Article 10 of the Act

(Spare Parts Certification)

Article 27 Components which are critical for aircraft safety specified by

Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (1) of Article 17 of the Act shall be those listed in the following:

- (i) Rotor wings
- (ii) Transmission
- (iii) Instruments
- (iv) Starter, magnet generator, airborne generator, fuel pump, propeller governor, carburetor, hydraulic pump, cabin super-charger, combustion heater for de-icing, de-icing fluid pump, air compressor, vacuum pump, inverter, landing gear, float, ski, skid, constant-speed drive unit for generator, water or alcohol injection pump, exhaust turbine, cabin combustion heater, rudder, elevator, aileron, flap, fuel injection pump, lubricating oil pump, cooling-liquid pump, feathering pump, fuel control unit, de-icing system controller, oxygen regulator, pressure regulator for air-conditioning system, high-pressure air regulator, high-pressure air controller, voltage regulator, high-pressure oil regulator, high-pressure oil controller, oil cooler, cooling-liquid cooler, fuel tank (excluding integral type), oil tank, flight control actuator, landing gear actuator, actuator for power unit, ignition distributor, ignition exciter, engine mount and navigation equipment (excluding radio equipments of radio station subject to the Radio Act)

Article 28 Any person who intends to obtain spare parts certification under paragraph (1) of Article 17 of the Act shall submit an application form for spare parts certification (Form No.13) to the Minister of Land, Infrastructure, Transport and Tourism.

Article 29 (1) Inspection under paragraph (2) of Article 17 of the Act shall be made for designs, manufacturing processes, processes of maintenances or alterations and current conditions.

(2) Notwithstanding the provisions of the preceding paragraph, a component for which a design and an inspection after the design has been made pursuant to the provision of item (vii) of Article 35 by a person who is certified based on item (v) under paragraph (1) of Article 20 of the Act for the capability specified in the same paragraph may not perform a part of the inspection provided in the respective item according to the classification listed in the following items.

- (i) Component which is manufactured: Inspection for design or manufacturing process of the component
- (ii) Component which is maintenances: Inspections for design or maintenance process of the component
- (iii) Component which is altered: Inspections for design or alternating process of the component

Article 30 Spare parts certification set forth in paragraph (2) of Article 17 of the Act shall be certified by delivering a spare parts certificate (From No.14) or by indicating that spare part passed the inspection (From No.15 or From No.15-2) for the component that passed the inspection under the same paragraph.

(Imported Component that is deemed to be certified by Spare Parts Certification)

Article 30-2 Components that are imported specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in item (iv) under paragraph (3) of Article 17 of the Act shall be listed in the following:

- (i) Components that any foreign state, a Contracting State to the Convention on International Civil Aviation, granted certification approval or performed other acts for airworthiness thereof
- (ii) Components that, in a foreign state that has been certified by the Minister of Land, Infrastructure, Transport and Tourism as having equal or better standards and procedures than those of Japan with regard to certification and other acts for capabilities of manufacture, repair or alteration of components, a person who obtained the certification and other acts by relevant standards and procedures manufactured, repaired or alternated and confirmed airworthiness thereof

(Lapse of Spare Parts Certification)

Article 30-3 Repair or alteration to the extent specified by Ordinances of the Minister of Land, Infrastructure, Transport and Tourism set forth in paragraph (4) of Article 17 of the Act shall be major repair or alteration (excluding minor alteration in the case of a spare parts installed to gliders) of the category of work listed in the table of Article 5-6.

(Maintenances of Engine, etc.)

Article 31 (1) Important components for securing safety as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in Article 18 of the Act shall mean oil pump, carburetor, magnet generator, exhaust gas turbine, ignition distributor, fuel control unit, fuel injection pump, engine driven fuel pump and propeller governor.

(2) Time as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in Article 18 of the Act shall be the time as designated in public notice by the Minister of Land, Infrastructure, Transport and Tourism in consideration of structure and performance of engine, propeller and components listed in the preceding paragraph (hereinafter referred to as "Engine, etc.") and a method as specified by Ordinances of the Ministry of Land,

Infrastructure, Transport and Tourism set forth in the same Article shall be the overhaul, provided, however that engine, etc. which may always secure favorable conditions by maintaining with a method other than overhaul shall be the amount of time and method separately designated by the Minister of Land, Infrastructure, Transport and Tourism in consideration of maintenance condition, structure and performance of the engine based on an application of the operator of aircraft pertaining to said engine or shall be the one prescribed in maintenance manual (limited to the case that an operator of the said engine is a domestic air carrier and the amount of time and the method is prescribed in the maintenance manual of the said domestic air carrier).

(Aircrafts as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (1) of Article 19 of the Act)
 Article 31-2 Aircrafts as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (1) of Article 19 of the Act shall be an aircraft and a rotorcraft with a maximum passenger capacity of more than 30 seats or a maximum takeoff weight of more than 15,000 kilogram.

(Minor Preservation)
 Article 32 Minor preservation as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth in paragraph (1) of Article 19 of the Act shall be minor preservation of the category of work listed the table of Article 5-6.

(Confirmation of Maintenance or Alteration)
 Article 32-2 Confirmation under paragraph (2) of Article 19 of the Act shall be made for plans for aircraft maintenance or alteration and its processes and current conditions after completion of the aforementioned work and shall be made to sign or register and seal on an aircraft flight logbook (glider flight logbook in the case of gliders) as well.

Section 2 Approval of Organizations

(Scope of Capabilities and Limitations)
 Article 33 (1) An approval of organizations specified in Article 20 paragraph (1) of the Act (hereinafter referred to simply as "Approval") shall be made for one or more of scope of capabilities listed in the right column under the following table according to the classification of capabilities listed in the left column under the same table:

Classification of Capability	Scope of Capability
------------------------------	---------------------

(i) Capabilities listed in Article 20 paragraph (1) item (i) through item (iv) of the Act	<p>1 Capabilities pertaining to aircrafts with a maximum takeoff weight not more than 5,700 kg (excluding rotorcrafts)</p> <p>2 Capabilities pertaining to aircrafts with a maximum takeoff weight more than 5,700 kg (excluding rotorcrafts)</p> <p>3 Capabilities pertaining to rotorcrafts</p>
(i) Capabilities listed in Article 20 paragraph (1) item (v) through item (vii) of the Act	<p>1 Capabilities pertaining piston engines</p> <p>2 Capabilities pertaining turbine engines</p> <p>3 Capabilities pertaining to fixed pitch propellers</p> <p>4 Capabilities pertaining to variable pitch propellers</p> <p>5 Capabilities pertaining to rotors</p> <p>6 Capabilities pertaining to transmissions</p> <p>7 Capabilities pertaining to mechanical instruments</p> <p>8 Capabilities pertaining to electrical instruments</p> <p>9 Capabilities pertaining to gyro instruments</p> <p>10 Capabilities pertaining to electronic instruments</p> <p>11 Capabilities pertaining to mechanical accessories</p> <p>12 Capabilities pertaining to electrical accessories</p> <p>13 Capabilities pertaining to electronic accessories</p> <p>14 Capabilities pertaining to Radio communication equipments (excluding radio facilities of the radio stations subject to the Radio Act)</p> <p>15 Capabilities pertaining to main component parts</p> <p>16 Other capabilities pertaining to components as designated in public notice by the Minister of Land, Infrastructure, Transport and Tourism</p>

(2) Limitations listed in the right column under the following table may apply to approval according to the classification listed in the left column under the same table.

Classification of Approval	Limitations
----------------------------	-------------

(i) Approval for capabilities listed in item (i) under the table of the preceding paragraph	Limitations for the type of aircrafts, limitations for the category of work or contents of work listed in the table under Article 5-6, limitations for the category of design change, contents of design change listed in the table under Article 6 or other limitations.
(ii) Approval for capabilities listed in item (ii) under the table of the preceding paragraph	Limitations for the kind and type of components, limitations for the category of work or contents of work listed in the table under Article 5-6, limitations for the category of design change, contents of design change listed in the table under Article 6 or other limitations.

(Application for Approval)

Article 34 Any person who intends to apply for an approval shall submit an application form for approval of organizations (From No.16) for each organization to the Minister of Land, Infrastructure, Transport and Tourism, together with documents explaining that the organization conforms to the technical standards under the following Article.

(Criteria for Approval)

Article 35 Technical standards set forth in Article 20 paragraph (1) of the Act shall be as follows:

- (i) An applicant shall possess the following facilities;
 - (a) Facilities necessary for services pertaining to approval (hereinafter referred to as "Approved Service")
 - (b) Workshop having appropriate space necessary for the approved service, equipment for temperature and humidity control, lighting facilities and other facilities
 - (c) Facilities to appropriately store the required materials, parts and components for the approved service
- (ii) Each organization that performs services must appropriately assign the approved service and respective authorization and responsibility shall be clearly defined.
- (iii) That personnel capable of accurately performing the approved service are appropriately assigned to each facility specified in the preceding item.
- (iv) Personnel who completed educations and trainings regarding the Civil Aeronautics Act and operations for quality control system pursuant to the item (vi) and satisfies requirements listed in the middle column of the same table or a person who is certified by the Minister of Land, Infrastructure, Transport and Tourism as having ability equivalent to or superior to that of the said person shall be selected as the person who certifies items listed in the right column of the same table. (hereinafter referred to as "Certifying

Staff"), in accordance with classifications of the approved service listed in the left column under the following table.

Classification of Approved Service	Requirements of Certifying Staff	Classification of Certification
Approved service pertaining to Article 20 paragraph (1) item (i) of the Act	A person must be a graduate of a university or college of technology under the School Education Act (Act No. 26 of 1947) after completing the prescribed courses of engineering department, in regard to the approved service listed in the light column, must have at least 6 years' experience for university graduates (excluding junior college graduates, hereinafter the same shall apply in this table) or at least 8 years' experience for a person other than university graduates and must have professional knowledge of necessary areas for performing the service such as structure, electric and others.	Certification set forth in Article 13 paragraph (4) of the Act or Article 13-2 paragraph (2) of the Act, or certification of inspections set forth in item (i) under the table of Article 39-4 paragraph (1).
Approved service pertaining to item (ii) under Article 20 paragraph (1) of the Act	A person must be a graduate of a university or college of technology under the School Education Act after completing the prescribed courses of aeronautical engineering or mechanical engineering and, in regard to the approved service listed in the above column, must have at least 3 years' experience for university graduates or at least 5 years' experience for a person other than university graduates.	Certification set forth in item (i) under Article 10 paragraph (6) of the Act or item (ii) under Article 17 paragraph (3) of the Act
Approved service pertaining to item (iii) under Article 20 paragraph (1) of the Act	A person who must have a competence certification for qualification of first class aircraft maintenance technician, second class aircraft maintenance technician or aircraft overhaul technician corresponding to the approved service listed in the left column and must have at least 3 years' experience for the approved service.	Certification set forth in item (iii) under Article 10 paragraph (6) of the Act

<p>Approved service pertaining to item (iv) under Article 20 paragraph (1) of the Act</p>	<p>A person who must have a competence certification for qualification of first class aircraft maintenance technician, second class aircraft maintenance technician first class aircraft line maintenance technician, second class aircraft line maintenance technician or aircraft overhaul technician corresponding to the approved service listed in the left column and must have at least 3 years' experience for the approved service. However, for an aircraft which has been altered, it shall be sufficient for a person who must have competence certification for qualification of first class aircraft maintenance technician or second class aircraft maintenance technician, completed educations and trainings regarding alternation of the type of aircraft pertaining to the said alternation and must have at least 3 years' experience for alternation of the type of aircraft pertaining to the alternation.</p>	<p>Certification set forth in Article 19 paragraph (1) of the Act or Article 19-2 of the Act</p>
<p>Approved service pertaining to item (v) under Article 20 paragraph (1) of the Act</p>	<p>A person must be a graduate of a university or college of technology under the School Education Act after completing the prescribed courses of engineering department, in regard to the approved service listed in the left column, must have at least 6 years' experience for university graduates or at least 8 years' experience for a person other than university graduates and must have professional knowledge of necessary areas for performing the service such as structure, electric and others.</p>	<p>Certification set forth in Article 14-2 paragraph (6) or certification of inspections set forth in item (ii) under the table of Article 39-4 paragraph (1).</p>
<p>Approved service pertaining to item (vi) under Article 20 paragraph (1) of the Act</p>	<p>A person must be a graduate of a university or college of technology under the School Education Act after completing the prescribed courses of engineering and, in regard to the approved service listed in the left column, must have at least 3 years' experience for university graduates or at least 5 years' experience for a person other than university graduates.</p>	<p>Certification set forth in item (i) under Article 17 paragraph (3) of the Act</p>

<p>Approved service pertaining to item (vii) under Article 20 paragraph (1) of the Act</p>	<p>It shall satisfy the requirements listed in 1 or 2 below:</p> <p>1 A person who must have a competence certification for qualification of aircraft overhaul technician corresponding to the approved service listed in the left column and must have at least 3 years' experience for the approved service.</p> <p>2 A person must be a graduate of a university or college of technology under the School Education Act after completing the prescribed courses of engineering and, in regard to the approved service listed in the left column, must have at least 3 years' experience for university graduates or at least 5 years' experience for a person other than university graduates.</p>	<p>Certification set forth in item (iii) under Article 17 paragraph (3) of the Act</p>
--	--	--

- (v) Implementation method of works (excluding methods pertaining to quality control system under the following item) shall be appropriate for the proper implementation of the approved service. (the implementation method of works regarding the approved service under Article 20 paragraph (1) item (iii) of the Act shall mean the necessary maintenance for the aircraft as a result of inspection for structure of the aircraft and conditions of its component and system and shall be appropriate for properly implementing the approved service);
- (vi) Quality control system including the following systems shall be appropriate for the proper implementation of the approved service:
- (a) Systems regarding operation and maintenance of facilities set forth in item (i)
 - (b) Systems regarding education and training of personnel set forth in item (iii)
 - (c) Systems regarding revision of implementation method of works set forth in the preceding item
 - (d) Systems regarding procurement, administration and operation of technical data
 - (e) Systems regarding administration of materials, parts and components
 - (f) Systems regarding receiving inspection for materials, parts and components, etc. and acceptance inspection, in-process inspection and completion inspection for aircrafts and components

- (g) Systems regarding process control
- (h) Systems regarding control of implementation of the service by the person being commissioned in the case where service is commissioned
- (i) Systems regarding record management of the service
- (j) Systems regarding audits conducted by any organization independent from implementation organization of the service
- (k) Systems regarding management of design documents and other documents pertains to design (hereinafter referred to as "Design Document" in this Chapter) and inspection for the documents, for the approved service under Article 20 paragraph (1) item (i) or (v) of the Act
- (l) Systems regarding inspections in order to manage test specimen and to maintain its quality, for the approved service under Article 20 paragraph (1) item (i) or (v) of the Act
- (vii) In the case of the approved service listed in the left column of the following table, inspections listed in the middle column of the same table shall be made in methods listed in the right column of the same table.

Classification of Approved Service	Classification of Inspection	Implementation Method of Inspection
Approved service under, Article 20 paragraph (1) item (i) of the Act	Inspection after design set forth under, Article 10 paragraph (5) item (iv) of the Act, Article 13 paragraph (4) of the Act, Article 13-2 paragraph (4) of the Act, Article 18 paragraph (2) item (ii) (including cases where it is applied mutatis mutandis under Article 21), Article 23-2 paragraph (2) item (ii) (including cases where it is applied mutatis mutandis under Article 23-5) or Article 26 paragraph (2)	Examination of Design Document, Ground test, Flight test and Other Methods
Approved service under Article 20 paragraph (1) item (ii) of the Act	Inspection after completion set forth under Article 10 paragraph (6) item (i) of the Act	Ground test and Flight test
Approved service under Article 20 paragraph (1) item (iii) of the Act	Inspection after maintenance set forth under Article 10 paragraph (6) item (iii) of the Act	

Approved service under Article 20 paragraph (1) item (v) of the Act	Inspection after design set forth under Article 10 paragraph (5) item (v) of the Act, Article 14-2 paragraph (6) or Article 29 paragraph (2)	Examination of Design Document, Function Test and Other Methods
Approved service under Article 20 paragraph (1) item (vi) of the Act	Inspection after completion set forth under Article 17 paragraph (3) item (i) of the Act	Function Test and Other Methods

(Issuance of Approval Certificate)

Article 36 Approval shall be made by issuing an approval organization certificate (Form No.16-2) to an applicant.

(Validity Period for Approval)

Article 37 Validity period for approval shall be 2 years.

(Change of Limitations)

Article 38 (1) In the case where a person who is approved intends to change any limitations, he/she shall submit an application form for the limitation change (Form No.16-3) to the Minister of Land, Infrastructure, Transport and Tourism and obtain its approval.

(2) Approval under the preceding paragraph shall be made by examining whether or not service capabilities pertaining to changes conform to the technical standards set forth in Article 35.

(3) Approval under paragraph (1) shall be made by issuing an approval for the limitation change (Form No.16-4) to an applicant.

(Matters regarding Implementation of Service and application for approval pertaining to approved organization exposition)

Article 39 (1) Matters regarding implementation of service as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth under Article 20 paragraph (2) of the Act shall be as follows:

- (i) Capability and coverage for the approved service and limitations
- (ii) Matters regarding facilities, working areas, storage facilities and other facilities used for the service
- (iii) Matters regarding organization and personnel that perform the service
- (iv) Matters regarding quality control system and other implementation methods of the service
- (v) Matters regarding certification service performed by certifying staff

- (vi) Other necessary matters regarding implementation of the service
- (2) Any person who intends to apply for approval of establishment or change of approved organization exposition pursuant to Article 20 paragraph (2) of the Act shall submit an application form for approval of establishment (change) of an approved organization exposition (Form No.16-5) to the Minister of Land, Infrastructure, Transport and Tourism, together with documents stating matters listed in the following:
 - (i) Approved organization exposition that he/she intends to establish or change (in case of change, comparison of the original and the being changed shall be clearly presented)
 - (ii) Documents explaining that the approved organization exposition under the preceding item conform to the technical standards under the following Article

(Technical Standards)

Article 39-2 Technical standards as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism set forth under paragraph (3) of Article 20 the Act shall be as follows:

- (i) Matters of item (i) under paragraph (1) of the preceding Article shall clearly determine capability and coverage for the approved service and limitations in accordance with the provisions under Article 33.
- (ii) Matters set forth in item (ii) through (iv) under paragraph (1) of the preceding Article shall conform to the standards listed in each item of Article 35.
- (iii) Matters set forth in item (v) under paragraph (1) of the preceding Article shall appropriately determine methods to perform certification service in accordance with the provisions Article 39-4 through Article 41.

(Operation of Approved Service)

Article 39-3 Any person who is approved shall fairly operate the approved service in accordance with the approved organization exposition stipulated in Article 20 paragraph (2) of the Act.

(Methods for Certification of Inspection)

Article 39-4 (1) The certifying staff who performs the approved service under Article 20 paragraph (1) item (i) or (v) of the Act shall perform each inspection listed in the right column of the following table according to classifications listed in the left column of the same table and then sign or register and seal on the document certifying that effect when he/she confirmed that all inspections has been properly made and results of the inspections shall be recorded.

Classification of Approved Service	Inspection to be Confirmed
(i) Approved service under Article 20 paragraph (1) item (i) of the Act	Inspection after design set forth under Article 10 paragraph (5) item (iv) of the Act, Article 13 paragraph (4) of the Act, Article 13-2 paragraph (4) of the Act, Article 18 paragraph (2) item (ii) (including cases where it is applied mutatis mutandis under Article 21), Article 23-2 paragraph (2) item (ii) (including cases where it is applied mutatis mutandis under Article 23-5) or Article 26 paragraph (2)
(ii) Approved service under Article 20 paragraph (1) item (v) of the Act	Inspection after design set forth under Article 10 paragraph (5) item (v) of the Act, Article 14-2 paragraph (6) or Article 29 paragraph (2)

(2) The certifying staff who took charge of design to be subjected to inspections set forth in the preceding paragraph shall not issue the confirmation under the preceding paragraph.

(Method, etc. to confirm that it conforms to the Standards under Article 10 paragraph (4) of the Act)

Article 40 (1) Confirmations that it conforms to the standards set forth in paragraph (4) of Article 10 of the Act shall be made by a certifying staff (excluding person who took charge of design pertaining to the confirmation for item (iii) and (iv) of the same table) for each matter listed in the middle column of the following table according to classifications listed in the left column of the same table, and confirmations by the certifying staff shall be made by signing or registering and sealing on the aircraft statement of conformity or the flight logbook listed in the right column of the same table.

Classification of Confirmation	Matters	aircraft statement of conformity or Flight Logbook
(i) Confirmation set forth under Article 10 paragraph (6) item (i) of the Act	For manufacturing processes and current conditions after completion of aircrafts, the aircrafts conform to the standards set forth under Article 10 paragraph (4) of the Act.	Aircraft statement of conformity and aircraft flight logbook set forth in paragraph (1) of the following Article (glider flight logbook for gliders)

(ii) Confirmation set forth under Article 10 paragraph (6) item (iii) of the Act	For maintenance processes and current conditions after maintenance of aircrafts, the aircrafts conform to the standards set forth under Article 10 paragraph (4) of the Act.	
(iii) Confirmation set forth under Article 13 paragraph (4) of the Act	For a change in designs of aircrafts of the type which is received type certification, aircrafts after the relevant change in design conform to the standards set forth under Article 10 paragraph (4) of the Act.	Design statement of conformity set forth in paragraph (1) of the following Article
(iv) Confirmation set forth under Article 13 paragraph (2) item (iv) of the Act	For a change in designs of the aircraft obtained an approval of supplemental type design, aircrafts after the relevant change in design conform to the standards set forth under Article 10 paragraph (4) of the Act.	
(v) Confirmation set forth under Article 17 paragraph (3) item (i) of the Act	For manufacturing processes and current conditions after completion of equipments, the equipments conform to the standards set forth under Article 10 paragraph (4) item (iv) of the Act.	Authorized release certificate set forth in paragraph (1) of the following Article
(vi) Confirmation set forth under Article 17 paragraph (3) item (ii) of the Act	For manufacturing processes (limited to manufacturing of equipments) and current conditions after completion of equipments, the relevant equipment conforms to the standards set forth under Article 10 paragraph (4) item (i) of the Act.	
(vii) Confirmation set forth under Article 17 paragraph (3) item (iii) of the Act	For plan and processes of repair or alteration of equipments and current conditions after completion of the work, the relevant equipments conforms to the standards set forth under Article 10 paragraph (4) item (i) of the Act.	

(viii) Confirmation set forth under Article 19 paragraph (1) of the Act or Article 19-2 of the Act	For plan and processes of maintenance or alteration of aircrafts and current conditions after completion of the work, airplanes listed in the following (a) through (c) conform to the standards set forth in (a) through (c) respectively. (a) Aircraft performed maintenance or alternation on (excluding aircrafts listed in (b) and (c)): Standards set forth under Article 10 paragraph (4) item (i) of the Act (b) Aircraft performed repair or alternation listed in the right column (b) under item (ii), the table of Article 24: Standards set forth under, Article 10 items (i) and (ii) paragraph (4) of the Act (c) Aircraft performed repair or alternation listed in the right column (c) under item (ii), the table of Article 24: Standards set forth under Article 10 paragraph (4) items (i) and (iii) of the Act	Aircraft Flight Logbook set forth in paragraph (1) of the following Article (glider flight logbook for gliders)
---	---	---

(2) Confirmations set forth under paragraph (6) Article 14-2 of that for design change of components or parts of type or specification as certified pursuant to paragraph (1) of Article 14, components or parts after the relevant design change still conform with type or specification granted the relevant approval shall be made by a certifying staff (excluding person who took charge of design pertaining to the relevant confirmation, and). confirmation by the certifying staff shall be made by signing or registering and sealing on design statement of conformity under paragraph (2) of the following Article.

(Issuance of Statement of Conformity)

Article 41 (1) A person who is approved shall issue the statement of conformity listed in the middle column of the following table to any person who is listed in the right column of the same table when he/she has confirmed that it conforms to the standards set forth under Article 10 paragraph (4) of the Act as listed in the left column of the same table.

Classification of Confirmation	Classification of Statement of Conformity	Person who is certified
--------------------------------	---	-------------------------

Confirmation set forth in item (i) and item (ii), table of paragraph (1), the preceding Article	Aircraft statement of conformity (Form 17)	Operator of the relevant aircraft
Confirmation set forth in item (iii), table of paragraph (1), the preceding Article	Design statement of conformity (Form 17-2)	Person who obtained type certification
Confirmation set forth in item (iv), table of paragraph (1), the preceding Article		Person who is certified supplemental type certification
Confirmation set forth in item (v) through item (vii), table of paragraph (1), the preceding Article	Authorized release certificate (Form 18)	Operator of the relevant equipment

(2) A person who is approved shall issue design statement of conformity to any person who has obtained the approval when he/she had confirmed that it conforms to types or specifications as certified pursuant to Article 14 paragraph (1) listed in paragraph (2) of the preceding Article.

(Training)

Article 41-2 Upon receiving a notice that a training shall be conducted for the necessary matters regarding implementation of the Civil Aeronautics Act and other approved service from the Minister of Land, Infrastructure, Transport and Tourism, a person who is approved shall designate appropriate person from among personnel under Article 35 item (iii) to make him/her participate in the training.

Chapter IV Airmen

(Application for Competence Certification)

Article 42 (1) A person who intends to apply for competence certification pursuant to Article 22 of the Act (excluding those applying under the provisions of Article 57, called "applicant for competence certification" in paragraph (3)) shall submit a written application for competence certification (Format 19 (in the case of a person who intends to be exempted from paper examinations pertaining to all subjects (called "applicant for exemption from all paper examination subjects" below) Format 19-2)) to the Minister of Land, Infrastructure, Transport and Tourism.

(2) The written application pursuant to the preceding paragraph shall be accompanied by one copy of photograph (taken within six months prior to application, without a hat, with upper body, without mounting to a board (3 cm

in height and 2.5 cm in width), with full name written on the back, also applicable hereafter), as well as attaching the documents listed in item (i) or item (ii), or producing the documents listed in item (iii) and attaching a photocopy thereof.

(i) In the case of a person who intends to be exempted from examinations pertaining to all or some of the theory subjects pursuant to the provisions of Article 48 or 48-2, a photocopy of the document pursuant to Article 47

(ii) In the case of a person who intends to be exempted from examinations pertaining to all or some of the subjects under the provisions of Article 49, a photocopy of his/her competence certificate

(iii) In the case of a person who holds a certificate of qualification pertaining to air navigation duties which was granted by a foreign government which is a contracting state of the Convention on International Civil Aviation and intends to be exempted from examinations, the relevant certificate

(3) When applying for practical examinations (including when intending to be exempted from the practical examinations pertaining to all or some of the subjects), an applicant for competence certification (excluding the applicant for exemption from all paper examination subjects) who has passed the paper examinations shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written application for practical examinations (Format 19-2), together with one copy of photograph and a photocopy of the document pursuant to Article 47 (only those pertaining to the paper examination passes), and attaching the documents listed in item (i) as applicable, or producing the documents listed in item (ii) and attaching a photocopy thereof.

(i) In the case of a person who intends to be exempted from practical examinations pertaining to all or some of the subjects pursuant to the provisions of Article 49, a photocopy of the competence certificate

(ii) In the case of a person who holds a certificate of qualification pertaining to air navigation duties which was granted by a foreign government which is a contracting state of the Convention on International Civil Aviation and intends to be exempted from practical examinations, the relevant certificate

(4) An applicant for competence certification in accordance with the provisions of paragraph (1) shall submit to the Minister of Land, Infrastructure, Transport and Tourism the abstract of his/her family register or a certificate of entry in the family register or a copy of the resident register which states his/her permanent domicile (or in the case of a foreigner, a certificate from a consul of his/her country which certifies his/her nationality, full name, date of birth and sex (in the case of a person who is unable to submit a certificate from a consul from his/her country, a document which certifies those matters which was issued by a competent authority), also applicable hereafter) and a document which proves his/her flight and other aeronautical experience as listed in

Appended Table 2, within two years of the date of notification pursuant to Article 47 of paper examination passes pertaining to the said application (or in the case of an applicant for exemption from all paper examination subjects, within two years of the date of submission of written application for competence certification).

- (5) A person applying for competence certificate pertaining to qualification as a flight radiotelephone operator under the provisions of paragraph (1) shall submit to the Minister of Land, Infrastructure, Transport and Tourism a photocopy of his/her radiotelephone operator license within two years of the date of submission of written application for competence certification.

(Requirements for Competence Certification, etc)

Article 43 (1) Competence certification or instrument flight certification pursuant to Article 34 paragraph (1) of the Act or flight instructor certification pursuant to Article 34 paragraph (2) cannot be issued unless the person has reached 17 years of age in the case of a private pilot, second class flight navigator or flight radiotelephone operator (among the private pilot qualifications, in the case of a qualification pertaining to gliders, 16 years of age), 18 years of age in the case of a commercial pilot, first class flight navigator, flight engineer, first class aircraft line maintenance technician, second class aircraft line maintenance technician and aircraft overhaul technician, 19 years of age in the case of a second class aircraft maintenance technician, 20 years of age in the case of a first class aircraft maintenance technician, and 21 year of age in the case of an airline transport pilot, and has the flight and other aeronautical experience listed in Appended Table 2.

- (2) The qualifications specified by Ordinances of the Minister of Land, Infrastructure, Transport and Tourism pursuant to Article 26 paragraph (2) of the Act are first class radio operator for general services, second class radio operator for general services or flight radiotelephone operator.

(Proof of Flight Experience etc)

Article 44 The flight and other experience required pursuant to Article 42 paragraph (4) and paragraph (1) of the preceding Article shall be certified through the methods listed below. However, the experience gained prior to effective date of the Act shall not be subject to the following.

- (i) In the case of a holder of a competence certificate, the flight experience pertaining to that qualification shall be certified by the applicable captain after the end of each flight.

- (ii) Flight experience pertaining to piloting for the purpose of flight training as listed in each item of Article 35 paragraph (1) of the Act shall be certified each time by the supervisor.

(iii) In the case of matters other than those listed in the preceding two items, they shall be certified each time by the user, instructor or other equivalent persons.

(Publication and Notification of Examination Dates etc)

Article 45 (1) When the Minister of Land, Infrastructure, Transport and Tourism conducts examinations pursuant to Article 29 paragraph (1) of the Act (including the cases where it is applied mutatis mutandis to Article 29-2 paragraph (2), Article 33 paragraph (3), and Article 34 paragraph (3)), he/she shall publish in the Official Gazette the date and location of examinations, qualifications in connection with the competence certification for which the examinations are being conducted, the timing for submission of written application for competence certification pursuant to Article 42 paragraph (1), written application for change of rating on competence certification pursuant to Article 57 paragraph (1), written application for aviation English proficiency certification pursuant to Article 63 paragraph (1), or written application for instrument flight certification or flight instructor certification pursuant to Article 64 paragraph (1), and any other required matters.

(2) After receiving a written application for competence certification pursuant to Article 42 paragraph (1), written application for change of rating on competence certification pursuant to Article 57 paragraph (1), written application for aviation English proficiency certification pursuant to Article 63 paragraph (1), or written application for instrument flight certification and flight instructor certification pursuant to Article 64 paragraph (1), the Minister of Land, Infrastructure, Transport and Tourism shall notify the candidate the details of examinations and other required matters pursuant to Article 29 paragraph (1) of the Act (including the cases where it is applied mutatis mutandis to Article 29-2 paragraph (2) of the Act, Article 33 paragraph (3) of the Act, and Article 34 paragraph (3) of the Act).

(Examination Subjects etc)

Article 46 The examinations pursuant to Article 29 paragraph (1) of the Act (including the cases where it is applied mutatis mutandis to Article 29-2 paragraph (2) of the Act, Article 33 paragraph (3) of the Act, and Article 34 paragraph (3) of the Act) shall be conducted for the subjects listed in Appended Table 3. However, among the practical examination subjects, those subjects that the Minister of Land, Infrastructure, Transport and Tourism deems to be unnecessary due to the strength, structure or performance of the aircraft used for the practical examination will not be conducted.

Article 46-2 The Minister of Land, Infrastructure, Transport and Tourism may

conduct all or part of the practical examination in a flight simulator or a flight training device, when conducting a practical examination for the subjects listed in Appended Table 3.

(Notification of Theory Examination Pass)

Article 47 The Minister of Land, Infrastructure, Transport and Tourism shall notify in writing the person who has passed the paper examinations or the person who has obtained pass marks in some of the subjects of the paper examinations.

(Exemption from examinations)

Article 48 When a person who has passed the paper examinations applies for competence certification for the same qualification as the one pertaining to the said pass and for the same category of aircraft (in the case of aircraft overhaul technician qualification, the same rating of functions permitted), or if he/she applies for aviation English proficiency certification pursuant to Article 33 paragraph (1) or for instrument flight certification or flight instructor certification, he/she will, upon application, be exempted from paper examinations conducted within two years of the date of notification pertaining to the said pass.

Article 48-2 When a person who sat paper examinations in all paper examination subjects and obtained pass marks in some of the subjects applies for competence certification for the same qualification as the one pertaining to the said paper examinations, he/she will be exempted from the paper examinations pertaining to the subjects in which the person obtained pass marks, upon application, only for the paper examinations conducted within one year of the notification pursuant to Article 47 pertaining to the applicable paper examinations, in the paper examinations pertaining to all of the applicable subjects and following the paper examinations pertaining to all of the applicable subjects until the paper examinations pertaining to the applicable application.

Article 48-3 If a person who holds an aviation English proficiency certification newly applies for aviation English proficiency certification, he/she will be exempted from paper examinations pertaining to the applicable application, upon application, only when he/she undertakes the practical examinations pertaining to the applicable application prior to the expiry of his/her existing aviation English proficiency certificate.

Article 49 In relation to the examinations for a person who applies for

competence certification for qualifications other than the one that he/she currently holds, or for change of rating on competence certification, or for instrument flight certification or for flight instructor certification, if they are the same as the examinations subjects pertaining to the existing competence certification, instrument flight certification or flight instructor certification and if the Minister of Land, Infrastructure, Transport and Tourism deems them to be equivalent or above, they will not be conducted.

Article 50 (1) In the case of a person who holds a certificate of qualification pertaining to air navigation duties which was granted by a foreign government which is a contracting state for the Convention on International Civil Aviation, the Minister of Land, Infrastructure, Transport and Tourism may, upon application, grant competence certification, change of rating on competence certificate, aviation English proficiency certification or instrument flight certification without conducting all or parts of the paper examinations (except for those relating to the domestic Aviation Act listed in Appended Table 3) and practical examinations.

(2) In the case of a person who holds a certificate of qualification for air navigation duties which was granted by a foreign government which is a contracting state for the Convention on International Civil Aviation, if the Minister of Land, Infrastructure, Transport and Tourism deems that the said government conducts the equivalent examinations pursuant to the provisions of Article 46 or higher, he/she may, upon application, grant competence certification, change of rating on competence certification, aviation English proficiency certification or instrument flight certification without conducting any examination.

(3) In the case of the two preceding paragraphs (other than when aviation English proficiency certification is to be granted), the person shall pass the examinations that the Minister of Land, Infrastructure, Transport and Tourism deems necessary for determining whether the person possesses Japanese language or English language skills required as an airman.

Article 50-2 (1) In the case of a person who has completed the course of the Independent Administrative Institution Civil Aviation College, upon application, the paper examinations for competence certification for flight radiotelephone operator qualification or for aviation English proficiency certification or the practical examinations for competence certification for a commercial pilot qualification or private pilot qualification or for change of rating on competence certificate or instrument flight certification will not be conducted. However, this is not applicable if one year has passed from the date of completion of the course of the applicable Civil Aviation College.

- (2) In order to apply under the provisions of the preceding paragraph, a documentary evidence of completion of the course of the Independent Administrative Institution Civil Aviation College shall be attached.
- (3) In the case of the examinations for a person who has completed the course of an airman training school which is designated by the Minister of Land, Infrastructure, Transport and Tourism under the provisions of Article 29, paragraph (4) of the Act (hereafter called "designated airman training school"), as specified by the Minister of Land, Infrastructure, Transport and Tourism by public notice, upon application, all or part of the practical examinations will not be conducted. However, this is not applicable if one year has passed from the date of completion of the course of the applicable designated airman training school (in the case of a course pertaining to the subjects of basic maintenance technique in item (ii), paragraph (3) of the following Article, it shall be two years).
- (4) In the case of a person who has completed the course of designated airman training school pertaining to flight radiotelephone operator qualification or for aviation English proficiency certification, upon application, paper examinations pertaining to the applicable competence certification or aviation English proficiency certifications will not be conducted. However, this is not applicable if one year has passed from the date of completion of the course of the applicable airman training school.
- (5) In order to apply under the provisions of the preceding two paragraphs, a completion certificate (Format 19-3) issued by the administrator of the designated airman training school shall be attached.
- (6) In the case of a person who has been assessed to possess the knowledge and ability in aviation English by a Japanese air carrier designated by the Minister of Land, Infrastructure, Transport and Tourism under the provisions of Article 29, paragraph (4) of the Act, as applied mutatis mutandis as a replacement in Article 33, paragraph (3) of the Act (hereafter called "designated air carrier for assessment of aviation English proficiency"), upon application, the examinations pertaining to aviation English proficiency certification will not be conducted. However, this is not applicable if one year has passed from the date of applicable assessment.
- (7) In order to apply under the provisions of the preceding paragraph, a certificate of result of proficiency assessment (Format 19-3-2) issued by the administrator of the designated air carrier for assessment of aviation English proficiency.

(Application for Designation as an Airman Training School)

Article 50-3 (1) A person wishing to be designated as an airman training school under the provisions of Article 29, paragraph (4) of the Act shall submit a

written application for designation as an airman training school (Format 19-4) to the Minister of Land, Infrastructure, Transport and Tourism.

- (2) The written application of the preceding paragraph shall be accompanied by two copies of the training manual and a document detailing the training history.
- (3) The training manual of the preceding paragraph shall include the following matters.
 - (i) Full name and resume of the administrator of the applicable training school
 - (ii) Ratings pursuant to Article 25 paragraph (1), (2) and (3) of the Act, rating pertaining to the change pursuant to Article 29-2 paragraph (1) of the Act, aviation English proficiency certification pursuant to Article 33 paragraph (1) of the Act, instrument flight certification pursuant to Article 34 paragraph (1) of the Act, or a course specified separately for each subject of basic maintenance technique pertaining to competence certification for first class aircraft maintenance technician, second class aircraft maintenance technician, first class aircraft line maintenance technician, second class aircraft line maintenance technician, and aircraft overhaul technician qualifications indicated in Appended Table 3
 - (iii) Full name, resume and airman qualifications of theory instructors
 - (iv) Full name, resume and airman qualifications of practical instructors
 - (v) Full name, resume and airman qualifications of competency assessor (refers to a person who is engaged in assessing practical or theory competency pertaining to the course at the applicable school, also applicable below)
 - (vi) Outline of the training facility
 - (vii) Contents and method of training
 - (viii) Method of competency assessment
 - (ix) Other matters that can prove conformance with standards that are set out in items in the next Article

(Standards for Designation of Airman Training School)

Article 50-4 The designation of airman training school pursuant to Article 29 paragraph (4) of the Act shall be granted when the following standards are conformed to.

- (i) It is a school that is established by a provider who satisfies the following requirements.
 - (a) The person is not a person who has, in the last two years, engaged in improper conduct in connection with issuance of completion certificate at a designated airman training school or examinations pursuant to Article 29 paragraph (1) of the Act (including the cases where it is applied mutatis mutandis to Article 29-2 paragraph (2), Article 33 paragraph (3), and Article 34 paragraph (3)), or a person who committed an offence against

- law and was subject to fines or severer punishment and is less than two years since the end of its execution or since becoming not subject to execution (hereafter called "disqualified person").
- (b) The person is deemed to be capable of properly and reliably operate the applicable school.
 - (c) The person has substantial experience in airman training.
 - (d) If the provider is a corporation, the officer (regardless of his/her title, a person with an equivalent authority or power or higher) of the applicable corporation is not a disqualified person.
- (ii) There is an administrator who satisfies the following requirements.
- (a) 25 years of age or more.
 - (b) Not a disqualified person.
 - (c) The person is deemed to be capable of properly administer the operations of the applicable school.
 - (d) The person has the required knowledge and experience of airman training.
- (iii) There are at least the required number of theory instructors who satisfy the following requirements.
- (a) 21 years of age or more.
 - (b) The person holds competence certification, aviation English proficiency certification or instrument flight certification corresponding to the course of the applicable training school, or the person has sufficient knowledge and ability in the subject pertaining to the course at the applicable training school and has substantial practical experience in the applicable theory subject.
 - (c) The person has sufficient knowledge and ability to teach the theory pertaining to the course at the applicable school and has received the necessary training as an instructor.
- (iv) There are at least the required number of practical instructors who satisfy the following requirements.
- (a) 21 years of age or more.
 - (b) The person holds competence certification, aviation English proficiency certification, instrument flight certification or flight instructor certification (including the equivalent certification pertaining to air navigation duties granted by a foreign government which is a contracting state of Convention on International Civil Aviation) required for practical training pertaining to the course at the applicable school, or a person with equivalent experience, knowledge and ability or more.
 - (c) The person has sufficient knowledge and ability to conduct the practical training pertaining to the course at the applicable school and has received the necessary training as an instructor.
- (v) There are at least the required number of competency assessors who have

been accredited by the Minister of Land, Infrastructure, Transport and Tourism as satisfying the following requirements.

- (a) 25 years of age or more.
- (b) Not a disqualified person.
- (c) If conducting a competency assessment pertaining to the course towards competence certification or instrument flight certification, among the courses at the applicable training school, a person who holds the competence certification or instrument flight certification that is required for the applicable competency assessment.
- (d) The person has the ability to carry out competency assessment pertaining to the course of the applicable training school.
- (vi) There is a training facility that satisfies the following requirements.
 - (a) Buildings and other facilities required to conduct theory training
 - (b) Aircraft and other equipment and facilities required to conduct practical training
- (vii) The subjects of the theory training and practical training pertaining to the course at the applicable training school and number of training hours for each subject shall be appropriate.
- (viii) There are following systems for proper operation of the applicable training facility.
 - (a) A system relating to management of theory instructors and practical instructors
 - (b) A system relating to evaluation of competency assessment results
 - (c) A system relating to maintenance and management of training facilities
 - (d) A system for management of training history records
 - (e) A system relating to audits of the applicable training facilities

(Operation of Service of Designated Airman Training School)

Article 50-5 The administrator of a designated airman training school shall operate their services properly and in accordance with the training manual set out in Article 50-3 paragraph (2) to conform to the standards set out in items of the preceding Article.

(Designation of Airman Training School)

Article 50-6 (1) Designation of airman training school pursuant to the provisions of Article 29 paragraph (4) of the Act shall be granted for each facility.
(2) The designation pursuant to the preceding paragraph shall specify the courses.

(Issuance of the Designation Document for Airman Training School)

Article 50-7 Designation of an airman training school shall be granted by issuing

a designation document for airman training school (Format 19-5).

(Accreditation of Competency Assessor)

Article 50-8 (1) Accreditation of a competency assessor pursuant to Article 50 paragraph (4) item (v) shall be granted per course.

(2) The accreditation pursuant to the preceding paragraph may be subject to a time limit.

(Changes to the Specified Course of a Designated Airman Training School)

Article 50-9 (1) If the designee intends to change the matter that is specified in relation to a course of the applicable designated airman training school, he/she shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written application for change of specification (Format 19-6) accompanied by two copies of the training manual to be changed and a document stating the training history and shall obtain an approval.

(2) The approval of the preceding paragraph shall be granted after assessment of whether the matters pertaining to the changes conform to the standards set out in Article 50-4.

(3) The approval pursuant to paragraph (1) is granted by issuing the applicant a Document Approving the Specification Change (Format 19-7).

(Limitations on Issuance of Completion Certificate)

Article 50-10 The administrator of a designated airman training school shall not issue a completion certificate under the provisions of Article 50-2 paragraph (5) to anyone other than a person who has completed the course of the applicable designated airman training school and has passed the competency assessment conducted by a competency assessor pursuant to Article 50-4 item (v) for the subjects in which he/she is exempt from examinations under the provisions of the aforesaid Article paragraph (3) and (4).

(Cancellation of Accreditation of Competency Assessor)

Article 50-11 The Minister of Land, Infrastructure, Transport and Tourism may cancel the accreditation of a competency assessor accredited under the provisions of Article 50-4 item (v), if he/she deems that there was impropriety in connection with the conduct of a competency assessment or that the standards pursuant to the same item are not met.

(Specifying the Aircraft)

Article 51 The aircraft specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 28 paragraph (3) of the Act are as follows.

- (i) Basic Class Gliders and Middle Class Gliders
- (ii) The aircraft which flies between places outside of Japan which is crewed on board and operated (including handling of the aircraft systems and engines on board the aircraft) by a person who is specified in a public notice by the Minister of Land, Infrastructure, Transport and Tourism as a person who has sufficient knowledge and ability required to engage in air navigation duties on the applicable aircraft

Article 51-2 A person who intends to obtain an approval pursuant to Article 28 paragraph (3) of the Act shall submit a written application stating the details of the following matters to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Full name and address
- (ii) Category, class and type of the aircraft and the country of registration and registration marks of the aircraft
- (iii) Clearly state the outline of the flight plan (purpose, date and time, and route of the flight).
- (iv) Full name and qualifications of the pilot
- (v) Full name and purpose of the accompanying person
- (vi) Other pertinent matters

(Format for Competence Certificate)

Article 52 The format of a competence certificate pursuant to Article 23 of the Act shall be as per Format 20.

(Rating on Competence Certificate)

Article 53 (1) A rating pertaining to aircraft categories under Article 25 paragraph (1) of the Act and a rating pertaining to aircraft classes under paragraph (2) of the same Article shall be granted based on the aircraft used for the practical examination. In this case, the class of aircraft shall correspond to the category of aircraft listed in the upper column of the following table, and shall each be the class of aircraft listed in the lower column of the same table.

Category of Aircraft	Class of Aircraft
Aeroplane	Single- Engine Piston Land
	Single- Engine Turbine Land
	Multi-Engine Piston Land
	Multi-Engine Turbine Land
	Single-Engine Piston Sea
	Single-Engine Turbine Sea
	Multi-Engine Piston Sea
	Multi-Engine Turbine Sea
Rotorcraft	Same as classes in the Aeroplane paragraph

Glider	Motor Glider without Tow Hook
	Motor Glider with Tow Hook
	High Class Glider
	Middle Class Glider
Balloons	Same as classes in the Aeroplane paragraph

(2) In the case of the preceding paragraph, if the class of aircraft that is used in the practical examination is the class listed in the upper column of the following table, for the purpose of competence certification for an airline transport pilot, commercial pilot and private pilot and flight engineer qualification (only when the category of the class of aircraft for the rating is aeroplane or balloon), the class of aircraft for the rating shall be the class listed in the lower column of the following table.

Class of Aircraft used in the Practical Examination	Class of Aircraft for Rating
Single-engine Piston Land or Single-engine Turbine Land	Single-engine Piston Land and Single-engine Turbine Land
Multi-engine Piston Land or Multi-engine Turbine Land	Multi-engine Piston Land and Multi-engine Turbine Land
Single-engine Piston Sea or Single-engine Turbine Sea	Single-engine Piston Sea and Single-engine Turbine Sea
Multi-engine Piston Sea or Multi-engine Turbine Sea	Multi-engine Piston Sea and Multi-engine Turbine Sea

(3) In the case of paragraph (1), for the purpose of competence certification relating to first class aircraft maintenance technician, second class aircraft maintenance technician, first class aircraft line maintenance technician and second class aircraft line maintenance technician qualification, if the class of aircraft that is used in the practical examination is the class listed in the upper column of the following table, the class of aircraft for the rating shall be the class of aircraft listed in the lower column of the same table.

Class of Aircraft used in the Practical Examination	Class of Aircraft for Rating
Single-engine Piston Land, Multi-engine Piston Land, Single-engine Piston Sea or Multi-engine Piston Sea	Single-engine Piston Land, Multi-engine Piston Land, Single-engine Piston Sea and Multi-engine Piston Sea
Single-engine Turbine Land, Multi-engine Turbine Land, Single-engine Turbine Sea or Multi-engine Turbine Sea	Single-engine Turbine Land, Multi-engine Turbine Land, Single-engine Turbine Sea and Multi-engine Turbine Sea
Motor Glider without Tow Hook or Motor Glider with Tow Hook	Motor Glider without Tow Hook, Motor Glider with Tow Hook, High Class Glider, Middle Class Glider
High Class Glider	High Class Glider and Middle Class Glider

Article 54 A rating pertaining to aircraft types pursuant to Article 25 paragraph (2) of the Act shall be granted in accordance with the following divisions based on the aircraft used in the practical examination.

- (i) In the case of a pilot qualification, for an aircraft model which requires two pilots to operate it or the model specified by the Minister of Land, Infrastructure, Transport and Tourism, the applicable aircraft model
- (ii) In the case of a flight engineer qualification, the applicable aircraft model
- (iii) In the case of a first class aircraft maintenance technician and first class aircraft line maintenance technician qualification, the following models
 - (a) For the aircraft specified under the provisions of Article 56-2, the applicable aircraft model
 - (b) For the aircraft model specified by the Minister of Land, Infrastructure, Transport and Tourism, the applicable aircraft model
- (iv) In the case of a second class aircraft maintenance technician and second class aircraft line maintenance technician, where the aircraft model is specified by the Minister of Land, Infrastructure, Transport and Tourism, the applicable aircraft model

Article 55 A rating in connection with the rating of functions permitted pursuant to Article 25 paragraph (3) of the Act shall be granted separately for aircraft system structure, aircraft system equipment, piston engine, turbine engine, propellers, instruments, electronic equipment, electrical equipment, or radio communication equipment, based on the type of operation pertaining to the examinations.

Article 56 If a person who holds a pilot qualification receives competence certification that is superior to his/her qualification (based on the order pursuant to the provisions of Article 24 of the Act) for the same category (in the case of a glider, the class) of aircraft, the ratings pertaining to his/her previous qualification shall be valid for the newly acquired qualification.

(The Aircraft which Purposes for which Second Class Aircraft Maintenance Technician and Second Class Aircraft Line Maintenance Technician is Unable to Carry out Post-Maintenance Checks)

Article 56-2 The aircraft that is used for purposes specified in Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism in the paragraphs pertaining to second class aircraft maintenance technician and second class aircraft line maintenance technician in the Appended Table are the aircraft that falls within the airworthiness categories, as set out in Appended Document 1, of aeroplane transport C, aeroplane transport T, rotorcraft

transport TA class and rotorcraft transport TB class.

Article 56-3 A minor repair specified in Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism in the paragraphs pertaining to first class line aircraft maintenance technician and second class aircraft line maintenance technician in Appended Table is a slight repair that is within the work category listed in the table in Article 5-6.

(Changes to the Rating on Competence Certification)

Article 57 (1) A person who intends to apply for a change to the rating on competence certification under the provisions of Article 29-2 paragraph (1) of the Act shall submit a written application for change to the rating on competence certificate (Format 19 (Format 19-2 in the case of an applicant for exemption from all theory examination subjects)) to the Minister of Land, Infrastructure, Transport and Tourism.

(2) The provisions of Article 42 paragraph (2) to (4) shall apply mutatis mutandis to the application of the preceding paragraph. In this case, where it says "one copy" within paragraph (2) of the Article shall be deemed to be replaced with "one copy (except for the applicant for exemption from all theory examination subjects)", "one copy of photograph and a photocopy of the document pursuant to Article 47" shall be deemed to be replaced with "a photocopy of the document pursuant to Article 47", "an applicant for competence certification" in paragraph (4) of the Article shall be deemed to be replaced with "an applicant for change of rating on competence certification (only applicable to an applicant for change of rating on competence certification where the required flight experience or other experiences are different from the flight experience or other experiences required for the grant of his/her existing competence certification)", and "the abstract of his/her family register or a certificate of entry in the family register or a copy of the resident register which states his/her permanent domicile (or in the case of a foreigner, a certificate from a consul of his/her country which certifies his/her nationality, full name, date of birth and sex (in the case of a person who is unable to submit a certificate from a consul from his/her country, a document which certifies those matters issued by a competent authority), also applicable hereafter) and a document which proves that the applicant possesses the flight and other aeronautical experience listed in Appended Table 2" shall be deemed to be replaced with "flight and other aeronautical experience listed in Appended Table 2".

(Notification of Cancellation of Competence Certificate etc)

Article 58 The Minister of Land, Infrastructure, Transport and Tourism shall, when imposing a disposition based under the provisions of Article 30 of the Act

(including the cases where it is applied mutatis mutandis pursuant to Article 35 paragraph (5) of the Act), notify the matter and the cause to the airman or student pilot (a person who has received an approval pursuant to Article 35 paragraph (1) item (i) of the Act, also applicable below) who is being subject to the disposition.

(Suspension from Performing Air Navigation Duties)

Article 59 An airman or student pilot who has received the notification of suspension of air navigation duties or flight training pursuant to the preceding Article shall promptly submit to the Minister of Land, Infrastructure, Transport and Tourism his/her competence certificate or student pilot permit.

(Special Cases in the Method of Hearing)

Article 60 (1) When conducting a hearing, the Minister of Land, Infrastructure, Transport and Tourism shall notify pursuant to the provisions of Article 15 paragraph (1) of Administrative Procedure Act (Act No. 88 of 1993) by 10 days prior to the date of the hearing.

(2) A person who receives from the Minister of Land, Infrastructure, Transport and Tourism a notice under the provisions of Article 15 paragraph (1) of Administrative Procedure Act (including the person to whom the applicable notice is deemed to have reached pursuant to the provisions of the second sentence of paragraph (3) of the Article, called "the party" hereafter) shall, if appointing an assistant, submit to the president by the day before the hearing a document stating the assistant's address, full name and the contents of the testimony.

(3) The party shall, where there is a person testifying for him/her (excluding a person participating in the proceedings in connection with the applicable hearing under the provisions of Article 17 paragraph (1) of the Act, called "witness" hereafter), submit to the Minister of Land, Infrastructure, Transport and Tourism by the day before the hearing a document stating the person's address, full name and the contents of the testimony.

(4) If a witness intends to speak or to submit evidence, a permission from the president shall be obtained.

(5) The proceedings on the date of the hearing pursuant to the previous two paragraphs shall be conducted publicly. However, this does not apply if there has been a request from the party to conduct it in private.

(Application for Aviation Medical Certification)

Article 61 (1) A person who intends to apply for aviation medical certification pursuant to Article 31 paragraph (1) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism or a designated aviation medical

examiner a written application for aviation medical certification (which shows the results of the examinations undertaken within one month prior to application at a medical facility etc designated by the Minister of Land, Infrastructure, Transport and Tourism (called "designated aviation medical examination facility", Format 22)).

- (2) The written application of the preceding paragraph shall be accompanied by the records of the result of the examinations pertaining to the previous aviation medical certification (called "medical examination" hereafter), except for when applying for aviation medical certification for the first time.

(Medical Standards and Aviation Medical Certificate)

Article 61-2 (1) The medical standards pursuant to the provisions of Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 31 paragraph (3) of the Act and the aviation medical certificate pursuant to paragraph (2) of the Article shall be as the following table.

Qualification	Medical standards	Aviation medical certificate
Airline transport pilot	Class 1	aviation medical certificate (class 1)
Commercial pilot		
First class navigator		
Flight engineer		
Private pilot	Class 2	aviation medical certificate (class 2)
Second class navigator		
Flight radiotelephone operator		

- (2) The contents of the medical examination standards listed in the table of the preceding paragraph shall be as listed in Appended Table 4, and the format of aviation medical certificate shall be in accordance with Format 24.
- (3) If a person does not conform to some of the provisions prescribed in Appended Table 4, if the person is deemed by the Minister of Land, Infrastructure, Transport and Tourism not to cause any detriment to being on board aircraft and to operate it, taking into consideration his/her experience and ability, then that person may be deemed to conform to the medical examination standards notwithstanding the provisions of the Table. In this case, when the applicable person newly applies for aviation medical certification, the Minister of Land, Infrastructure, Transport and Tourism may, if he/she deems necessary, able to instruct the person to undergo examinations etc of the conditions of injury or illness which was the cause of non-conformance to some of the provisions of the Table (called "conditions" hereafter in this Article).
- (4) A person who was deemed to conform to the medical examination standards under the provisions of the preceding paragraph shall be, in the following cases,

deemed to conform to the applicable provisions of Appended Table 4 that he/she does not conform to, when newly applying for aviation medical certification.

- (i) When the condition is deemed to be non-changing when the Minister of Land, Infrastructure, Transport and Tourism makes his/her finding in accordance with the provisions of the preceding paragraph.
 - (ii) When the condition is deemed to be stable based on the results of examinations etc under instruction from the Minister of Land, Infrastructure, Transport and Tourism in accordance with the provisions of the preceding paragraph.
- (5) When deemed necessary for the safe flight of aircraft, the Minister of Land, Infrastructure, Transport and Tourism may impose on aviation medical certification conditions that would be required when conducting air navigation duties, and he/she may also change such conditions.
- (6) A holder of a class 1 aviation medical certificate shall be deemed to be a holder of a class 2 aviation medical certificate.

(Start Date for the Validity Period of Aviation Medical Certification)

Article 61-3 The validity period of aviation medical certification shall start from the date of issue of the aviation medical certificate pertaining to the applicable aviation medical certification. However, if a new aviation medical certificate is issued between 45 days prior to the expiry date of the validity period of aviation medical certification and the expiry date of the applicable validity period, then it shall start from the day after the expiry date of the applicable validity period.

(Return etc of the Written Application for Aviation Medical Certificate)

Article 61-4 (1) The Minister of Land, Infrastructure, Transport and Tourism or the designated aviation medical examiner shall return to the applicant for aviation medical certification his/her written application for aviation medical certification that states the specified matters.

- (2) After conducting a medical examination, a designated aviation medical examiner shall submit, within 10 days, to the Minister of Land, Infrastructure, Transport and Tourism a photocopy of the written application for aviation medical certification that states the specified matters.
- (3) If a designated aviation medical examiner deems that an applicant attempted to be issued with an aviation medical certificate by deception or other improper means, he/she shall promptly notify the Minister of Land, Infrastructure, Transport and Tourism of this matter.

(Designated Aviation Medical Examiner)

Article 61-5 (1) A person who intends to be designated pursuant to Article 31 paragraph (1) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written application for designation as an aviation medical examiner (Format 23), attaching the following documents.

(i) Curriculum vitae

(ii) A photocopy of his/her medical license

(iii) A documentary proof that he/she belongs to a designated aviation medical examination facility

(2) The requirements specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 31 paragraph (1) of the Act are as follows.

(i) He/she is a medical practitioner who belongs to a designated aviation medical examination facility.

(ii) He/she shall have attended a training session on aviation medical certification that was conducted by the Minister of Land, Infrastructure, Transport and Tourism, or shall possess the level of knowledge of aviation medical certification that is deemed to be equivalent to or above that of those persons who have attended the applicable training session.

(iii) He/she shall possess five years or more of experience in clinical or aviation medicine.

(iv) He/she shall not be a person who had the designation pursuant to Article 31 paragraph (1) of the Act cancelled under the provisions of Article 62 paragraph (2) if two years have not passed since the date of such cancellation.

(3) Designation pursuant to Article 31 paragraph (1) of the Act shall be granted by issuance of a certificate of designation as an aviation medical examiner (Format 23-2). In this case, the applicable designation may be subject to a time limit.

(4) The Minister of Land, Infrastructure, Transport and Tourism shall issue a public notice to the effect when designating pursuant to the preceding paragraph has been granted.

Article 62 (1) The designation pursuant to Article 31 paragraph (1) of the Act shall be invalidated if one of the following items is applicable to the designated aviation medical examiner.

(i) When the time limit attached to the designation under the provisions of the paragraph (3) of the preceding Article has expired.

(ii) When he/she no longer belongs to the designated aviation medical examination facility to which he/she belonged.

(iii) When the designated aviation medical examination facility to which he/she belongs ceases to be a designated aviation medical examination facility.

(iv) When his/her medical license is cancelled under the provisions of Article 7

- paragraph (2) of the Medical Practitioner Act (Act No. 201 of 1948).
- (2) The Minister of Land, Infrastructure, Transport and Tourism may cancel the designation pursuant to Article 31 paragraph (1) of the Act if one of the following items is applicable to the designated aviation medical examiner.
- (i) If he/she violates an Act or an order pursuant to an Act.
 - (ii) When his/her medical services have been subject to a suspension measure under the provisions of Article 7 paragraph (2) of the Medical Practitioner Act.
 - (iii) If there has been delinquency or serious negligence in the course of his/her duty as a designated aviation medical examiner.
- (3) If the designation becomes invalidated under the provisions of the paragraph (1) or if the designation is cancelled under the provisions of the preceding paragraph, the Minister of Land, Infrastructure, Transport and Tourism shall issue a public notice regarding this matter.

(Designated Aviation Medical Examination Facility)

Article 62-2 (1) A person seeking to be designated under the provisions of Article 61 paragraph (1) shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written application for designation as an aviation medical examination facility (Format 24-2) accompanied by documentary evidence of conformance to each of requirements in the items in the following paragraph.

- (2) Designation under Article 61 (1) shall be granted to medical facilities etc that conform to the requirements listed in each of the following items.
- (i) The facility shall be a hospital or a clinic that has been approved under Article 7 of Medical Service Act (Act No. 205 of 1948) or a clinic that has carried out the notification under Article 8 of the Act or a medical facility etc outside of Japan that has been designated as a facility that conducts aviation medical examinations by a contracting state of the Convention in International Civil Aviation.
 - (ii) There shall be at least the necessary number of medical practitioners that conduct medical examinations in each specialty.
 - (iii) It shall have the necessary equipment and instruments to carry out a medical examination.
 - (iv) When part of a medical examination is conducted by another medical facility etc, the applicable medical facility shall conform to the requirements set out in the preceding three items in connection with the part of the medical examinations that it conducts.
 - (v) There shall be a member of staff who has sufficient knowledge of aviation medical certification and can properly manage the administrative matters pertaining to medical examinations (called "practical administrator"

hereafter).

- (vi) There shall be other examination systems that enable proper conduct of medical examinations.
- (3) Designation pursuant to Article 61 paragraph (1) shall be granted by issuance of a certificate of designation as an aviation medical examination facility (Format 24-3). In this case, the applicable designation may be subject to a time limit.
- (4) The Minister of Land, Infrastructure, Transport and Tourism shall issue a public notice to the effect when designating pursuant to the preceding paragraph has been granted.

(Invalidation and Cancellation of Designation)

Article 62-3 (1) The designation pursuant to Article 61 paragraph (1) shall be invalidated if one of the following items is applicable to the designated aviation medical examination facility.

- (i) When the time limit imposed on the designation under the provisions of paragraph (3) of the preceding Article has expired.
 - (ii) If the provider of the medical facility etc that was granted their designation pursuant to Article 61 paragraph (1) disestablishes the applicable medical facility etc.
 - (iii) If the approval as a provider is cancelled under the provisions of Article 29 paragraph (1) of the Medical Services Act.
- (2) The Minister of Land, Infrastructure, Transport and Tourism may cancel the designation pursuant to Article 61 paragraph (1) if one of the following items is applicable to the designated aviation medical examination facility.
- (i) If it violates an order pursuant to an Act.
 - (ii) If medical examinations are not conducted for a long period of time.
 - (iii) If the facility is ordered to close under the provisions of Article 29 paragraph (1) of the Medical Services Act.
 - (iv) If it ceases to conform to the requirements of paragraph (2) item (ii) to (vi) of the preceding Article.
- (3) If the designation becomes invalidated under the provisions of paragraph (1) or if the designation is cancelled under the provisions of the preceding paragraph, the Minister of Land, Infrastructure, Transport and Tourism shall issue a public notice regarding this matter.

(Aviation English Proficiency Certification)

Article 63 (1) An applicant for aviation English proficiency certification (called "an applicant for aviation English proficiency certification" in paragraph (3)) shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written application for aviation English proficiency certification (Format 19 (an

- applicant for exemption from theory examinations shall use Format 19-2)).
- (2) The written application pursuant to the preceding paragraph shall be accompanied by one copy of a photograph (except for the applicant for exemption from theory examinations), as well as attaching the documents listed in item (i) or item (ii) as applicable, or producing the documents listed in item (iii) and attaching a photocopy thereof.
- (i) In the case of a person who intends to be exempted from theory examinations under the provisions of Article 48, a photocopy of documents listed in Article 47
- (ii) In the case of a person who intends to be exempted from theory examinations under the provisions of Article 48 paragraph (3), a photocopy of his/her competence certificate
- (iii) In the case of a person who holds a certificate of qualification pertaining to air navigation duties that was granted by a foreign government which is a contracting state of the Convention on International Civil Aviation and intends to be exempted from examinations, the relevant certificate
- (3) When applying for a practical examination (including when intending to be exempted from the practical examination), an applicant for aviation English proficiency certification (excluding applicant for exemption from theory examinations) who has passed the theory examinations shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written application for practical examination (Format 19-2), attaching the documents listed in item (i), and producing the document listed in item (ii) as applicable and attaching a photocopy thereof.
- (i) A photocopy of the document pursuant to Article 47 (only those pertaining to passes in theory examination)
- (ii) In the case of a person who holds a certificate of qualification pertaining to air navigation duties that was granted by granted by a foreign government which is a contracting state of the Convention on International Civil Aviation and intends to be exempted from practical examinations, the relevant certificate

Article 63-2 Aviation English proficiency certification is granted by stating the said proficiency on the person's competence certificate.

(Categories of Aircraft Requiring Aviation English Proficiency Certification)

Article 63-3 The categories of aircraft specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 33 paragraph (1) of the Act shall be aeroplanes and rotorcraft.

(Flights Requiring Aviation English Proficiency Certification)

Article 63-4 The flight specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 33 paragraph (1) of the Act shall be the following (except for those flights deemed by the Minister of Land, Infrastructure, Transport and Tourism to be not requiring aviation English proficiency certification).

- (i) A flight conducted between a point within Japan and a point outside of Japan
- (ii) A flight conducted between points outside of Japan (limited to those flying within territories of countries other than Japan)
- (iii) A flights that leaves Japan and arrives in Japan, passing territories of a country other than Japan without landing

(Validity Period of Aviation English Proficiency Certification)

Article 63-5 (1) The period specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 33 paragraph (2) of the Act shall be the period specified in each applicable item, corresponding to the divisions listed in each item below.

- (i) Where the person is assessed to possess the knowledge and ability in aviation English corresponding to the Language Proficiency Level 4 or 5 under the provisions of Amendment 164 to Annex 1 of the Convention on International Civil Aviation: 3 years
 - (ii) Where the person is assessed to possess the knowledge and ability in aviation English corresponding to the Language Proficiency Level 6 under the provisions of Amendment 164 to Annex 1 of the Convention on International Civil Aviation: Lifetime
- (2) The period specified in the items of the preceding paragraphs starts on the date of passing the practical examination. However, if a person passes the practical examination between three months prior to the expiry of the validity period of his/her existing aviation English proficiency certification and the expiry date of the applicable validity period, then the period starts on the day after the expiry date of the applicable validity period.
- (3) Notwithstanding the provisions of the preceding two paragraphs, the validity period of aviation English proficiency certification that is granted without theory examination or practical examination under the provisions of Article 50 paragraph (1) or (2) shall be the period determined by the Minister of Land, Infrastructure, Transport and Tourism but not exceeding the end of the validity period of the certificate of qualification pertaining to the competence in air navigation duties that was granted by a foreign government of a contracting state of the Convention on International Civil Aviation (limited to those pertaining to aviation English proficiency certification).
- (4) If none of the practical examinations is conducted under the provisions of

Article 50-2 paragraph (3), when applying the provisions of paragraph (1) and (2), "passing the practical examinations" within the same paragraph shall be replaced by "completed the course".

- (5) If none of the practical examinations is conducted under the provisions of Article 50-2 paragraph (6), when applying the provisions of paragraph (1) and (2), "passing the practical examinations" within the same paragraph shall be replaced by "assessed as having knowledge and ability in aviation English".

(Application for Designation as Air Carrier for Assessment of Aviation English Proficiency)

Article 63-6 (1) A person who intends to be designated as a designated air carrier for assessment of aviation English proficiency shall submit a written application stating the details of the following matters to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Full name or company name and address
 - (ii) The name and address of the main office where the services pertaining to the applicable designation is to be conducted
 - (iii) The number of pilots belonging to the organization, the number of persons who are subject to proficiency assessment (the assessment as to whether the person has knowledge and ability in aviation English, also applicable below), the number of persons holding aviation English proficiency certification
 - (iv) Other pertinent matters
- (2) The written application of the preceding paragraph shall be accompanied by a manual for proficiency assessment (called "assessment manual" hereafter).
- (3) The assessment manual pursuant to the preceding paragraph shall include the following matters.
- (i) Full name and resume of the administrator of the services in connection with proficiency assessment
 - (ii) Full name and resume of the proficiency assessor (refers to a person who is engaged in proficiency assessment, also applicable below)
 - (iii) Method of proficiency assessment
 - (iv) Matters relating to issuance of certificate of result of proficiency assessment
 - (v) Matters relating to retention of confidential information that was acquired in connection with proficiency assessment
 - (vi) Method of producing and retaining records in connection with proficiency assessment
 - (vii) Other matters that are sufficient to prove conformance with standards that are listed in items in the next Article.

(Standards for Designation as Air Carrier for Assessment of Aviation English

Proficiency)

Article 63-7 Designation of as an air carrier for assessment of aviation English proficiency shall be granted when the following standards are conformed to.

- (i) There is an administrator who satisfies the following requirements.
 - (a) 25 years of age or more.
 - (b) The person is not a person who has, in the last two years, engaged in improper conduct in connection with issuance of certificate of result of proficiency assessment at a designated air carrier for assessment of aviation English proficiency or examinations or in connection with an examination pursuant to Article 29 paragraph (1) of the Act where it is applied mutatis mutandis to Article 33 paragraph (3), or a person who committed an offence against law and was subject to fines or severer punishment and is less than two years since the end of its execution or since becoming not subject to execution (hereafter called "disqualified").
 - (c) A person who is deemed to be capable of properly administering the operations of services in connection with proficiency assessment.
 - (d) A person with required knowledge of aviation English proficiency certification.
- (ii) There are at least the required number of proficiency assessors who have been accredited by the Minister of Land, Infrastructure, Transport and Tourism as satisfying the following requirements.
 - (a) 25 years of age or more.
 - (b) Not a disqualified person.
 - (c) A person with required knowledge and ability of aviation English and proficiency assessment.
- (iii) The contents and standards of proficiency assessment shall be in accordance with the contents and assessment standards pursuant to Article 29 paragraph (1) of the Act, where it is applied mutatis mutandis to Article 33 paragraph (3), as conducted by the Minister of Land, Infrastructure, Transport and Tourism.
- (iv) There are following systems for proper operation of services in connection with proficiency assessment at the applicable carrier.
 - (a) A system for evaluation of proficiency assessment results
 - (b) A system for managing records in connection with proficiency assessments
 - (c) A system for auditing services in connection with proficiency assessments

(Operation of Services of Designated Air Carrier for Assessment of Aviation English Proficiency)

Article 63-8 The administrator of a designated air carrier for assessment of aviation English proficiency shall operate the services properly and in

accordance with the assessment manual pursuant to the provisions of Article 63-6 paragraph (2), to conform with the standards set out in items of the previous Article.

(Accreditation of Proficiency Assessor)

Article 63-9 Accreditation of proficiency assessors under the provisions of Article 63-7 paragraph (2) may be subject to a time limit.

(Limitations on Issuance of Certificate of Result of Proficiency Assessment)

Article 63-10 The administrator of a designated air carrier for assessment of aviation English proficiency shall not issue a certificate of result of proficiency assessment pursuant to the provisions of Article 50-2 paragraph (7) to anyone other than a person who has been assessed as having the knowledge and ability in connection with aviation English by a proficiency assessor pursuant to the provisions of Article 63-7 paragraph (2).

(Cancellation of Accreditation of Proficiency Assessor)

Article 63-11 The Minister of Land, Infrastructure, Transport and Tourism may cancel the accreditation of a proficiency assessor granted under the provisions of Article 63-7 item (ii), if he/she deems that there was impropriety in connection with the conduct of a proficiency assessment or that the standards pursuant to the same item are not conformed to.

(Instrument Flight Certification and Flight Instructor Certification)

Article 64 (1) An applicant for instrument flight certification or flight instructor certification shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written application for instrument flight certification or a written application for flight instructor certification (Format 19 (an applicant for exemption from all theory examination subjects shall use Format 19-2)).

(2) The provisions of Article 42 paragraphs (2) to (4) shall be applied mutatis mutandis pursuant to the application of the preceding paragraph. In this case, "one copy" in paragraph (2) of the Article shall be deemed to be replaced with "one copy (except for the applicant for exemption from all theory examination subjects)", "one copy of photograph and a photocopy of the document pursuant to Article 47" in paragraph (3) of the same Article shall be deemed to be replaced with "a copy of the document pursuant to Article 47", and "the abstract of his/her family register or a certificate of entry in his/her family register or a copy of the resident register which states his/her permanent domicile (or in the case of a foreigner, a certificate from a consul of his/her country which certifies his/her nationality, full name, date of birth and sex (in the case of a person who is unable to submit a certificate from a consul from

his/her country, a document which certifies those matters issued by a competent authority), also applicable hereafter), and a document which proves that the applicant possesses the flight and other aeronautical experience as listed in Appended Table 2" in paragraph (4) of the Article shall be deemed to be replaced with "flight and other aeronautical experience listed in Appended Table 2".

Article 65 Instrument flight certification or flight instructor certification is granted by stating the said proficiency on the person's competence certificate.

(Category of Aircraft Requiring a Instrument Flight Certification for Instrument Flight etc)

Article 65-2 The category of aircraft specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 34 paragraph (1) of the Act shall be aircraft other than aeroplanes.

(Distance and Time of Instrument Navigation Flight)

Article 66 The distance specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 34 paragraph (1) item (ii) of the Act is 110 kilometers, and the time specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to item is 30 minutes.

(Aircraft Flight Training)

Article 67 (1) A person intending to obtain an approval pursuant to Article 35 paragraph (1) item (i) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written application for student pilot certification (which states with results of the medical examination undertaken at designated aviation medical examination facility within one month prior to the application, Format 26).

(2) The application pursuant to the preceding paragraph shall be accompanied by two copies of photograph and the abstract of his/her family register or a certificate of entry in his/her family register or a copy of his/her resident register which states his/her permanent domicile.

Article 68 (1) The format of the student pilot certificate pursuant to Article 35 paragraph (4) of the Act shall be in accordance with Format 27.

(2) The validity period of the permit pursuant to the preceding paragraph shall be as specified by the Minister of Land, Infrastructure, Transport and Tourism but shall be for one year or less.

Article 69 The designation pursuant to Article 35 paragraph (1) item (iii) of the Act shall be granted by issuing a certificate of designation of flight training supervisor (Format 27-2). In this case, the applicable designation shall be subject to a time limit.

Article 69-2 (1) The person specified in Article 35 paragraph (2) of the Act (called "flight training supervisor" hereafter) shall check the matters listed in the following items prior to the person undertaking flight training under the provisions of each item of Article 35 paragraph (1) of the Act (called "flight trainee" hereafter) commences his/her flight training.

- (i) The contents of the training plans are suitable.
 - (ii) The flight trainee has sufficient knowledge and ability to undertake the training.
 - (iii) The atmospheric conditions in the airspace in which the flight is planned to take place are suitable for the training.
 - (iv) The aircraft to be used has the required performance and equipment to carry out the training.
- (2) The flight training supervisor shall position himself in a location where it is possible for him to take over the control when he/she is on board the same aircraft as the flight trainee and the flight trainee is controlling the aircraft.
- (3) The flight training supervisor shall not engage in supervision of flight training of a particular flight when the flight trainee intends to undertake solo flight training using a particular type of aircraft for the first time, unless the matters listed in the following items are checked.
- (i) The flight trainee has sufficient experience to undertake the flight training of the applicable flight.
 - (ii) It is possible for the flight trainee to take-off and land alone.
- (4) The flight training supervisor shall not permit the flight trainee to undertake his/her first solo flight training unless each of the following item applies to the training.
- (i) It is conducted subsequent and continuously to take off and landing training accompanied on board by the flight training supervisor.
 - (ii) It is conducted as a flight in a circuit traffic pattern during daytime
- (5) The flight training supervisor shall not conduct the supervision of flight training of a particular flight when the flight trainee intends to undertake solo flight training to a location 40 kilometers or more from the point of origin for the first time, unless the flight trainee has the knowledge of navigation required to undertake that training.

(Instrument Flight Training etc)

Article 69-3 The provisions of Article 69 shall apply mutatis mutandis to the

specifications of Article 35-2 paragraph (1) item (iii) of the Act. In this case, "a certificate of designation of flight training supervisor (Format 27-2)" shall be deemed to be replaced with "a certificate of designation of instrument flight training etc supervisor (Format 27-3)".

Article 70 (1) The provisions of Article 69-2 paragraph (1) shall apply mutatis mutandis to the person who supervises instrument flight training etc pursuant to Article 35-2 paragraph (2) (called "instrument flight training etc supervisor" hereafter). In this case, "the person undertaking flight training pursuant to each item of Article 35 paragraph (1) of the Act (called "flight trainee")", and "flight trainee" shall be deemed to be replaced with "Instrument flight etc trainee", and "flight training" shall be deemed to be replaced with "instrument flight etc training".

(2) The instrument flight training etc supervisor shall not engage in supervision pertaining to applicable training without checking the matters listed in the following items regarding the instrument flight etc trainee.

(i) Required materials and information to conduct the training have been obtained and he/she has the knowledge of their meaning and contents.

(ii) Required tools to conduct the training are carried and he/she knows how to use those tools well.

(3) The instrument flight training etc supervisor shall be on board with a trainee when an instrument flight etc trainee conducts a flight for the purpose of applicable training, and shall be located in a position where he/she is able to control the aircraft.

(Reissue of Competence Certificate etc)

Article 71 (1) If applying for a replacement of competence certificate or aviation medical examination certificate or a student pilot permit due to loss, destruction, defacing or as a result of changing the address or name, the airman or a student pilot shall submit a written application for reissue (Format 28) to the Minister of Land, Infrastructure, Transport and Tourism (in the case of an aviation medical certificate issued by a designated aviation medical examiner, the applicable aviation medical examiner, also applies to paragraph (3)).

(2) The written application of the preceding paragraph shall be accompanied by one copy of his/her photograph and the following documents if applying for reissue of competence certificate, or be accompanied by the following documents if applying for reissue of aviation medical certificate, and two copies of his/her photograph and the following documents if applying for reissue of student pilot permit.

(i) The competence certificate or aviation medical examination certificate or a

- student pilot permit (except when lost)
 - (ii) The abstract of his/her family register or a certificate of entry in his/her family register or a copy of his/her resident register which states his/her permanent domicile (only when the registered domicile or name has changed)
 - (iii) The reason and time and date of loss (only when applying for reissue within 30 days of loss)
- (3) The Minister of Land, Infrastructure, Transport and Tourism shall reissue the competence certificate or aviation medical examination certificate or a student pilot permit if he/she deems the application pursuant to paragraph (1) to be legitimate.

(Return of Competence Certificate etc)

Article 72 A person who holds or keeps a competence certificate, aviation medical certificate or a student pilot certificate listed in the following items shall return the said document to the Minister of Land, Infrastructure, Transport and Tourism within 10 days accompanied by a document stating the reason.

- (i) If the competence certification or the permission pursuant to Article 35 paragraph (1) item (i) of the Act (including the cases where it is applied mutatis mutandis pursuant to Article 35 paragraph (5) of the Act) is cancelled under the provisions of Article 30 of the Act, the applicable competence certificate (in the case of a person pertaining to aircrew qualification, the competence certificate and aviation medical certificate, also applicable to item (iv)) or the student pilot certificate
- (ii) When a competence certificate for a higher level qualification of the same category has been issued, the certificate pertaining to the current qualification
- (iii) If the lost document that was reissued under the provisions of the preceding Article was later found, the found document
- (iv) If an aircrew or student pilot has died or declared missing, his/her competence certificate or student pilot permit

(Competence Certification in a Foreign Language)

Article 73 (1) An airman engaging in flight that is listed in each item of Article 126 (1) of the Act shall, when intending to apply for issuance of a competence certificate written in English, French or Spanish in addition to the competence certificate pursuant to Article 52, shall apply to the Minister of Land, Infrastructure, Transport and Tourism together with his/her the competence certificate that holds, accompanied by a photograph.

- (2) The fees for issuance under the provisions of the preceding paragraph shall be the same amount as for reissuance of a competence certificate under the

provisions of Article 71.

(Public Notice of Invalidation)

Article 74 The Minister of Land, Infrastructure, Transport and Tourism shall issue a public notice of invalidation when there was a notification of loss of a competence certificate, aviation medical certificate or a student pilot certificate pursuant to Article 238 or there was a written application for reissuance pursuant to Article 71 (only when it is due to loss) or when it has not been returned when it is required to be returned under the provisions of Article 72 (except for item (iii)).

Chapter V Aerodromes and Aeronautical Navigation Facilities

Section 1 Aerodromes and Associated Facilities

(Type of aerodromes and class of runway strips)

Article 75 (1) Aerodromes shall be classified into four types, land aerodromes, land heliports, water aerodromes and water heliports.

(2) The classes of runway strips are categorized by length of runway for land aerodromes, and by length of landing area for water aerodromes, as specified in the following table:

Aerodrome type	Class of runway strip	Length of runway or runway strip
Land aerodrome	A	2,550 meters or more
	B	2,150 meters or more and less than 2,550 meters
	C	1,800 meters or more and less than 2,150 meters
	D	1,500 meters or more and less than 1,800 meters
	E	1,280 meters or more and less than 1,500 meters
	F	1,080 meters or more and less than 1,280 meters
	G	900 meters or more and less than 1,080 meters
	H	500 meters or more and less than 900 meters
	J	100 meters or more and less than 500 meters
Water aerodrome	A	4,300 meters or more
	B	3,000 meters or more and less than 4,300 meters
	C	2,000 meters or more and less than 3,000 meters

D	1,500 meters or more and less than 2,000 meters
E	300 meters or more and less than 1,500 meters

(Application for permission for the establishment)

Article 76 (1) Pursuant to the provision of paragraph (2) of Article 38 of the Act, a person who intends to apply for permission for the establishment of an aerodrome, shall submit a written application describing the following matters, in triplicate, to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Purpose of the establishment (Whether or not it is for public use shall be added.)
- (ii) Name and address
- (iii) Name and location of an aerodrome and location of a reference point (Including the altitude; hereinafter the same)
- (iv) Planned location or planned water surface of an aerodrome and their owners' names and addresses
- (v) Type of aerodromes, class of runway strip, and strength of runway (for land aerodromes and land heliports, base ground included) or depth of runway strip
- (vi) In the case of an aerodrome used for instrument landing or night landing, the conditions as such shall be stipulated.
- (vii) Type and model of aircraft that are intended to use the aerodrome
- (vii)-2 Length of approach area, slope of approach surface, length of the radius of horizontal surface or slope of transitional surface, which are the subject of application for receiving the designation by the Minister of Land, Infrastructure, Transport and Tourism
- (viii) Outline of facilities of the aerodrome
- (ix) Outline of the air navigation facilities to be established
- (x) Cost incurred in the establishment
- (xi) Schedule dates of commencement and completion of the works
- (xii) Administration plan (Cost incurred in administration shall be added.)
- (xiii) If there is any object that has a height in excess of the approach surface of a scheduled aerodrome, transition surface, or horizontal surface, or any object that is located in an extreme proximity to these surfaces, the following matters shall be taken into account:
 - (a) Location and type of said object
 - (b) The height exceeding that of the approach surface, transition surface or horizontal surface or the extent of proximity to these surfaces
 - (c) The name and address of the owner of said object or the owner of title of other matters

- (d) Distinction whether or not said object should be removed
 - (e) Cost incurred in the removal of said object
 - (f) Scheduled dates of commencement and completion of works pertaining to the removal of said object
- (2) The following documents and drawings shall be attached to the written application prescribed in the preceding paragraph:
- (i) Documents prescribing the procuring method for the following matters
 - (a) Cost incurred in the establishment, land, water surface and objects
 - (b) Cost incurred in the removal of the objects listed under the preceding paragraph item (xiii)
 - (ii) Documents describing breakdown of cost incurred in administration and method for their procurement
 - (ii)-2 Documents proving whether the applicant has ownership or any other title to use the aerodrome site, or the applicant shall be deemed to surely acquire such title or ownership
 - (iii) Documents pertaining to the design or work of and specifications and budget statements for aerodromes
 - (iv) Survey drawings
 - (v) In the case of aerodromes, wind direction and speed chart (The chart of the wind direction and wind speed at places in a planned airport site or planned water surface or its vicinity shall be prepared based on the reference materials generated during the period of three years or more in the case of an aerodrome and a water aerodrome or one year or more in the case of a heliport.)
 - (v)-2 In the case of aerodromes, documents describing the air temperature on the planned site of an aerodrome or planned site of water surface or their vicinities (The documents shall be prepared based on reference materials generated during five years or more in accordance with the standards set forth by the Minister of Land, Infrastructure, Transport and Tourism.)
 - (vi) In the case of aerodromes, documents describing the type, model and number of aircraft assumed to avail the aerodrome in one year and the basis of the calculation of the number
 - (vii) Deleted
 - (viii) In the case of a local public entity, documents proving the decisions made for the establishment
 - (ix) In the case of a corporation other than local public entities, the following documents:
 - (a) Article of incorporation or certificate of an act of donation and registry matters
 - (b) Balance sheet for the latest business fiscal year
 - (c) Name list and personal history of directors or employees

- (d) Documents proving the decisions made for the establishment
- (x) In the case of a union having no corporate capacity, the following documents:
 - (a) Duplicate of union contract
 - (b) Inventory of the assets of union members
 - (c) Name list and personal history of union members
- (xi) For an individual, the following documents:
 - (a) Inventory of assets
 - (b) Abstract of family register
 - (c) Personal history
- (xii) In the case of a person who is engaged in managing other business, documents describing the type and outline of said business

(Survey drawing)

Article 77 The survey drawing prescribed under preceding paragraph (2) item

(iv) of the preceding Article shall be as follows:

- (i) Planimetric map: The planimetric map shall have a reduced scale of 1/5,000th or more and indicate the following matters:
 - (a) Reduced scale and bearing
 - (b) Site boundary of an aerodrome
 - (c) Topography of the peripheral area of an aerodrome and municipality name of the area
 - (d) Location of planned facilities of aerodrome
 - (e) Major road and linking roads connecting with urban area and public transports
- (ii) Vertical cross-section drawing of a runway strip: The vertical cross-section drawing of a runway strip shall have the reduced scales of 1/5,000th for the transverse direction and 1/500th for the longitudinal direction.
 - (a) Observation point number, distance between observation points (shall be set to 100 meters), and successively increasing distance.
 - (b) Height of the land, construction base surface and embankment and depth of the cut for each observation point
- (iii) Transverse cross-section drawing of a runway strip: The transverse cross-section of a runway strip shall be determined at its three locations, namely, both ends and center, have the reduced scales of 1/1,000th or more for the transverse direction and 1/50th for the longitudinal direction, and indicate the following matters:
 - (a) Observation point number and distance between observation points
 - (b) Height of the land, construction base surface and embankmenting and depth of the cut for each observation point
- (iv) Site vicinity drawing: In a site vicinity drawing shall have a reduced scale

of 1/10,000th (When a drawing with a reduced scale of 1/10,000th is not available, it may be substituted by a drawing with a reduced scale of 1/25,000th or 1/50,000th.), the projected plane of the approach surface, transitional surface and horizontal surface of objects and a planned aerodrome stipulated under paragraph (1) item (xiii) of Article 76 shall be clearly indicated, and the matters listed under (a) and (b) of said item shall be specified in a drawing having a reduced scale of 1/5,000th of the area where said objects are located.

(Public notice of application for permission of establishment)

Article 78 (1) Pursuant to the provisions of paragraph (3) of Article 38 of the Act, when an application for permission of establishment of an aerodrome, the following matters shall be put on public notice and displayed: matters listed under said paragraph and matters listed under items (i) to (v) inclusive of paragraph (1) of Article 76 and matters listed under items (viii) and (ix) of said paragraph.

(2) The provisions under the preceding paragraph shall apply mutatis mutandis when the Minister of Land, Infrastructure, Transport and Tourism establishes an aerodrome.

(Standards of establishment)

Article 79 (1) The standards applied in compliance with paragraph (1) item (i) of Article 39 of the Act (including a case where they apply mutatis mutandis in accordance with paragraph (2) of Article 43 of the Act) shall be as follows:

- (i) Building structures, plants and other objects present in the vicinity of an aerodrome, which are deemed by the Minister of Land, Infrastructure, Transport and Tourism that they have no adverse influence on the take-off or landing of aircraft. However, this shall not apply when said object are deemed securely removable by the scheduled completion date of the works of said an aerodrome.
- (ii) Circular flight area (referring to a specified air space above an aerodrome deemed to be at a minimum required for safety of circular flight of landing aircraft, the same shall apply hereinafter) shall not overlap a circular flight area previously designated for an existing aerodrome.
- (iii) In the case of a land aerodrome, except when it is deemed to have a special reason, shall have a runway, runway strip and taxiway conforming to the standards for the appropriate class listed in the following table:

Class of runway strip	A	B	C	D	E	F	G	H	J
-----------------------	---	---	---	---	---	---	---	---	---

Runway	Width		45 meters or more	45 meters or more	45 meters or more	45 meters or more	45 meters or more	30 meters or more	30 meters or more	25 meters or more	15 meters or more		
	Maximum longitudinal slope	(i) A section located at a distance of one-fourth length of a runway	0.8%	0.8%	0.8%	0.8%	1%	1%	1%	1.5%	2%		
		(ii) Section other than that stipulated under (i)	1%	1%	1%	1%	1.5%	1.5%	1.5%	2%	3%		
	Maximum transverse slope		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	2%	3%		
	Runway strip	Length		The length obtained by extending the longer side of a runway by 60 meters each along both shorter sides									
		Distance from the centerline in the longitudinal direction to one of the longer side of a runway strip	For instrumental landing	150 meters or more	150 meters or more	150 meters or more	150 meters or more	150 meters or more	150 meters or more	150 meters or more	150 meters or more	75 meters or more	75 meters or more
			For non-instrumental landing	75 meters or more	75 meters or more	75 meters or more	75 meters or more	75 meters or more	60 meters or more	60 meters or more	30 meters or more	30 meters or more	30 meters or more
		Maximum longitudinal slope of a section within the smallest area required for non-instrumental landing		1.5%	1.5%	1.75%	1.75%	2%	2%	2%	2%	2%	2%
		Maximum transverse slope	(i) A section within the smallest area required for non-instrumental landing	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	3%
				2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%

		(ii) A section other than that stipulated under (i)	5%	5%	5%	5%	5%	5%	5%	5%	5%	
Taxiway	Width		23 meters or more	23 meters or more	23 meters or more	18 meters or more	18 meters or more	18 meters or more	18 meters or more	18 meters or more	9 meters or more	6 meters or more
	Maximum longitudinal slope		1.5%	1.5%	1.5%	1.5%	3%	3%	3%	3%	3%	3%
	Maximum transverse slope		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
	Clearance between a taxiway edge and a fixed obstacle		39 meters or more	39 meters or more	30 meters or more	30 meters or more	26 meters or more	26 meters or more	26 meters or more	26 meters or more	16 meters or more	16 meters or more

- (iv) In the case of land aerodromes and land heliports, runways, taxiways and aprons (each including base ground, the same shall apply to item (vii) below and item (i) of Article 85) and underground structures that may affect the strength of said facilities shall possess sufficient strength to withstand the number of flights of aircraft assumed to avail said facilities.
- (v) In the case of land aerodromes and land heliports, the runway and taxiway shall provide a sufficient distance between the neighboring ones and have proper angle and shape at each connection point in order to secure the safety of flight of the aircraft runs these facilities.
- (vi) In the case of a land aerodrome and land heliport, each edge of the runway, taxiway and apron shall be provided with a shoulder having an adequate width, strength and surface.
- (vii) In the case of land aerodromes, the runway, runway strip and apron shall have the following performance characteristics:
- (a) Runway
1. Damage and losses incurred by dead weight, earth pressure, ground emotion [of the ground motion that would presumably occur on the planned site of said facilities, said ground emotion shall be limited to those likely to occur during the design working life (that refers to the

period determined in the design of said facilities, during which the performance required for said facilities shall continuously be satisfied, the same shall apply hereinafter) of said facilities in consideration of the relationships between the return period of ground motion and the design working life of said facilities, the same shall apply hereinafter], water pressure, waves (of the waves that would presumably occur on the planned site of said facilities, said waves shall be limited to those likely to occur during the design working life of said facilities, the same shall apply hereinafter), etc. shall neither impair the functions of said facilities nor affect their continuous services.

2. A runway shall have proper surface in consideration of natural status, usage status and various other conditions to which said facilities are to be subjected.

(b) Runway strip

1. Damage and losses incurred by dead weight, earth pressure, ground motion, water pressure, waves, etc. shall neither impair the functions of said facilities nor affect their continuous services.

2. A landing strip shall have proper surface in consideration of natural status, usage status and various other conditions to which said facilities are to be subjected.

(c) Taxiway

1. Damage and losses incurred by dead weight, earth pressure, ground motion, water pressure, waves, etc. shall neither impair the functions of said facilities nor affect their continuous services.

2. A taxiway shall have proper surface in consideration of natural status, usage status and various other conditions to which said facilities are to be subjected.

(d) Apron

1. Damage and losses incurred by dead weight, earth pressure, ground motion, water pressure, waves, etc. shall neither impair the functions of said facilities nor affect their continuous services.

2. An apron shall have proper surface in consideration of natural status, usage status and various other conditions to which said facilities are to be subjected.

3. In order to ensure safety of aircraft during parking, an apron shall have adequate area and proper shape.

(viii) In the case of land heliports, it shall have a runway and runway strip(s), and when a taxiway(s) is provided, the taxiway shall conform to the standards listed in the following table: However, this shall not apply when any special reason exists.

Classification	Standards of establishment
----------------	----------------------------

Runway and runway strip	Length	1.2 times of the length of the projected plane of aircraft that may avail the facilities
	Width	1.2 times of the width of the projected plane of aircraft that may avail the facilities
	Maximum longitudinal slope	2%
	Maximum transverse slope	2.5%
Taxiway	Width	Two times or more of the width of undercarriage of aircraft assumed to avail the aerodrome
	Maximum longitudinal slope	3%
	Maximum transverse slope	3%
Clearance between taxiway edge and fixed obstacle		Minimum value obtained by subtracting the width of undercarriage from the width of project plane of aircraft assumed to avail the facilities

(ix) In the case of a land heliport and a water heliport, the departure route and approach route pertaining to said heliport shall have such site conditions that when the power train alone of a helicopter on flight stops, the helicopter in question can securely land without imposing any danger on persons or object on land or on water.

(x) In the case of a land heliport to be established on a building structure, it shall have the following ancillary facilities:

- (a) Aircraft fall protection system
- (b) Fuel spillage prevention system

(xi) In the case of a water aerodrome, it shall have a runway strip, circular flight water area and taxi waterway conforming to the standards for the appropriate class listed in the following table:

Class of runway strip		A	B	C	D	E
Runway strip	Width	255 meters or more	255 meters or more	255 meters or more	255 meters or more	255 meters or more
		255 meters or more	180 meters or more	150 meters or more	100 meters or more	65 meters or more
Circular flight water area	Diameter	510 meters or more	360 meters or more	300 meters or more		

Taxi waterway	Width	120 meters or more	105 meters or more	90 meters or more	75 meters or more	40 meters or more
---------------	-------	--------------------	--------------------	-------------------	-------------------	-------------------

(xii) In the case of a water aerodromes and a water heliport, the runway strip, circular flight water area and taxi waterway of each shall have a sufficient depth on the ebb tide, and the conditions of water surface shall be suited for the safe flight of aircraft.

(xiii) In the case of a water heliport, it shall have a runway strip and taxi waterway conforming to the standards listed in the following table:

Classification		Standards of establishment
Runway strip	Length	Five times or more of the length of projected plane of aircraft presumed to avail the facilities
	Width	Three times or more of the width of undercarriage of aircraft presumed to avail the facilities
Width of taxi waterway		Two times or more of the width of the projected plane of aircraft presumed to avail the facilities

(xiv) Shall have the aerodrome markings (according to the forms given in the appended 5) in according to the appropriate classification specified in the following table. However, in the case of an unpaved runway or taxiway on which runway markings or taxiway markings can hardly be installed, they may be omitted.

Type of aerodrome markings	Matters to be marked	Aerodrome or runway requiring the installation	Place of installation
Aerodrome identification sign	Name of an aerodrome.	Aerodrome (except those whose name can be identified by topography of peripheral area)	Such a place that can readily be identified from aircraft on flight
Boundary marker	Boundary of a runway strip	Land heliport, water aerodrome and water heliport (limited to the case where boundary of a runway strip is not clearly recognizable)	Longer side of a runway strip

Runway markings	Runway designation marking	Bearing of a runway observed from the approaching direction that is determined in the clockwise direction from the magnetic north and, in the case of a parallel runway, the order from the left side	Runway of a land aerodrome	A location near the threshold of a runway
	Runway centerline marking	Runway centerline in the longitudinal direction		On the runway centerline in the longitudinal direction
	Runway threshold marking	Threshold of a runway	Runway for instrumental landing of a land aerodrome	A location 6 meters from the threshold of the runway
	Runway middle point marking	Runway middle line in the transverse direction	Runway of a land aerodrome. (except those on which runway distance marker lights are installed)	On the runway middle line in the transverse direction
	Aiming point marking	Aiming point for landing on a runway	A runway with a length of 1,200 meters or more of a land aerodromes and a runway with a length less than 1,200 meters for instrumental landing	A location 150 meters from the threshold of runway

	Touchdown zone marking	Landing touchdown zone on a runway	A runway with a length of 1,200 meters or more of a land aerodrome, a runway with a length less than 1,200 meters for instrumental landing with a precision approach, and a land heliport	In the case of a runway of a land aerodrome, a location at a distance of 150 meters or more and 922.5 meters or less from the threshold of a runway and in the case of a land heliport, the center of a runway
	Runway side stripe marking	Boundary of a runway	Runway of a land aerodrome, etc. (limited to runways for instrumental landing with precision approach and other types of runways with indefinite boundaries)	Longer side of the runway
	Snow marker	A zone of a snow-covered runway serviceable for take-off and landing	Runway of a land aerodrome (limited to the case when boundaries are not clearly visible on a snow-covered runway)	Longer side of the runway serviceable for take-off and landing
	Overrun area marking	Overrun area	Land aerodrome	Paved overrun area
Taxiway marking	Taxiway centerline marking	Longitudinal centerline of a taxiway and the paths to and from a runway	Land aerodrome, etc.	On the longitudinal centerline of a taxiway and on the paths to and from a runway

	Runway holding position marking	A position where aircraft should make a temporary stop before entering a runway		A location on a taxiway that is 30 meters or more apart from the longitudinal centerline of a runway
	Mandatory instruction marking	Matters indicated by taxiing guidance signs (limited to those indicating a location where aircraft should make a temporary stop; the same applicable hereinafter)	Land aerodromes (limited to the case where taxiing guidance signs cannot be installed or the width of a taxiway exceeds 60 meters, except when no taxiing guidance signs need to be installed)	A location on each of the both side of a taxiway centerline marking and one meter or more apart from each marking
	Taxiway side stripe marking	Boundary of a taxiway	Land aerodrome (limited to the case where taxiway boundaries are indefinite)	Edge of the taxiway
Wind direction indicator		Wind direction	Aerodrome	A location immune to air disturbance due to neighboring objects and readily identified by an observer on aircraft

- (2) Matters required under the item (iv) through (vii) of preceding paragraph for performance verification of the runway, runway strip, taxiway, apron, underground structures that may affect the strength of said objects and shoulders shall be determined by the Minister of Land, Infrastructure, Transport and Tourism.
- (3) Notwithstanding the provisions under paragraph (1), the installation of aerodrome markings cannot conform to the standards prescribed under said paragraph because of temporary conditions of works and other issues, the

installation may be implemented in a way differing from said standards.

(Interested person)

Article 80 The interested person prescribed under paragraph (2) of Article 39 of the Act, (including the cases where the subject shall apply mutatis mutandis under pursuant to paragraph (2) of Article 43 of the Act, paragraph (2) of Article 55-2 of the Act and paragraph (2) of Article 56-2 of the Act.) shall mean those listed under the following provisions:

(i) Permission applicant

(ii) A person in possession of property right, superficies right, emphyteusis, easement, stone quarrying rights, pledge, mortgage, rights created by loan for use and lease of land or buildings comprised within the area of aerodrome, etc., approach area or transition surface extended approach surface, conical surface or outer horizontal surface and other rights pertaining to land or buildings

(iii) A person in possession of mining rights, right to avail hot springs, fishing rights or rights to utilize running water, sea water and other kinds of water that are pertaining to the areas listed under the preceding item

(iv) Local public entity administering the areas listed under item (ii)

(v) Person who uses an aerodrome, etc.

(Public notification and public notice)

Article 81 (1) The Minister of Land, Infrastructure, Transport and Tourism shall, when he/she intends to hold a public hearing by provisions of paragraph (2) of Article 39 of the Act, (including the cases where the subject shall apply mutatis mutandis under pursuant to paragraph (2) of Article 43 of the Act, paragraph (2) of Article 55-2 of this and paragraph (2) of Article 56-2 of the Act), issue a public notification through the Official Gazette indicating the details of subject project, date and time, place, chairperson, proposal for a public statement, and public statement description, due date, and number of copies ten days before the opening of said public hearing.

(2) When a public hearing does not terminate within the duration predetermined in accordance with the provision of the preceding paragraph, it may suffice that the chairperson orally notify the date and time and place of the subsequent public hearing, notwithstanding the provision of the preceding paragraph.

(Appointment of chairperson)

Article 81-2 A public hearing shall be chaired by a person who is appointed by the Minister of Land, Infrastructure, Transport and Tourism by selecting from a certain number of personnel who are deemed to have no specific interest in

the subject project.

(Proposal for a public statement or similar matters)

Article 81-3 (1) A person who intends to present a public statement shall submit a proposal for a public statement and a public statement description to the Minister of Land, Infrastructure, Transport and Tourism by the due date specified in the public notice issued pursuant to the provision of the paragraph (1) of Article 81.

(2) A proposal for a public statement shall bear the name, address, occupation age (in the case of a corporate entity, its name and address, and the name and age of the person who represents the corporate body and intends to present said public statement), approval or disapproval of subject project and matters describing any interest in the project.

(3) A public statement description shall bear the details of the intended public statement in a specific manner.

(4) The Minister of Land, Infrastructure, Transport and Tourism may, when he/she deems it necessary, demand the person who intends to present a public statement as an interested person for the submission of documents verifying the interest concerned by specifying the place of submission, due date and number of copies.

(Selection of a speaker at public hearing)

Article 81-4 The Minister of Land, Infrastructure, Transport and Tourism may, when he/she finds the details of a proposed public statement are either beyond the scope of the project or concurrent with it, select a speaker at the scheduled public hearing from the interested persons who have submitted the proposal for public statement.

(Commission of a witness)

Article 81-5 The Minister of Land, Infrastructure, Transport and Tourism may, when he/she deems it necessary, demand a person who is other than an interested person to attend the scheduled public meeting and present his/her opinions or reports.

(Cancellation of the opening of a public hearing)

Article 81-6 The Minister of Land, Infrastructure, Transport and Tourism shall, when he/she deems it unnecessary to open a public hearing on a day after the date of public notification pursuant to the provisions under paragraph (1) of Article 81, promptly notify the known interested persons that the opening of said public hearing is to be cancelled and concurrently notify by an appropriate means.

(Cancellation of the opening of a public hearing)

Article 81-7 The Minister of Land, Infrastructure, Transport and Tourism may, when he/she deems it necessary to alter the matters that have been publicly notified or announced pursuant to the provisions under Article 81 because of a natural disaster or any other urgent and inevitable reasons, alter said matters that have been publicly notified or announced by promptly notifying the known interested persons of the alteration.

(Limitation of the time for presentation of a public statement)

Article 81-8 The chairperson may, when he/she deems it necessary for arranging the proceedings, limit the time assigned to a speaker at the public hearing.

(Public statement)

Article 81-9 The public statement presented by a speaker at a public hearing shall be conducted as given in the public statement description. However, this shall not apply to the case where questions posed by the chairperson are answered to or he/she deems it necessary and permits the exceptions.

(Cancellation of presenting a public statement or similar actions)

Article 81-10 (1) The chairperson may, when he/she finds a public statement of a speaker at a public hearing falls under any of the following item, cancel the said public statement:

- (i) In the event a public statement exceeds the time assigned by the chairperson pursuant to the provision of Article 81-8.
- (ii) In the event a public statement overlaps the matters that have already been stated or it is beyond the scope of subject project.
- (iii) In the event a public statement breaches the provision of the preceding Article.

(2) The chairperson may, when a speaker at a public hearing fails to observe the instructions of cancellation pursuant to the provision of the preceding paragraph, urge the speaker to leave the public hearing.

(Reading a public statement in lieu of an appointed speaker)

Article 81-11 A speaker at a public hearing shall, when he/she is unable to attend the public hearing due to illness or any other inevitable condition, substitute the reading the public statement by another person for the original speaker at the public hearing.

(Documentary evidence)

Article 81-12 The chairperson may, when he/she deems it necessary, request at

the public hearing a speaker at the public hearing for the submission of documents that proves the matters stated in public by specifying the place of submission, due date and number of copies.

(Maintenance of Records)

Article 81-13 (1) Matters stated at a public hearing shall be recorded by stenography or other means.

(2) The record referred to in the preceding paragraph shall, when an offer is presented by the public, disclose the record for public inspection.

(Issue of admission tickets)

Article 81-14 The Minister of Land, Infrastructure, Transport and Tourism may, when he/she deem it necessary, issue admission tickets and allow the holders only to observe the public hearing.

(Matters to be observed)

Article 81-15 (1) An observer shall, upon entrance into or leave, or in the place of public hearing, obey the instructions given by the chairperson or official(s) appointed by the chairperson.

(2) The chairperson may urge an observer who fails to obey the instructions prescribed in the preceding paragraph.

(3) The provision under the preceding two paragraphs shall apply mutatis mutandis to a speaker at a public hearing when he/she is not in the course of presenting a statement.

(Application for permission for alteration of scheduled work completion date)

Article 82 A person who intends to obtain the permission prescribed in the main clause of paragraph (2) of Article 41 of the Act shall submit the Application for permission for alteration of scheduled work completion date describing the matters listed in the following to the Minister of Land, Infrastructure, Transport and Tourism.

(i) Name and address

(ii) Name and address

(iii) Scheduled date of desired alteration

(iv) Reasons for the need of alteration

(Valid period of paragraph (2) of Article 41 of the Act)

Article 82-2 The validity period of the proviso of paragraph (2) of Article 41 of the Act shall be one (1) year.

(Notification of alteration of scheduled date of works completion)

Article 82-3 Pursuant to the provision of paragraph (3) of Article 41 of the Act, a person who intends to submit a notification of the alteration of the scheduled completion date of works shall submit the scheduled work completion date alteration notification describing the following matters to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
- (ii) Name and location of an aerodrome
- (iii) Altered scheduled date
- (iv) Reasons for the need of alteration

(Application for works completion inspection)

Article 83 (1) Pursuant to the provision of paragraph (2) of Article 42 of the Act, a person who intends to apply for the completion inspection of works of an aerodrome, and other facilities shall submit an application for completion inspection of completed works for aerodromes, etc. describing the following matters to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
- (ii) Name and location of an aerodrome
- (iii) Work completion date

(2) Provisions of the preceding paragraph shall apply mutatis mutandis to the application for the inspection of the works pertaining to the alteration of aerodromes, etc., pursuant to the provisions of paragraph (1) of Article 42 of the Act that shall be applied mutatis mutandis in compliance with the provisions of paragraph (2) of Article 43 of the Act.

(Notification of services commencement date)

Article 84 (1) Pursuant to the provision of paragraph (3) of Article 42 of the Act, a person who intends to submit a notification on the date of services commencement of an aerodrome, and other facilities shall submit a notification of services commencement date of aerodromes, etc. describing the following matters to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
- (ii) Name and location of aerodrome, etc.
- (iii) Date of commencing services

(2) Provisions of the preceding paragraph shall apply mutatis mutandis to the notification of services commencement date of aerodromes, etc. that has been altered or whose services have been suspended pursuant to the provisions of paragraph (3) of Article 42 of the Act that is applied mutatis mutandis in compliance with the provisions of paragraph (5) of Article 44 of the Act, that is applied mutatis mutandis in compliance with the provisions of paragraph (2) of Article 43 of the Act, paragraph (5) of Article 44 of the Act or paragraph (2) of

Article 45 of the Act, respectively.

(Important changes and alterations)

Article 85 Important changes and alterations for which the applicant shall receive the permission prescribed in paragraph (1) of Article 43 of the Act shall differ with respect to the type of an aerodrome as listed below:

- (i) Land aerodromes and land heliports
 - (a) Change in the location of reference point
 - (b) New establishment of a runway, runwaystrip, taxiway or apron
 - (c) Change in the length, width or strength of a runway or landing strip
 - (d) Change in the width or strength of a taxiway
 - (e) Extension of or change in the strength of an apron
- (ii) Land aerodromes or water heliports
 - (a) Change of location of reference point
 - (b) New establishment of runwaystrip, taxi waterway or circular flight water area
 - (c) Change in the length, width or depth of a runwaystrip
 - (d) Change in the width or depth of a taxi waterway or change in the diameter or depth of a circular flight water area

(Application for permission of change and alteration)

Article 86 (1) A person intending to apply for permission of change or alteration of aerodrome, etc. pursuant to the provisions of paragraph (2) of Article 38 of the Act that shall be applied mutatis mutandis in compliance with the provisions of paragraph (2) of Article 43 of the Act shall submit the written application in triplicate to the Minister of Land, Infrastructure, Transport and Tourism for permission of the change or alteration of aerodrome, etc. describing the matters listed below:

- (i) Name and address
 - (ii) Name and location of an aerodrome, etc.
 - (iii) Matters desired to be changed or altered (Documents and drawings comparing the old and new matters shall be attached.)
 - (iv) Cost incurred in implementing the changes or alterations
 - (v) Schedule dates of commencement and completion of the works
 - (vi) When an alteration in administration plans is required, the administration plan as a consequence of the alteration
 - (vii) Reasons for the need of change or alteration
- (2) The following documents and drawings shall be attached to the written application prescribed in the preceding paragraph:
- (i) Documents describing the cost incurred by the change or alteration and the methods for procuring land and objects

- (ii) Work design drawings and documents, specifications and work budget statement
- (iii) In the case of a change or alteration of the site of an aerodrome, etc., documents verifying whether the applicant possesses property right for the site pertaining to said change or alteration or any other title to use said aerodrome site, or the applicant shall be deemed to surely acquire such title or ownership.
- (iv) In the case where an applicant is a corporate entity or union, documents verifying the decision of intent pertaining to the change or alteration.

(Public notice of application for permission of establishment)

Article 87 (1) Matters that shall be put on public notice and displayed pursuant to the provisions of paragraph (3) of Article 38 of the Act to be applied mutatis mutandis in compliance with the provisions of paragraph (2) of Article 43 of the Act shall be as listed below:

- (i) Name and address
 - (ii) Name and location of an aerodrome, etc.
 - (iii) Matters desired to be changed
 - (iv) In the case of alteration of approach surface, transition surface or horizontal surface, the approach surface, transition surface or horizontal surface after the alteration
- (2) The provisions of the preceding paragraph shall apply mutatis mutandis to the case where the Minister of Land, Infrastructure, Transport and Tourism executes alteration of an aerodrome and relevant facilities.

(Application for permission of suspension or demolition of services)

Article 88 (1) Pursuant to the provision of paragraph (1) of Article 44 of the Act, a person intending to apply for the suspension or demolition of an aerodrome, shall submit an application for permission of the suspension (demolition) of aerodrome describing the following matters to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
 - (ii) Name and location of an aerodrome
 - (iii) In the case of application for permission of suspension, the commencement date and duration of the suspension
 - (iv) In the case of application for permission of demolition, the scheduled date of demolition
 - (v) Reasons for the need of suspension or demolition
- (2) In the case where an applicant is a corporate entity or union, the documents verifying the decision of intent pertaining to the suspension or demolition shall be attached to the "written application" prescribed in the preceding paragraph.

(3) The provisions of the preceding two paragraphs shall be applied mutatis mutandis to a notification of suspension or demolition of a non-public aerodrome. In this case, the terms "a person intending to apply for permission" and "application for permission" prescribed in the paragraph (1) of this Article shall be deemed to be replaced with "a person intending to submit a notification" and the term "application" in the preceding paragraph to be replaced with "notification".

(Application for services resumption inspection)

Article 89 (1) A person intending to receive the inspection for the services resumption of an aerodrome pursuant to the provisions of paragraph (4) of Article 44 of the Act (including the case to which the same applies mutatis mutandis in compliance with the provisions of paragraph (2) Article 45 of the Act) shall submit a written application for aerodrome services resumption inspection describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism shall submit a written application for aerodrome services resumption inspection describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

(i) Name and address

(ii) Name and location of an aerodrome

(iii) Scheduled date of services resumption

(2) In the case where an applicant is a corporate entity or union, the documents verifying the decision of intent pertaining to the resumption of services shall be attached to the "written application" prescribed in the preceding paragraph.

(Notification of services commencement)

Article 90 (1) Pursuant to the descriptions of Article 46 of the Act, the matters that shall be put on public notice in the case a notification of the date of services commencement of an aerodrome are as listed below:

(i) Name and address of the aerodrome provider

(ii) Name and location of an aerodrome

(iii) Date of services commencement

(2) The provisions of the preceding paragraph shall apply mutatis mutandis to the case where the Minister of Land, Infrastructure, Transport and Tourism establishes an aerodrome.

(Public notice of change, alteration, etc.)

Article 91 Pursuant to the provision of Article 46 of the Act, the matters that shall be put on public notice in the case where any change or alteration occurs in a matter that has been put on public notice in regard to an aerodrome or when the aerodrome services are suspended, resumed or demolished (including

a case where they shall apply mutatis mutandis in compliance with the provisions of paragraph (2) item (ii) of Article 55 of the Act) include those listed under items (i) and (ii) of paragraph (1) of the preceding Article and the additional matters listed below:

- (i) In the case where any change or alteration occurs in the matters that have been notified, the changed or altered matters
- (ii) In the case of a suspension, the commencement date and duration of a schedule suspension
- (iii) In the case of a resumption or demolition, the scheduled date

(Standards for safety and security)

Article 92 The standards for safety and security prescribed under paragraph (1) of Article 47 of the Act (including a case where they said provisions mutatis mutandis in compliance with paragraph (2) of Article 55-2) shall be as listed below.

- (i) An aerodrome shall be maintained to conform to the standards prescribed under Article 79 (excluding those listed under paragraph (1) item (ii)).
- (ii) The functions of facilities of an aerodrome shall be secured by conducting inspection and cleaning operations.
- (iii) When remodeling, rehabilitating or any other work is to be executed, the navigation of aircraft shall not be affected by taking proper measures such as setting necessary markings.
- (iv) Signboards indicating the prohibited acts prescribed under Article 53 of the Act shall be displayed in a manner readily recognizable by the public.
- (v) Markers or equivalent means clearly identifying borders prescribed under paragraph (3) of Article 53 of the Act shall be provided in a no-admittance area, and necessary measures shall be taken to prevent it from indiscriminate trespassing by persons, vehicles, etc.
- (vi) Fire-extinguishing facilities and rescue facilities required for counteracting fire and other accidents of aircraft in an aerodrome. etc. shall be installed, and in the event an accident occurs, necessary measures shall be taken immediately.
- (vii) In the event safety in take-off and landing of aircraft is endangered by natural disaster or other causes, such urgent measures as promptly suspending the their services shall be taken and the systems therein required to communicate with the Minister of Land, Infrastructure, Transport and Tourism shall be established.
- (viii) Such measures as communicating with relevant administrative organs shall be provided.
- (ix) An aerodrome services log shall be equipped and stored for one year to record the matters listed below:

- (a) Facility status of an aerodrome
- (b) Details of works performed
- (c) In the event a disaster or accident has occurred, the time, causes, status, and countermeasures taken
- (d) Matters communicated with relevant organs
- (e) Status of the use of an aerodrome by aircraft
- (f) Other matters required for administration of an aerodrome
- (x) In the case of an airport, when deemed necessary by the Minister of Land, Infrastructure, Transport and Tourism, the facilities required for meteorological observation shall be installed for the use by aircraft taking off and landing at the airport, the meteorological observation shall be conducted.
- (xi) In the case of an airport, when deemed necessary by the Minister of Land, Infrastructure, Transport and Tourism, wireless telephone system for aeronautical communications shall be installed, and information required for the flight of aircraft taking off and landing at the airport shall be offered.
- (xii) In the case of an airport, any entity engaged in business at the airport shall be urged to take countermeasures against acts of unlawful seizure of aircraft (shall mean the measures for preventing seizure and destruction of aircraft; the same shall apply hereinafter).
- (xiii) In the case of an airport a conference comprising the airport provider and delegates from relevant organs shall be organized to conduct necessary discussion with the relevant organs on countermeasures against acts of unlawful seizure of aircraft.
- (xiv) In the case of an airport, in addition to the measures listed under the preceding items, necessary measures shall be taken to ensure the safety of personnel engaged in the services of aviation traffic and airport.
- (xv) In the case of an airport, a guidebook describing the matters listed below and comprising attached drawings shall be equipped:
 - (a) Name and address of the airport provider
 - (b) Name and location of an airport and location of a reference point
 - (c) Site of an airport and the name and address of the owner of the site
 - (d) Type of airport, class of runway strip, and the strength of a runway (for land airports base ground included) or the depth of a runway strip
 - (e) Length of the approach area, slope of the approach surface, length of the radius of the approach surface or slope of the transition surface
 - (f) Outline of facilities of the airport
 - (g) Outline of air navigation facilities
 - (h) When there is any object that has a height in excess of the approach surface, transition surface, or horizontal surface, or any object that is located in an extreme proximity to these surfaces, the following matters
 1. Location and type of said object

2. The height exceeding that of the approach surface of said object, transition surface or horizontal surface or the extent of proximity to these surfaces
 - (i) Documents describing the air temperature on that planned site of an airport (The documents shall be prepared based on reference materials generated during five years or more in accordance with the standards set forth by the Minister of Land, Infrastructure, Transport and Tourism.)
 - (j) Specific method administer in compliance with the standards prescribed under sub-item (a) to the preceding item

(Exceptions of limitation of objects)

Article 92-2 The objects prescribed in the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism referred to in the proviso of paragraph (1) of Article 49 of the Act (including the cases where the subject shall apply mutatis mutandis in compliance with to paragraph (2) of Article 55-2 of the Act and paragraph (2) of Article 56-3 of the Act).

(i) Temporary structures

(ii) The lightening arresting system that shall be installed pursuant to the provisions of Article 33 of Building Standards Act (Act No. 201 of 1950)

(iii) Objects that do not noticeably hinder the safety of aircraft in regard to topography or in relation to other existing objects

(Prohibited acts)

Article 92-3 The important facilities of an aerodrome prescribed under paragraph (1) of Article 53 of the Act. shall include runwaystrip taxiway, apron, hangar, aerodrome markings and fueling facilities.

Article 92-4 The acts prescribed under paragraph (2) of Article 53 of the Act, which are likely to cause a danger to flight operations include those listed below:

(i) Throwing any objects at aircraft

(ii) Leaving metallic pieces, cloth or any other objects unattended on the runway strips, taxiways or aprons

(iii) Using fire or naked flame without any specific aim on runway strips, taxiways, aprons, hangar floors, and areas where the markings indicating the prohibition of use of fire or naked flame according the two different manners prescribed under item (xxviii) are displayed by the Minister of Land, Infrastructure, Transport and Tourism or the aerodrome provider.

(Notification of charges for using facilities)

Article 93 (1) Pursuant to the provisions of paragraph (1) of Article 54 of the Act,

a person intending to submit a notification on the setting or change of airport and air-navigation charges shall submit a written notification of airport and air-navigation charges setting (changing) describing the following matters to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name and address
 - (ii) Name and location of an aerodrome
 - (iii) The type and amount of said charges to be set or changed (in the case of a change, the comparison of old and new descriptions or values shall be clearly indicated).
 - (iv) Scheduled date of implementation
 - (v) In the case of a change, reasons for the need of change
- (2) The written notification prescribed in the preceding paragraph shall be attached with documents describing the basis for calculating the charges.

(Administrative Regulations)

Article 93-2 (1) An aerodrome provider shall set forth an administrative regulation on the matters listed below:

- (i) Operating time of an aerodrome
 - (ii) In the case where method for the use of a runway or a taxiway by aircraft is desired to be specified, the specific method.
 - (iii) When the places for boarding or disembarking aircraft, cargo loading or unloading, supplies replenishing, places for aircraft maintenance or inspection servicing, or methods and place for aircraft parking are desired to be specified, the places and methods.
 - (iv) The amount or rate of airport and air-navigation charges notified pursuant to paragraph (i) of Article 54 of the Act and the matters pertaining to their collection and payment as well as disbursement.
 - (v) In the case where imposing a certain restriction on persons entering the precinct of an aerodrome is desired, the method for conducting the restriction.
 - (vi) In the case where a certain type of acts are desired to be restricted, the type of acts
 - (vii) Other matters required as condition of offering services
- (2) The provisions of the preceding paragraph shall apply mutatis mutandis to the case where the Minister of Land, Infrastructure, Transport and Tourism establishes an aerodrome.

(Succession in title of the aerodrome provider, etc.)

Article 94 (1) A person intending to obtain permission of the succession in title of the provider of an aerodrome etc. shall submit a written application for permission of the succession in title of aerodrome provider describing the following matters to the Minister of Land, Infrastructure, Transport and

Tourism.

- (i) Name and address of the successor
 - (ii) Name and address of the inheritee
 - (iii) Name and location of an aerodrome, etc.
 - (iv) Conditions of succession
 - (v) Timing for attempting a succession
 - (vi) Reasons for the need of succession
- (2) The following documents shall be attached to the written application prescribed in the preceding paragraph:
- (i) Documents verifying the conditions of succession
 - (ii) In the case of a local public entity, documents verifying the decisions made for the succession
 - (iii) In the case of a corporation other than local public entities, the following documents:
 - (a) Article of incorporation or certificate of an act of donation and registry matters
 - (b) Balance sheet for the latest business fiscal year
 - (c) Name list and personal history of directors or employees
 - (d) Documents verifying the decisions made for the succession
 - (e) Documents describing other matters for reference
 - (iv) In the case of a union having no corporate capacity, the following documents:
 - (a) Duplicate of union contract
 - (b) Inventory of the assets of union members
 - (c) Name list and personal history of union members
 - (d) Documents describing other matters for reference
 - (v) For an individual, the following documents:
 - (a) Inventory of assets
 - (b) Abstract of family register
 - (c) Personal history
 - (d) Documents describing other matters for reference

(Notification of succession in title of the aerodrome provider, etc. as a result of inheritance)

Article 95 (1) A person intending to submit a notification of the succession in title of the provider of an aerodrome etc. pursuant to the provision of paragraph (4) of Article 55 of the Act shall submit a written application for permission of the succession in title of aerodrome provider describing the following matters to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address of notifier and the relationship with the inheritee

- (ii) Name and address of the inheritee
 - (iii) Name and location of an aerodrome, etc.
 - (iv) Date of commencing the inheritance
- (2) The following documents shall be attached to the written notification prescribed in the preceding paragraph:
- (i) Documents verifying the relationships between the notifier and the inheritee
 - (ii) In the case where any inheritee(s) other than the notifier exists, documents describing the name and address of said inheritee(s) and the statement of consent signed by said inheritee(s)

(Conical surface)

Article 96 The gradient and length of the radius pursuant to the provision of paragraph (3) of Article 56 of the Act shall be as specified below:

- (i) An aerodrome serving for the landing with the use of instrumental landing or the landing with the use of precision approach radar
 - (a) Gradient: 1/50th
 - (b) Length of radius: 16,500 meters
- (ii) In the case of land aerodromes, etc. other than the aerodromes prescribed in the preceding item, the details in reference to the type of landing strip are as listed in the following table (in the case of an aerodrome having two or more land strips):

Class of landing strip	Gradient	Length of radius
A	1/40th	10,000 meters
B	1/40th	8,000 meters
C and D	1/40th	6,000 meters
E	1/30th	6,000 meters
F	1/20th	4,000 meters

(Outer horizontal surface)

Article 96-2 Length of the radius pursuant to the provisions of paragraph (4) of Article 56 of the Act shall be 24,000 meters.

(Public notice of specifications for extended approach surface, etc.)

Article 96-3 Matters that shall be put on public notice and displayed pursuant to the provisions of paragraph (3) of Article 38 of the Act to be applied mutatis mutandis in compliance with the provisions of paragraph (2) of Article 56-2 of the Act shall be as listed below:

- (i) Name and location of an aerodrome
- (ii) Extended approach surface, conical surface or outer horizontal surface that are intended to be specified or altered

(Public notice of the assignment of public facilities)

Article 96-4 Matters to be put on public notice pursuant to the provision of paragraph (2) of Article 56-4 of the Act shall be as listed below:

- (i) Name and location of facilities and outline of installations
- (ii) Date of commencing services of facilities
- (iii) Conditions for the use of facilities

Section 2 Aeronautical Radio Navigation Facilities

(Types of aeronautical radio navigation facilities)

Article 97 The types of aeronautical radio navigation facilities prescribed under item (i) of Article 1 shall be as listed below:

- (i) Non-directional radio beacon (hereinafter abbreviated as NDB)
- (ii) Directional radio range beacon
- (iii) Z-marker beacon
- (iv) VHF omni-directional radio range (hereinafter abbreviated as hereinafter abbreviated as VOR)
- (v) Tactical air navigation system (hereinafter abbreviated as TACAN)
- (vi) Instrument landing system (hereinafter abbreviated as ILS)
- (vii) Distance measuring equipment (hereinafter abbreviated as DME)
- (viii) Long-range navigation A (hereinafter abbreviated as LORAN A)
- (ix) Satellite-based augmentation system (hereinafter abbreviated as SBAS)

(Application for permission of the establishment)

Article 98 (1) Pursuant to the provision of paragraph (2) of Article 38 of the Act, a person intending to apply for permission of the establishment of aeronautical radio navigation facilities, shall submit a written application for permission of the establishment of aeronautical radio navigation facilities describing the matters listed below, in triplicate, to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
- (ii) Purpose of installation
- (iii) Type and name of aeronautical radio navigation facilities
- (iv) Location and address of aeronautical radio navigation facilities
- (v) Name and address of owner of the proposed site for the installation of the aeronautical radio navigation facilities
- (vi) Outline of facilities (In the case of facilities indicating course directions, at least its direction, rated output of a transmitter and assumed frequencies shall be added)
- (vii) Management plan (Desired operating hours shall be added.)
- (viii) Estimated Costs for the installation and management

- (ix) Schedule dates of commencement and completion of the works
- (2) The provisions prescribed under paragraph (2) of Article 76 (except those pertaining to the provisions prescribed under item (i) (b) and items (iv) to (vi)) shall apply mutatis mutandis to the application of the preceding paragraph.

(Standards for installation)

Article 99 (1) The standards such as location and structure for the installation of aeronautical radio navigation facilities prescribed under paragraph (1) of Article 39 of this Act (including the case where they apply mutatis mutandis in compliance with paragraph (2) of Article 43) shall be as listed below:

- (i) Said facilities shall be installed in such a manner that they do not affect the functions of existing aeronautical radio navigation facilities.
- (ii) Said facilities shall be installed in such a place where its topological influence on the said facilities is at the least possible level, and concurrently, in such a manner that building structures, vegetation and other objects around the planned site shall not affect the said facilities.
- (iii) In the case of an NDB, it shall have the following performance and structure:
 - (a) The horizontal radiation characteristics of a radio wave shall be non-directional to the best possible extent and its polarization wave shall be in the form of vertical polarization wave not including more than the least possible horizontal polarization wave.
 - (b) Said system shall be such that it emits a carrier that is amplitude-modulated at an audible frequency.
 - (c) Said system shall be such that an audible modulation audio frequency is key-operated in order to transmit an identifier code.
 - (d) The modulation frequency shall be 1,020 Hz and its deviation shall not exceed 50 Hz.
 - (e) The identifier code shall be such that it is transmitted at a speed corresponding to seven words per minute, and shall be repeated for two consecutive times every 30 seconds (in the case of an NDB specified by the Minister of Land, Infrastructure, Transport and Tourism and used for aircraft approach or stand-by, eight times or more per minute).
 - (f) Said system shall have such radiation characteristics that during the transmitting an identifier code, it can definitely identify the code within a range not exceeding a rated reach distance (referring to a distance in which the vertical electric field intensity of a radiated radio wave reaches 70 microvolts per meter during daytime; hereafter the same applying to NDB as well)
 - (g) The carrier power of this system shall be such that its value will remain unchanged when an identification code is sent.

- (h) The rated coverage shall be such that it will not decrease to 90% or less of its original value because of the variation of antenna constant or power supply voltage.
- (i) The modulation of a superfluous range of audible frequency shall be controlled in such a way that the amplitude of a redundant frequency shall not exceed 5% of that of the carrier wave.
- (j) The configuration of a transmitting antenna system shall be such that the loss of its each part and the magnitude of standing wave generated in the feeder cable will be suppressed to a minimum.
- (k) The antenna system shall be such that it will not generate a space wave that damages the functions of said aeronautical radio navigation facilities.
- (l) Transmitter equipments shall be provided in a pair so that they can be switched any time.
- (m) A dummy antenna system shall be provided.
- (n) A standby isolated power unit shall be provided.
- (o) A monitor equipment that can determine whether or not a transmission of identification code is properly performed shall be provided.
- (iv) In the case of an omnidirectional range ground station, it shall have the performance characteristics and structures listed below:
 - (a) It shall be able to radiate non-directional non-radio wave into space and concurrently radiate directional A-A radio wave that is key-operated with marker codes corresponding to Morse codes A and N alternately. Note, however, that the carrier frequency for directional radio waves shall be higher by those for non-directional radio waves by 1,020 Hz and its deviation shall not exceed 50 Hz.
 - (b) In the quadrant including true north, the marker code shall be N. Note, however, that when a course is heading for north, the marker code shall be N in the west-north quadrant.
 - (c) The marker code transmission procedure shall be such that the code is transmitted for quadrant N and subsequently quadrant for one time each.
 - (d) Marker codes shall be such that each of marker code N and marker code A is transmitted for twelve times following an identification code, respectively.
 - (e) An identification code shall be such that it is transmitted at a speed corresponding to seven words per minute, and shall be repeated for two consecutive times every 30 seconds.
 - (f) Said system shall have such radiation characteristics that during transmitting an identifier code, it can definitely identify the code within a range not exceeding a rated reach distance (which refers to a distance from said facility where a non-directional radio wave radiated hereafter the same applying to a directional wireless marking facility to a point where

- its vertical electric field intensity on the course of said facility reaches 70 microvolts per meter during daytime; hereafter the same applying to NDB)
- (g) The ratio in vertical electric field between the directional radio wave and non-directional radio wave on a course shall be 30% or more and not exceeding 95%.
 - (h) A course shall be such that when received, it is audible as a perfectly continuous sound, and its width shall be approximately 3 degrees.
 - (i) The variation of a course shall not exceed the allowable deviations listed below:
 1. In the case where it occurs on a course oriented to the centerline of a runway, it shall be zero degree.
 2. In the case where it occurs on a course oriented to an aerodrome, etc., it shall be 1 degree 30 minutes.
 3. In the case where it occurs on a course other than that stipulated under 1 and 2, it shall be 3 degrees.
 - (j) Said system shall be such that it will suppress the occurrence of a false course to a minimum.
 - (k) In order to confirm that an aircraft has passed over range station, a shadow zone shall exist high above the center of said facility, and it has such a spread of area corresponding to 1.5 second of silent period in the case with an altitude of 300 meters and at a speed of 250 kilometers per hour, or 5 seconds in the case with an altitude of 1.5 kilometers and at a speed of 250 kilometers per hour.
 - (l) A rated coverage shall not be such that it will not decrease to 90% or less of its original value because of the variation of antenna constant or power supply voltage.
 - (m) The modulation of a superfluous range of audible frequency shall be controlled in such a way that the amplitude of a redundant frequency shall not exceed 5% of that of the carrier wave.
 - (n) A radiated radio wave shall be such that the key clicking noise contained in it is suppressed to a minimum.
 - (o) The configuration of an antenna system shall be such that in the case of radiating a directional radio wave, the variation of its antenna constant and the loss in its feeder cable are minimum possible, and, the phase and amplitude of a pair of antenna due to variation of antenna constant will remain unchanged to the highest possible extent, and also, in the case of that radiating a non-directional radio wave, the loss of each section will be minimized, and additionally, the standing wave generated in the feeder cable is suppressed to a minimum.
 - (p) Transmitter equipments shall be provided in a pair so that they can be switched any time.

- (q) A dummy antenna shall be provided.
- (r) A standby isolated power unit shall be provided.
- (s) A monitor equipment that can determine the normality of an identification code and a course shall be installed at point on a course with a distance of one wavelength from said facility in such a way that it can be checked any time during operation hours.
- (v) In the case of a Z marker beacon, it shall have the performance characteristics and structures listed below:
 - (a) Said system shall be such that it emits a conical, vertically directional carrier that is amplitude-modulated with an audible frequency.
 - (b) A transmitter equipment shall emit a radio wave with a frequency limited to 75 MHz.
 - (c) Said radio wave shall be a horizontal polarization wave containing the least possible proportion of vertical polarization wave.
 - (d) The radial electric field profile shall be such that its axis has the highest possible extent of verticality.
 - (e) The electric field intensity shall be symmetric about the axis of the radial electric field profile to the highest possible extent.
 - (f) The radial electric field shall be free from any no sensitivity region.
 - (g) The coverage of horizontal radiation shall be designed so that, when an aircraft equipped with a Z marker beacon receiver passes a radial electric field, the continuous lighting time of pilot lamp of said receiver shall be 10 to 15 seconds in the case of an aircraft cruising at an altitude of 300 meters and a speed of 250 kilometers per hours or 18 to 24 seconds at an altitude of 1.5 kilometers and a speed of 250 kilometers per hour.
 - (h) The configuration of a transmitting antenna system shall be such that the loss of each part of it and the magnitude of standing wave generated in the feeder cable will be suppressed to a minimum.
 - (i) Transmitter equipments shall be provided in a pair so that they can be switched any time.
 - (j) A dummy antenna shall be provided.
 - (k) A standby isolated power unit shall be provided.
- (vi) In the case of a VOR, it shall have the following performance characteristics and structures:
 - (a) Said system shall, in order to provide cruising aircraft with a magnetic bearing in reference to said facility, be designed to emit a radio wave carrying a reference phase signal (that refers to a signal of a uniform intensity in all magnetic bearings; hereafter the same shall apply), a variable phase signal (whose phase constitutes a phase difference, in combination with a reference phase signal, and the difference corresponds to a magnetic bearing; hereafter the same shall apply) and an

- identification signal.
- (b) Said radio wave shall be a horizontal polarization wave containing the least possible proportion of vertical polarization wave.
 - (c) The main carrier shall be such that is amplitude-modulated with the modulation waves listed below:
 - 1. A subcarrier that is frequency-modulated with a reference phase signal (in the case of a Doppler VOR, variable phase signal).
 - 2. A variable phase signal (In the case of a Doppler VOR, a reference phase signal)
 - 3. An identification signal
 - (d) The frequency of a reference phase signal and a variable phase signal shall be 30 Hz and its deviation shall not exceed 1%.
 - (e) The degree of modulation of amplitude-modulation with a subcarrier and that with variable phase signal (in the case of a Doppler VOR, a reference phase signal) shall, in a space of an attack angle of 5 degree or less from the center of an antenna part, be 30% and its deviation shall not exceed 2%.
 - (f) The frequency of a subcarrier shall be 9,960 Hz and its deviation shall not exceed 1%.
 - (g) The modulation index of the frequency-modulation with a reference phase signal (In the case of a Doppler VOR, variable phase signal) shall be 15 and more to 17 or less.
 - (h) A subcarrier shall not be such that is amplitude-modulated to a higher degree of modulation than those listed below:
 - 1. In the case of a standard VOR, the degree of modification shall be 5%.
 - 2. In the case of a Doppler VOR, it shall be 40% at a location that is apart from the center of antenna part with a distance of 300 meters.
 - (i) The error of a magnetic bearing supplied by said facility shall not exceed 2 degrees at a location that is apart from the center of antenna part with a distance approximately 4 times of the wavelength of the main carrier (in the case of a Doppler VOR, approximately 18 times) and in a space with an attack angle of 40 degrees or less from said center.
 - (j) The modulation frequency shall be 1,020 Hz and its deviation shall not exceed 50 Hz.
 - (k) The degree of modulation of amplitude modulation with an identification signal shall not exceed 10% and be a closest possible value to 10%.
 - (l) Said system shall be such that it can transmit an identification code composed of three international Morse codes at a speed corresponding to seven words per minute, and shall be repeated for three or more times during 30 seconds.
 - (m) Transmitter equipments shall be provided in a pair so that they can be switched any time.

- (n) A dummy antenna shall be provided.
- (o) A standby isolated power unit shall be provided.
- (p) A monitor equipment shall be installed at a location with a distance of approximately 4 times (in the case of Doppler VOR, approximately 18 times) of the wavelength of main carrier from the center of an antenna part.
- (q) Said monitor equipment shall, when any of the below-listed event occurs, be capable of promptly notify the control station of the event, capable of switching to a standby transmitter equipment, and, even when said state of event continues after activation of the standby transmitting equipment, and of terminating the transmission of radio wave from a VOR.
 1. When the magnetic bearing supplied by a VOR varies in excess of 1 degree from the bearing of original setting
 2. When the degree of modulation of amplitude modulation by a subcarrier or the degree of modulation of amplitude modulation by a variable phase signal (in the case of a Doppler VOR, a reference phase signal) decreases from the degree of modulation at the original setting by an extent exceeding 15%
 3. When the monitoring function of a monitoring equipment is in failure
- (vii) In the case of a tactical air navigation system (TACAN), it shall have the performance characteristics and structures listed below:
 - (a) Said system shall have such functions that, in order to provide cruising aircraft with a magnetic bearing in reference to said facility, emit a main reference bearing signal (a signal simultaneously emitted in all magnetic bearings and intended to serve for the rough measurement; hereafter the same shall apply), auxiliary reference bearing signal (a signal simultaneously emitted in all magnetic bearings and intended to serve for the precision measurement of a bearing; hereafter the same shall apply), main variable bearing signal (a signal having a phase that varies with magnetic bearing and is intended to serve for the rough measurement of a bearing; hereafter the same shall apply), and auxiliary variable bearing signal (a signal having a phase that varies with magnetic bearing and is intended to serve for the precision measurement of a bearing; hereafter the same shall apply), and in order to provide said aircraft with the distance from said facility, emit a response signal to a query signal emitted from an on-board TACAN unit or DME unit, and also emit an identification signal.
 - (b) Each of said main reference bearing signal, auxiliary reference bearing signal, response signal, identification signal, and random pulse pair shall be a radio wave of a pulse pair.
 - (c) Said pulses shall conform to the requirements listed below:
 1. A pulse rise time (which refers to a period of time required for the amplitude of a pulse to rise from a point 10% of its maximum

- amplitude at its rising edge to reach 90% of the amplitude) and a pulse fall time (which refers to a period of time required for the amplitude of a pulse to fall from point 90% of its maximum amplitude at its falling edge to reach 10% of the amplitude) shall be the closest possible to 2.5 microseconds and it shall not exceed 3 microseconds.
2. A pulse width (which refers to a period of time required for the amplitude of a pulse to reach a point 50% of its maximum amplitude in the falling edge from the point 50% of its maximum amplitude in the rising edge) shall be 3 microseconds or more to 4 microseconds or less.
 3. The amplitude of a pulse shall, during the period from the time point when it reaches 95% of its maximum amplitude at the rising edge to the time point when it reaches 95% of the falling edge, be 95% or more of its maximum amplitude.
- (d) A pulse interval (which refers to a period of time required for a pulse pair to reach a point 50% of its maximum amplitude at the falling edge from the point 50% of its maximum amplitude at the rising edge: hereafter the same shall apply) shall be 12 microseconds in the case of channel X or 30 microseconds in the case of channel Y, and, the deviation shall not exceed 0.25 microseconds.
- (e) The difference in peak power between the first pulse and the second shall be 1 dB or less.
- (f) Each of said main reference bearing signal, auxiliary reference bearing signal, response signal, identification signal, and random pulse pair shall be those amplitude-modulated with the main variable bearing signal and auxiliary variable bearing signal.
- (g) The frequency of a main variable bearing signal shall be 15 Hz and its deviation shall not exceed 0.23%.
- (h) The frequency of an auxiliary variable bearing signal shall be 35 Hz and its deviation shall not exceed 0.23%.
- (i) The degree of modulation of a main variable bearing signal and of an auxiliary bearing signal shall be 12% or more to 30% or less.
- (j) The relative harmonic content of a main variable bearing signal and of an auxiliary variable bearing signal shall not exceed 20%.
- (k) When the amplitude of a main variable bearing signal reaches its maximum, the amplitude of an auxiliary bearing signal shall reach its maximum.
- (l) The number of pulse pairs constituting a main reference bearing signal shall be 11 or more to 13 less.
- (m) The pulse pair interval of a main bearing signal (which refers to a period of time required for a pair of adjacent pulses, to reach a point where the amplitude reaches 50% of its maximum at the front edge of the second

- pulse of the following pulse pair from the point where the amplitude reaches 50% of its maximum at the front edge of the second pulse of the leading pulse pair; hereafter the same shall apply) shall be 30 microseconds, and, its deviation shall not exceed 0.3 microseconds.
- (n) The number of pulse pairs constituting an auxiliary reference bearing signal shall be 6 or 7.
 - (o) The pulse pair interval of an auxiliary reference bearing signal shall be 24 microseconds, and, its deviation shall not exceed 0.3 microseconds.
 - (p) A main reference bearing signal shall be such that it is emitted when the amplitude of a main variable bearing signal reaches its maximum in the magnetic bearing in reference to said facility is in the direction of 90 degrees.
 - (q) An auxiliary reference bearing signal shall be such that it is emitted when the amplitude of an auxiliary variable bearing signal reaches its maximum in the magnetic bearing in reference to said facility is in the direction of 90 degrees (except when the amplitude of the main variable bearing signal reaches its maximum in said direction).
 - (r) The error of the magnetic bearing supplied by said facility shall not exceed 1.5 degrees.
 - (s) The reply delay time (which refers to a period of time from the point when the second pulse of a query signal is received to the point when the second pulse of a query signal in response to said query signal is received; hereafter the same shall apply to this item and item (ix)) shall be 50 microseconds, and, its deviation shall not exceed 1 microsecond. Nevertheless, in the case of TACAN that constitutes part of ILS, this shall not apply.
 - (t) The sum of the number of transmissions of reply signal pulse pairs and that of random pulse pairs shall be 2,700 per second, and, its deviation shall not exceed 90 per second.
 - (u) The reply signal shall not be transmitted during the period of transmitting a reference bearing signal, auxiliary bearing signal or identification signal.
 - (v) The random pulse pair shall not be transmitted during the period of transmitting a reference bearing signal, auxiliary bearing signal, response signal or identification signal.
 - (w) The identification signal shall be composed of a pulse pair having a pulse pair interval of 90 microseconds or more to 110 microseconds or less.
 - (x) The number of transmissions of identification signal pulse pair shall be 2,700 per second and its deviation shall not exceed 20 per second.
 - (y) The intervals between pulse pairs, each constituting an identification code, shall be as equal as possible.

- (z) Said system shall be such that it can transmit an identification code composed of three international Morse codes at a speed corresponding to seven words per minute, and shall be repeated with an interval of 30 seconds.
- (aa) The time required to transmit an identification code shall not exceed 5 seconds per send.
- (bb) The identification signal shall not be transmitted during the period of transmitting a reference bearing signal or auxiliary bearing signal.
- (cc) The identification code of TACAN that is used in combination with VOR or ILS shall be such that is transmitted during one period obtained by dividing a period of 30 seconds into 4 or more periods, while the identification code of VOR or ILS that is used in combination with said TACAN shall be transmitted during a period other than the identification code of said TACAN is being transmitted.
- (dd) The maximum sensitivity of a receiving equipment (which refers to the sensitivity at the central frequency (which refers to the peak power of said query signal at a point when the response ratio to the query signal reaches 70%; hereafter the same shall apply to this item and item (ix)); hereafter the same shall apply to this item and item (ix)) shall be minus 125 dB or less in reference to 1 Watt while receiving a query signal of 200 pulse pairs per second.
- (ee) The maximum sensitivity of a receiving equipment shall not vary by 1 dB or more when the number of response signal pulse pair transmissions remains at 90% or less of its maximum value.
- (ff) The maximum sensitivity of a receiving equipment at a frequency deviating from the central frequency shall be within 3 dB from the maximum sensitivity.
- (gg) The receiving equipment shall be such that its frequency deviates from the central frequency by 900 kHz, and, it shall not have a response ratio of 70% or more to a query signal of which peak power is not more than the sum of the maximum sensitivity and 80 dB.
- (hh) The sensitivity of the receiving equipment shall, when a period of time of 8 microseconds have elapsed since receiving the first pulse of a query signal of which peak power is a result of adding 60 dB to the maximum sensitivity, recovered to a state within a range of 3 dB from the maximum sensitivity.
- (ii) The spurious response of a receiving equipment shall be 80 dB or more in the case of intermediate frequency response or 75 dB or more in the case of image frequency response or other spurious responses.
- (jj) The receive quiescent time of a receiving equipment shall be the intervals of 60 microseconds or less after receiving a query signal until transmitting

- a reply signal and after transmitting a reply signal (or 150 seconds in the case where it is required to avoid the influence of reflective wave that may be generated by topological conditions).
- (kk) The decoder of a receiving equipment shall be such that it will not function in response to any pulse pair other than the pulse pair of a query signal.
 - (ll) The decoder of a receiving equipment shall be such that it will not function without fail in response to the pulse pair of a query signal even if another pulse is added before or after said pulse pair or in the middle of it.
 - (mm) The antenna system shall be such that it transmits and receives the radio wave of a vertical polarization wave.
 - (nn) The TACAN antenna used in combination with VOR shall be installed on a vertical line including the center of VOR antenna. Nevertheless, when this causes any difficulty, in the case of TACAN being used mainly for approach and stand-by of aircraft, the antennal shall be installed at a location 30 meters (80 meters in the case where said VOR is of a Doppler type) away from the center of VOR antenna part, or in the case of other types of TACAN, at a location not exceeding 600 meters from the center of VOR antenna part.
 - (oo) Transmitting-receiving equipments shall be provided in a pair so that they can be switched and used any time.
 - (pp) A dummy antenna shall be provided.
 - (qq) A standby isolated power unit shall be provided.
 - (rr) A monitoring equipment shall be provided.
 - (ss) Said monitoring equipment shall, when any of the below-listed events continues for 4 seconds or more, be capable of promptly notify the control station of the event, capable of switching to a spare transmitting-receiving equipment, and, even when said state of event continues after activation of the spare transmitting-receiving equipment, and capable of terminating the transmission of radio wave from a TACAN.
 1. When the magnetic bearing supplied by a TACAN varies in excess of 1 degree from the bearing of original setting
 2. When the reply delay time relative to the query signal, of which peak power corresponds to the maximum sensitivity of a receiving equipment added with 6 dB, ceased to conform to the standards prescribed under subitem (s)
 3. When the power of an antenna drops below 50%
 4. When the monitoring function of a monitoring equipment is in failure
 - (tt) The number of pulse pairs transmitted by a monitoring equipment shall not exceed 120 per second.
 - (viii) In the case of an ILS, it shall have the performance characteristics and

structures listed below:

- (a) An ILS shall have such a configuration that comprises the equipment listed below. However, in the case of installation a TACAN or DME, the establishment of either one or both of the marker beacon listed under sub-item 3., a and b may be omitted.
 1. Localizer
 2. Glide slope
 3. Marker beacons listed below:
 - a. Outer marker
 - b. Middle marker
 - c. Inner marker (shall be limited to the case where it is required.)
- (b) The localizer shall have the performance characteristics and structures listed below:
 1. To provided aircraft performing a precision approach along an ILS course with the deviation value in the horizontal direction from said course by means of the difference in degree of modulation between two modulation waves, said equipment shall be such that transmits a radio wave that carries these modulation waves and an identification signal.
 2. Said equipment shall be such that it transmits a carrier that is amplitude-modulated with a modulation wave of 90 Hz, a modulation wave of 150 Hz and an identification signal.
 3. The composite electric field shall be such that, on the right side of the course line (which refers to a virtual straight line obtained by taking the average of selected loci that are closest to the runway centerline or its extended line among the loci of points of which DDM (one-hundredth of absolute value of difference in the degree of modulation between two modulation waves; hereafter the same shall apply) based on the horizontal polarization wave on an arbitrary horizontal plane of a radio wave emitted by localizer; hereafter the same shall apply) as observed from an approaching direction of aircraft using said ILS, the degree of modulation of a modulated wave that is modulated with a modulation wave of 150 Hz is greater than that of 90 Hz, while on the left side of the course line, the degree of modulation of a modulated wave that is modulated with a modulation wave of 90 Hz is greater than that of 150 Hz.
 4. The radio wave shall be a horizontal polarization wave and shall not contain the horizontal polarization wave with the values exceeding those listed below:
 - a. In the case of a localizer of ILS Category I (which refers to an ILS on which the minimum height for an aircraft to perform a precision approach by using said ILS is 60 meters or more above the horizontal

plane including the runway approach end edge (which refers to the end of a runway on the landing side for the aircraft using said ILS; the same shall apply in this Article); hereafter the same shall apply), the value at which the DDM-equivalent value indicated by the receiving equipment of a localizer on board of an aircraft that is on a course line and transversely inclined by 20 degrees against the horizontal line reaches 0.016.

- b. In the case of a localizer of ILS Category II (which refers to an ILS on which the minimum height for an aircraft to perform a precision approach by using said ILS is 30 meters or more to less than 60 meters above the horizontal plane including the runway approach end edge; hereafter the same shall apply), the value at which the DDM-equivalent value indicated by the receiving equipment of a localizer on board of an aircraft that is on a course line and transversely inclined by 20 degrees against the horizontal line reaches 0.008.
 - c. In the case of a localizer of ILS Category III (which refers to an ILS on which the minimum height for an aircraft to perform a precision approach by using said ILS is less than 30 meters above the horizontal plane including the runway approach end edge; hereafter the same shall apply), the value at which the DDM-equivalent value indicated by the receiving equipment of a localizer on board of an aircraft that is on a course line and transversely inclined by 20 degrees against the horizontal line reaches 0.005 within a range where the value of DDM based on a horizontal polarization wave remains within 0.02 or less.
5. In the case of a localizer of ILS Category III, the spread of variation of a course line shall not exceed 0.005 in terms of DDM-equivalent value within a frequency band of 0.01 Hz to 10 Hz.
6. The horizontal electric field intensity of a radio wave transmitted from a localizer shall, within the rated coverage indicated in the following figure, be 40 microvolts per meter or more:
- Horizontal projection plant (omitted)
Vertical projection plan (omitted)
Remarks
- i. A rated coverage shall be as indicated with hatched lines.
 - ii. In a topologically inevitable case or the case where an operationally permissible case, the distance from C to A shall be 33.3 kilometers and that from C to B shall be 18.5 kilometers.
 - iii. Point C shall be the center of the antenna for a localizer unit.
 - iv. P1 is a point vertically above A, while P2 is a point vertically above B.

Each shall be either higher point of 600 meters from the horizontal plane including the runway approach end or 300 from the highest point on ground surface within intermediate approach airspace and final approach airspace.

- v. Point E shall be the runway approach end.
7. In addition to be conformant to the standards prescribed under "6," the horizontal electric field intensity of a radio wave transmitted from a localizer shall conform to the standards listed below:
- a. In the case of an ILS Category I localizer, the horizontal electric field intensity shall be 90 microvolts per meter or more at a point in a course sector (which refers to a fan-shaped area with a DDM value of 0.155 or less of a horizontal plane including a course line; hereafter the same shall apply), within a distance of 18.5 kilometers from the center of the antenna, and at a height of 60 meters or more from a horizontal plane including a runway approach end.
 - b. In the case of an ILS Category II localizer, said value shall be equal to or more than the corresponding one of the values listed below:
 - 1) 100 microvolts per meter at a point in a course sector and in a distance of 18.5 kilometers from the center of the antenna
 - 2) 200 microvolts per meter at a point in a course sector and with a height of 15 meters from a horizontal plane including a runway approach end
 - c. In the case of an ILS Category III localizer, said value shall be equal to or more than the corresponding one of the values listed below:
 - 1) 100 microvolts per meter at a point in a course sector and in a distance of 18.5 kilometers from the center of the antenna
 - 2) 200 microvolts per meter at a point in a course sector and with a height of 6 meters from a horizontal plane including a runway approach end
 - 3) 100 microvolts per meter at a point on a glide path (refers to a virtual straight line obtained by taking the average of selected loci that are closest to the runway centerline or its extended line among the loci of points of which DDM based on the horizontal polarization wave of a radio wave transmitted by a glide slope on a vertical plane including a runway; hereafter the same shall apply) and a point on a straight line connecting a point at a height of 6 meters above the horizontal plane including a runway approach end and a point vertically 4 meters above a touch-down point (which refers to appoint 300 meters above the runway centerline from a runway approach end to runway end (which refers to the end of a runway on the opposite direction of a runway approach

end; the same shall apply in this Article); the same shall apply in this Article), and a point above vertically 4 meters from a point on the runway centerline from the touch-down point to the center point of runway end.

8. In the case of a localizer transmitting two carrier waves, the electric field of one of the carrier waves shall be configured inside of the electric field of the other carrier wave, and, in a course sector, the horizontal electric field intensity of the carrier wave of which electric field is configured inside is higher than the of the horizontal electric field intensity of the carrier wave of which electric field is configured outside by 10 dB or more.
9. The frequency deviation at modulation frequencies of 90 Hz and 150 Hz shall not exceed 2.5% in the case of an ILS Category I localizer 1.5% in the case of an ILS Category II localizer, and 1.0% in the case of an ILS Category III localizer, respectively.
10. The phase characteristics of a 90 Hz-modulation wave and a 150 Hz-modulation wave in a semi-course sector (which refers to a fan-shaped area having a DDM value of 0.0775 or less of the horizontal plane including a course line; hereafter the same shall apply) shall be as prescribed below:
 - a. The voltage of each of the 90-Hz modulation wave and 150-Hz modulation wave turns to zero in the same direction at every half cycle of their composite wave during a period not exceeding 370 microseconds in the case of an ILS Category I or Category II localizer or 186 microseconds in the case of an ILS Category III localizer.
 - b. In the case of a localizer transmitting two carrier waves, the voltage of 90-Hz modulation wave of each carrier wave turns to zero in the same direction during a period not exceeding 617 microseconds in the case of an ILS Category I or Category II localizer, or 308 microseconds in the case of an ILS Category III localizer; and similarly, the voltage of 150-Hz modulation wave of each carrier wave turns to zero during the period not exceeding 370 microseconds in the case of an ILS Category I or Category II localizer, or 185 microseconds in the case of an ILS Category III localizer.
11. The degree of modulation of 90 Hz modulation wave and 150 Hz modulation wave shall be 20% on a course line, and, its deviation shall not exceed 2%.
12. The relative harmonic content of 90 Hz modulation wave and 150 Hz modulation wave shall not exceed 10%, and in the case of an ILS Category III localization, the second relative harmonic content of 90 Hz modulation wave shall not exceed 5%.

13. In the case of an ILS Category III localizer, the degree of modulation of modulation waves of a power supply frequency, its harmonic wave and other unrequired frequency components shall not exceed 0.5%, and, the degree of modulation of 90 Hz and 150 Hz modulation waves and of the harmonic wave of a power supply frequency that causes the variation of a course line by imposing mutual modulation on these harmonic waves and other unrequired frequency components shall not exceed 0.05%.

14. The DDM at each point on a course line shall conform to the value in accordance with each classification as listed in the following table. match the value of corresponding case:

Classification		DDM
Type	Location of a point on a course line	
Localizer of ILS Category I	A point located on a course line from the far end within the range of the rated coverage from the vertical plane to the runway centerline or its extended line including ILS Point A (hereinafter the plane shall be simply called "vertical plane" in this table and the table under item (xiv) (c)).	0.031 or less
	A point on a course line from the vertical plane including ILS Point A to the vertical plane including ILS Point B	A value not more than that obtained by multiplying by 0.015 the distance (in the unit of kilometer) between the vertical plane including said point and the vertical point including ILS Point B
	A point on a course line from the vertical plane including ILS Point A to the vertical plane including ILS Point C	0.015 or less
Localizer of ILS Category II	A point located on a course line within a range from the far end of a rated coverage from the vertical plane including ILS Point A	0.031 or less

	A point on a course line from the vertical plane including ILS Point A to the vertical plane including ILS Point B	A value not more than that obtained by multiplying by 0.005 the value obtained by multiplying by 0.015 the distance (in the unit of kilometer) between the vertical plane including said point and the vertical point including ILS Point B
	A point on a course line from the vertical plane including ILS Point B to the vertical plane including ILS reference datum point	0.005 or less
Localizer of ILS Category III	A point located on a course line within a range from the far end of a rated coverage from the vertical plane including ILS Point A	0.031 or less
	A point located on a course line from the vertical plane including ILS Point A to the vertical plane including ILS Point B	A value not more than that obtained by multiplying by 0.005 the value obtained by multiplying by 0.041 the distance (in the unit of kilometer) between the vertical plane including said point and the vertical plain including ILS Point B
	A point located on a course line from the vertical plane including ILS Point B to the vertical plane including ILS Point D	0.005 or less
	A point located on a course line from the vertical plane including ILS Point D to the vertical plane including ILS Point E	A value not more than that obtained by multiplying by 0.005 the value obtained by dividing the value obtained by multiplying by 0.005 the distance (in the unit of kilometer) between the vertical plain including said point and the vertical plane including ILS Point D by the distance (in the unit of kilometer) between the vertical plane including ILS Point D and the vertical plane including E

Remarks:

- 1) ILS Point A refers to a point on a glide path, and its projection coincides

- with the point at 7.41 kilometers from the runway approach end on the extended line of the runway centerline; hereafter the same shall apply.
- 2) ILS Point B refers to a point on a glide path, and its projection coincides with the point at 1.05 kilometers from the runway approach end on the extended line of the runway centerline; hereafter the same shall apply.
 - 3) ILS Point C refers to the intersection point of a glide path and a horizontal plane including the point 30 meters vertically above the center of the runway approach end edge; hereafter the same shall apply.
 - 4) ILS reference datum refers to a point on a glide path, and its projection coincides with the center of runway approach end edge; hereafter the same shall apply.
 - 5) ILS Point D refers to a point 4 meters above a runway at a distance of 900 meters from the runway approach end toward the other end of the runway.
 - 6) ILS Point E refers to a point 4 meters vertically above a point on the centerline of a runway located at a distance of 600 meters from the other end of the runway toward the runway approach end.

15. The distance between the projection of a course line and the center point at a runway approach end in the case of an ILS Category I localizer shall not exceed either the shorter of 10.5 meters or the distance between the course line and the point where DDM value reaches 0.015; in the case of an ILS Category II localizer it shall not exceed be 7.5 meters; and in the case of an ILS Category III localizer it shall not exceed 3.0 meters.
16. The DDM value or its rate of variation on a horizontal plane including a course line shall be as listed below:
 - a. The deviation sensitivity (which refers to a magnitude of DDM value variation depending on the variation of distance) shall be 0.00145 per minute on the intersection line of semi course sector and a vertical plane including a runway approach end, and, its deviation in the case of a localizer of ILS Category I or ILS Category II shall not exceed 17%; and in the case of an ILS Category III localizer, it shall not exceed 10%.
 - b. During the period from starting at a course line to arrive at a horizontal angle (which refers to an angle formed by a line connecting said point and the course line on a horizontal plane including the course line; hereafter the same shall apply) the DDM shall increase as constant as possible with the increase of horizontal angle during the period from starting at a course line to reach a point where DDM value reaches 0.180.
 - c. From a horizontal angle at which the value of DDM reaches 0.180 to a

- point at which the horizontal angle is 10 degrees, the DDM value shall remain at 0.180 or more.
- d. During a period when a horizontal angle exceeds 10 degrees to 35 degrees or less, the value of DDM shall remain at 0.155 or more.
17. The angle of a course sector shall be 6 degrees or less.
 18. The frequency of an identification signal shall be 1,020 Hz, and, its deviation shall not exceed 50 Hz.
 19. The degree of modulation of an identification signal shall be 5% or more to 15% or less.
 20. Said system shall be such that it transmits an identification code composed of three international Morse codes at a speed corresponding to seven words per minute, and shall be repeated for 6 times or more per minute at intervals as equal as possible.
 21. In the case of a localizer transmitting two carrier waves, the two identification signals shall have such a phase characteristic that does not cause difficulty in identifying said identification codes.
 22. In the case where two localizers are to be installed for a single runway (except such a case where the two localizers are of ILS Category I and each transmits a different frequencies from the other, and thus no operational failure will occur even when the two localizers transmit radio waves simultaneously), the two localizers shall be equipped with an interlock unit to prevent the two units from transmitting a radio wave simultaneously.
 23. An antenna shall be installed on an extended line of runway centerline on the runway end direction.
 24. Transmitter equipments shall be provided in a pair so that they can be switched any time.
 25. A dummy antenna shall be provided.
 26. A standby isolated power unit shall be provided.
 27. Monitoring equipment shall be provided.
 28. Said monitor equipment shall, when any of the below-listed events occurs, be capable of notifying the control station of the event within a shortest possible period of time, specifically, within 10 seconds in the case of an ILS Category I localizer, within 5 seconds in the case of an ILS Category II localizer, or within 2 seconds in the case of an ILS Category III localizer, and concurrently, capable of switching to a standby transmitter equipment, and even when said state of event continues after activation of the standby transmitting equipment, and of terminating the transmission of radio wave from a localizer.
 - a. When the location of a course line fails to conform to the standards prescribed under "15". However, in the case of an ILS Category III

localizer, when the distance between the projection line of the course line and the center point of runway approach end edge exceeds 6.0 meters.

- b. When the deviation of deviation sensitivity on the intersection line of semi-course sector and a vertical plane including a runway approach end exceeds 17%
 - c. In the case of a localizer transmitting a single carrier wave, when its antenna output power decreases to less than 50% of normal value in the case where it conforms to the standards prescribed under 6. to 14., or in the case where a localizer transmitting two carrier waves, when its antenna output power for either one of the carrier wave decreases to less than 80% of normal value (when it conforms to the standards prescribed under 6. to 14., 50% of normal value).
 - d. When the monitoring function of a monitoring equipment is in failure
- (c) The glide slope shall have the performance characteristics and structures listed below:
1. To provide aircraft performing a precision approach along an ILS course with the deviation value in the vertical direction from said course by means of the difference in degree of modulation between two modulation waves, said unit shall be such that transmits a radio wave that carries these modulation waves.
 2. Said unit shall be such that it transmits a carrier that is amplitude-modulated with a modulation wave of 90 Hz, a modulation wave of 150 Hz and an identification signal in order to generate a composite electric field in the space.
 - 2-2. In the case of a glide slope transmitting two carrier waves, In addition of generate a composite electric field with one of the carrier waves, it shall be transmit the other carrier wave that is amplitude-modulated with a 150 Hz modulation wave to create an electric field in the space.
 3. A composite electric field shall be such that, above a glide path, the degree of modulation with 90-Hz modulation wave is greater than that of 150-Hz modulation as far as the vertical angle (which refers to an angle, in a vertical plane including a glide path, formed by a line connecting its point of glide path with the intersection point of the glide path and a runway; hereafter the same shall apply) is up to 1.75 times of an angle formed by the glide path and horizontal plane, while under the glide path, the degree of modulation with 150-Hz modulation wave is greater than that of 90-Hz modulation wave.
 4. Said radio wave shall be a horizontal polarization wave containing the least possible proportion of vertical polarization wave.
 5. In the case of a glide slope of ILS Category III, the spread of variation of

a glide path shall not exceed 0.02 in terms of DDM-equivalent value within a frequency band of 0.01 Hz to 10 Hz.

6. The angle formed by a glide path and a horizontal plane shall be set to 2 degrees or more to 4 degrees or less.
7. The angle formed by a glide path and a horizontal plane shall not deviate from the set value in excess of 7.5% in the case of an ILS Category I glide slope unit or in excess of 4.0% in the case of an ILS Category III glide slope unit.
8. The horizontal electric field of a radio wave transmitted from a glide slope shall be 400 microvolts per meter or more in the rated coverage indicated in the following figure. (In the case of an ILS Category I glide slope, it shall be limited to a height of 30 meters or more from the horizontal plane including a runway approach end, or in the case of an ILS Category II or Category III glide slope, it shall be limited to a height of 15 meters or more from the horizontal plane including a runway approach end).

Horizontal projection plan (omitted)

Vertical projection plan (omitted)

Remarks

- i. A rated reach coverage shall be as indicated with hatched lines.
 - ii. Point R shall be the intersection point of a glide path and a runway.
 - iii. The theta shall be the angle formed by a glide path and a horizontal plane.
9. The frequency deviation at modulation frequencies of 90 Hz and 150 Hz shall not exceed 2.5% in the case of an ILS Category I glide slope, or 1.5% in the case of an ILS Category II glide slope, and 1.0% in the case of an ILS Category III glide slope, respectively.
 10. The phase characteristics of a 90 Hz-modulation wave and a 150 Hz-modulation wave in a semi-course sector (which refers to a fan-shaped area having a DDM value of 0.0875 or less of the vertical plane including a glide path) shall be as prescribed below:
 - a. The voltage of each of the 90-Hz modulation wave and 150-Hz modulation wave turns to zero in the same direction at every half cycle of their composite wave during a period not exceeding 370 microseconds in the case of an ILS Category I or Category II localizer or 185 microseconds in the case of an ILS Category III glide slope.
 - b. In the case of a glide slope transmitting two carrier waves, the voltage of 150-Hz modulation wave of each carrier wave turns to zero in the same direction during a period not exceeding 370 microseconds in the case of an ILS Category I or Category II glide slope, or 185 microseconds in the case of an ILS Category III localizer.

11. The degree of modulation of 90 Hz modulation wave and 150 Hz modulation wave shall be 40% on a glide path, and, its deviation shall not exceed 2.5%.
12. The relative harmonic content of 90 Hz modulation wave and 150 Hz modulation wave shall not exceed 10%, and in the case of an ILS Category III glide slope, the second relative harmonic content of 90 Hz modulation wave shall not exceed 5%.
13. In the case of an ILS Category III glide slope, the degree of modulation of a modulation wave of power supply frequency, of its harmonic wave and of other unrequired frequency component shall not exceed 1.0%.
14. The DDM value at each point on a glide path shall conform to the value in accordance with each classification as listed in the following table and match the value of corresponding case:

Classification		DDM
Type	Location of a point on a glide path	
Glide slope of ILS Category I	A point located on a glide path from the far end of rated coverage from the ILS Point C.	0.035 or less
Glide slope of ILS Category II or Category III	A point located on a glide path from the far end of rated coverage from the ILS Point A.	0.035 or less
	A point located on a glide path from the ILS Point A to Point B.	The value, or less, obtained by adding 0.023 to the value obtained by multiplying the distance (in the unit of kilometer) between the vertical plane including said point and the vertical plain including ILS Point B by 0.0019
	A point located on a glide path from the ILS Point B to the ILS reference datum	0.023 or less

15. The height of ILS reference datum shall be 15 meters from the center point of runway approach end edge (allowable deviation shall be 3 meters upward).
16. The DDM value or its rate of variation on a vertical plane including a glide path shall be as listed below:
 - a. The point where DDM value is 0.0875 shall be set within the appropriate one of the ranges values listed below:
 - 1) In the case of an ILS Category I glide slope, the vertical angle shall

- be within a range from 0.86 times to 0.93 times of an angle formed by a glide path and a horizontal plane (shall be referred to as "theta" in "c.") and a range from 1.07 times to 1.14 times of theta.
- 2) In the case of an ILS Category II glide slope, the vertical angle shall be within a range from 0.86 times to 0.90 times of theta, and the range from 1.07 times to 1.14 times of theta.
 - 3) In the case of an ILS Category III glide slope, the vertical angle shall be within a range from 0.86 times to 0.90 times of theta, and the range from 1.10 times to 1.14 times of theta.
- b. In a region below a glide path, DDM shall increase at a rate as constant as possible against the decrease of vertical angle to the vertical angle where DDM reaches 0.22.
 - c. In a region below a glide path, the vertical angle at which DDM value is 0.22 shall be 0.3 times of theta. In this case, when the vertical point at which DDM reaches 0.22 exceeds 0.45 times of theta, from the vertical point of said point to the vertical point reaches 0.45 times of theta, the DDM value shall be 0.22 or more.
17. In a region below a glide path, the vertical angle at which DDM is 0.0875 shall not vary in excess of the appropriate value obtained by subtracting the vertical angle of said point at setting from theta which is then multiplied by the corresponding value given below:
 - a. In the case of an ILS Category I glide slope, 25/100ths
 - b. In the case of an ILS Category II glide slope, 20/100ths
 - c. In the case of an ILS Category III glide slope, 15/100ths
 18. Transmitting equipments shall be provided in a pair so that they can be switched any time.
 19. A dummy antenna shall be provided.
 20. A standby isolated power unit shall be provided.
 21. A monitoring equipment shall be provided.
 22. Said monitor equipment shall, when any of the below-listed events occurs, be capable of notifying the control station of the event within a shortest possible period of time, specifically, within 10 seconds in the case of an ILS Category I localizer, within 5 seconds in the case of an ILS Category II localizer, or within 2 seconds in the case of an ILS Category III localizer, and concurrently, capable of switching to a standby transmitter equipment, and even when said state of event continues after activation of the standby transmitting equipment, and of terminating the transmission of radio wave from a localizer unit.
 - a. When the angle formed by a glide path and a horizontal plane varies in excess of 0.925 times or more to 1.10 times or less of its set value
 - b. In a region below a glide path, when the vertical angle at a point

where DDM value is 0.0875 varies in excess of the value given below:

- 1) In the case of an ILS Category I glide slope, 0.0375 times of theta
 - 2) In the case of an ILS Category II or Category III glide slope, the value obtained by subtracting the vertical angle at setting of said point from theta, which is then multiplied by 25/100ths
- c. At the lower limit of the rated coverage of a glide path, when DDM decreases less than 0.175
- d. In the case of a localizer transmitting a single carrier wave, when it conforms to the standards prescribed under "6." to "14.," the antenna output power decreases less than 50% of normal value; and in the case of a localizer transmitting two carrier waves, when the antenna output power for either carrier wave decreases less than 80% of normal value (when it conforms to the standards prescribed under "6." to "14., the antenna output power decreases less than 50% of normal value").
- e. When the monitoring function of a monitoring equipment is in failure
- (d) The marker beacon shall have the performance characteristics and structures listed below:
1. It shall be such that in order to notify an aircraft performing a precision approach along an ILS course that said aircraft has reached a location that is at a specific distance from a runway, it transmits a fan-shaped vertically oriented radio wave that is amplitude-modulated with a modulation wave in the upward direction.
 2. Said radio wave shall be a horizontal polarization wave containing the least possible proportion of vertical polarization wave.
 3. The radial electric field profile shall be such that its axis has the highest possible extent of verticality.
 4. The horizontal electric field intensity shall be symmetric about the axis of the radial electric field profile to the highest possible extent.
 5. An antenna shall be installed at one of the locations listed below whenever possible:
 - a. In the case of an outer marker, it shall be on an extended line on the runway approach end side at a location with a distance of 6.5 kilometers or more to 11.1 kilometers or less (desirably 7.2 kilometers), and on a straight line forming a right angle with said extended line of runway centerline with a distance of 75 meters or less from said location.
 - b. In the case of a middle marker, it shall be on an extended line on the runway approach end side at a location with a distance of 900 meters or more to 1,200 meters or less, and on a straight line forming a right angle with said extended line of runway centerline with a

- distance of 75 meters or less from said location.
- c. In the case of an inner marker, it shall be on an extended line on the runway approach end side at a location with a distance of 75 meters or more to 450 meters or less, and on a straight line forming a right angle with said extended line of runway centerline with a distance of 30 meters or less from said location.
6. The rated coverage (which refers to a range on a glide path within which the horizontal electric field intensity of a radio wave transmitted from said facility is 1.5 millivolts per meter or more; the same shall apply to "7." below) shall be as listed below:
 - a. In the case of an outer marker, 400 meters or more to 800 meters or less
 - b. In the case of a middle marker, 200 meters or more to 400 meters or less
 - c. In the case of an inner marker, 100 meters or more to 200 meters or less
 7. The maximum value of the horizontal electric field of a radio wave within the rated radiation coverage shall be 3.0 millivolts per meter or more.
 8. The frequency of a modulation wave shall be as listed below, and its deviation shall not exceed 2.5%:
 - a. In the case of an outer marker, 400 Hz
 - b. In the case of a middle marker, 1,300 Hz
 - c. In the case of an inner marker, 3,000 Hz
 9. The degree of modulation of a modulation wave shall be 95%, and, its deviation shall not exceed 4%.
 10. The harmonic wave content of a modulation wave shall not exceed 15%.
 11. The configuration of an identification code shall be as listed below:
 - a. In the case of an outer marker, consecutive dashes
 - b. In the case of a middle marker, consecutively alternating dashes and dots
 - c. In the case of an inner marker, consecutive dots
 12. The keying rate of dashes composing an identification code is two times per second, and, its deviation shall not exceed 15%.
 13. The keying rate of dots composing an identification code is six times per second, and, its deviation shall not exceed 15%.
 14. Transmitting equipments shall be provided in a pair so that they can be switched any time.
 15. A dummy antenna shall be provided.
 16. A standby isolated power unit shall be provided.
 17. A monitoring equipment shall be provided.

18. Said monitor equipment shall, when any of the below-listed event occurs, be capable of promptly notify the control station of the event, capable of switching to a standby transmitting equipment, and, even when said state of event continues after activation of the standby transmitting equipment, and of terminating the transmission of radio wave from a marker beacon.
 - a. When the degree of modulation fails to conform to the standards prescribed under "9"
 - b. When the power of an antenna drops below 50%
 - c. When the monitoring function of a monitoring equipment is in failure
- (ix) In the case of DME, it shall have the performance characteristics and structures listed below:
 - (a) In order to provide a cruising aircraft with the distance information from said facility, said equipment shall be such that it transmit a response signal to a query signal transmitted from an on-board TACAN or DME, and also transmit an identification signal.
 - (b) Each of said response signal, identification signal and random pulse pair shall be a radio wave of a pulse pair.
 - (c) Said pulses shall conform to the requirements prescribed under item (vii), (b).
 - (d) The pulse interval shall be 12 microseconds in the case of channel X or 30 microseconds in the case of channel Y, and, the deviation shall not exceed 0.25 microseconds.
 - (e) The difference in peak power between the first pulse and the second shall be 1 dB or less.
 - (f) The response delay time shall be 50 microseconds, and, its deviation shall not exceed 1 microsecond. Nevertheless, in the case of DME that constitutes part of ILS, this shall not apply.
 - (g) Said equipment shall be such that it is capable of transmitting pulse pairs of a response signal at a rate of 2,700 (allowable deviation 90) per second.
 - (h) The total of the number of pulse pair transmissions of a response signal and of random pulses shall be 700 or more to 2,790 or less per second.
 - (i) The response signal shall not be transmitted during the period of transmitting an identification signal.
 - (j) The random pulse pair shall not be transmitted during the period of transmitting a response signal or identification signal.
 - (k) The identification signal shall be composed of a pulse pair having a pulse pair interval of 90 microseconds or more to 110 microseconds or less.
 - (l) The number of transmissions of an identification signal shall be as listed below:
 1. An identification signal composed of a single pulse pair: 1,350 (allowable

- deviation 10) per second
2. An identification signal composed of a pair(s) of pulse pairs: 2,700
(allowable deviation 20) per second
- (m) The mutual interval of pulse pairs of an identification signal listed under (l), 1. and the mutual interval of an identification signal listed under (l), "2." shall be equal to the highest possible extent.
- (n) The configuration, transmission rate, and number of transmissions of an identification code shall conform to the standards prescribed under item vii, (z).
- (o) The time required for transmitting an identification code shall conform to the standards prescribed under item vii, (aa).
- (p) The identification code of DME that is used in combination with VOR or ILS shall be such that is transmitted during one period obtained by dividing a period of 30 seconds into 4 or more periods, while the identification code of VOR or ILS that is used in combination with said DME shall be such that is transmitted during a period other than the identification code said TACAN is being transmitted.
- (q) The receiving equipment shall conform to the standards prescribed under item vii, (dd) to (ll).
- (r) The antenna system shall be such that it transmits and receives the radio wave of a vertical polarization wave.
- (s) The antenna system of DME used in combination with VOR shall be installed on a vertical line including the center of VOR antenna. However, when this is difficult to achieve, in the case of TACAN that is combined with VOR and mainly used for the approach or stand-by of aircraft, said antenna system shall be installed in such a location where the distance from the center of the antenna of VOR does not exceed 30 meters (in the case where said VOR is a Doppler VOR, 80 meters) while in the case of other types of TACAN, said antenna shall be installed in such a location where the distance from the center of the antenna of VOR does not exceed 600 meters.
- (t) Transmitting-receiving equipments shall be provided in a pair so that they can be switched and used any time.
- (u) A dummy antenna shall be provided.
- (v) A standby isolated power unit shall be provided.
- (w) A monitoring equipment shall be provided.
- (x) Said monitoring equipment shall, when any of the below-listed events continues for 4 seconds or more, be capable of promptly notify the control station of the event, capable of switching to a standby transmitting-receiving equipment, and even when said state of event continues after activation of the spare transmitting-receiving equipment, and capable of

terminating the transmission of radio wave from a DME.

1. When the reply delay time relative to the query signal, of which peak power corresponds to the maximum sensitivity of a receiving unit added with 6 dB, ceased to conform to the standards prescribed under subitem (f)
 2. When the power of an antenna drops below 50%
 3. When the monitoring function of a monitoring equipment is in failure
- (y) The number of pulse pairs transmitted by a monitoring equipment shall not exceed 120 per second.
- (2) In the case of such an aeronautical radio navigation facility a topological or any other inevitable reason prevents said facility to be pursuant to the standards prescribed under the preceding paragraph, the standards set forth by the Minister of Land, Infrastructure, Transport and Tourism may be applied notwithstanding the standards prescribed under said paragraph.

(Application for works completion inspection)

Article 100 (1) Pursuant to the provision of paragraph (1) of Article 42 of this Act, any person intending to apply for the completion inspection of works of an aerodrome and other facilities shall submit a written application for completion inspection of completed works for aerodromes, etc. describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

(i) Name and address

(ii) Name and address of aeronautical radio navigation facilities

(iii) Date of completion of the construction work

(2) Provisions of the preceding paragraph shall apply mutatis mutandis to the application for the inspection of the works pertaining to the alteration of aerodromes, etc., pursuant to the provisions of paragraph (1) of Article 42 of this Act that shall be applied mutatis mutandis in compliance with the provisions of paragraph (2) of Article 43 of this Act.

(Notification of services commencement date)

Article 101 (1) Pursuant to the provision of paragraph (3) of Article 42 of this Act, a person intending to submit a notification on the date of services commencement of an aerodrome, and other facilities shall submit a written notification of services commencement date of aerodromes, etc. describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

(i) Name and address

(ii) Name and address of aeronautical radio navigation facilities

(iii) Date of commencing services

(2) Provisions of the preceding paragraph shall apply mutatis mutandis to the notification of services commencement date of the aeronautical radio navigation facilities that have been altered or discontinued pursuant to the provisions of paragraph (3) of Article 42 of this Act that shall be applied mutatis mutandis in compliance with the provisions of paragraph (2) of Article 43 and paragraph (2) of Article 45 of this Act.

(Important changes)

Article 102 The important changes or alterations that shall receive permission for the aeronautical radio navigation facilities pursuant to paragraph (1) of Article 43 of this Act, shall be as listed below:

- (i) Change in course direction
- (ii) Change in location of antenna system
- (iii) Change in structure of the antenna system
- (iv) Change in the type of transmitting-receiving facilities
- (v) Change in the structure and circuits of transmitting-receiving equipments (limited to change in radio frequencies, antenna power, identification code, and other cases where the electrical characteristics of aeronautical radio navigation facilities)
- (vi) Additional installation of transmitting-receiving equipments and power supply unit.

(Application for permission of changes)

Article 103 (1) A person intending to apply for permission of change or alteration of aerodrome, etc. pursuant to the provisions of paragraph (2) of Article 38 of this Act that shall be applied mutatis mutandis in compliance with the provisions of paragraph (2) of Article 43 of this Act shall submit the written application for permission of change or alteration of aeronautical radio navigation facilities in triplicate describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism for permission of the change or alteration of aerodrome, etc. describing the matters listed below:

- (i) Name and address
 - (ii) Name and address of aeronautical radio navigation facilities
 - (iii) Matters desired to be changed (Documents and drawings comparing the old and new matters shall be attached.)
 - (iv) Estimated cost of said changes
 - (v) Scheduled dates of commencement and completion of the works
 - (vi) When an alteration in management plans is required, the management plan as a consequence of the changes
 - (vii) Reasons for the change
- (2) The following documents and drawings shall be attached to the written

application prescribed in the preceding paragraph:

- (i) Documents describing the cost incurred by the change or alteration and the methods for procuring land and objects
- (ii) Work design drawings and documents, specifications and work budget statement
- (iii) In the case where an applicant is a corporate entity or union, documents verifying the decision of intent pertaining to the change.

(Application for permission of suspension or demolition of services)

Article 104 (1) Pursuant to the provision of paragraph (1) of Article 45 of this Act, a person intending to submit a notification on the suspension or demolition of services of aeronautical radio navigation facilities shall submit a written notification of services commencement date of aerodromes, etc. describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
 - (ii) Name and address of aeronautical radio navigation facilities
 - (iii) In the case of application for permission of demolition, the scheduled date of demolition
 - (iv) In the case of application for permission of suspension, the commencement date and duration of the suspension
 - (v) Reasons for the suspension or demolition
- (2) In the case where an applicant is a corporate entity or union, the documents verifying the decision of intent pertaining to the suspension or demolition shall be attached to the written application prescribed in the preceding paragraph.

(Application for services resumption inspection)

Article 105 (1) A person intending to receive a services resumption inspection of aeronautical radio navigation facilities pursuant to the provisions of paragraph (4) of Article 44 of this Act that shall be applied mutatis mutandis in compliance with the provisions of paragraph (2) of Article 45 of this Act shall submit the written application for receiving services resumption inspection of aeronautical radio navigation facilities describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
 - (ii) Name and address of aeronautical radio navigation facilities
 - (iii) Scheduled date of services resumption
- (2) In the case where an applicant is a corporate entity or union, the documents verifying the decision of intent pertaining to the resumption of services shall be attached to the written application prescribed in the preceding paragraph.

(Public notice of services commencement)

Article 106 (1) Pursuant to the provisions of Article 46 of this Act, the matters that shall be put on public notice when a notification of the date of services commencement of aeronautical radio navigation facilities has been submitted are as listed below:

- (i) Name and address of the provider
 - (ii) Type and name of aeronautical radio navigation facilities
 - (iii) Location and address of air navigation facilities
 - (iv) Carrier frequency
 - (v) Antenna power
 - (vi) Direction of course
 - (vii) Identification code
 - (viii) Hours of Operation
 - (ix) Date of services commencement
 - (x) Special notes on the use of aeronautical radio navigation facilities
- (2) The provisions of the preceding paragraph shall apply mutatis mutandis to the case where the Minister of Land, Infrastructure, Transport and Tourism establishes air navigation facilities.

(Public notice of change, alteration, suspension etc.)

Article 107 Pursuant to the provision of Article 46 of this Act, (including a case where they shall apply mutatis mutandis in compliance with the provisions of paragraph (2) item (ii) of Article 55 of this Act) the matters that shall be put on public notice in the case where any change or alteration, resumption or demolition occurs in regard to air navigation facilities shall be as listed below in addition to those listed under items (i), (ii) and (iii) of paragraph (1) of the preceding Article:

- (i) In the case where any change occurs in the matters that have been put on public notice, the changed matters
- (ii) In the case of a suspension, the date of suspension commencement and duration of a schedule suspension
- (iii) In the case of a resumption or demolition, the scheduled date

(Administration standards)

Article 108 The standards for the administration of aeronautical radio navigation facilities pursuant to the provision of paragraph (1) of Article 47 of this Act, (including a case where they shall apply mutatis mutandis in compliance with the provisions of paragraph (2) item (ii) of Article 55 of this Act) shall be as listed below:

- (i) The operation of said facilities shall be securely maintained during a specified operation time.

- (ii) Said facilities shall be sustained in perfect conditions by conducting the repair and cleaning services of them.
- (iii) One or more signboards indicating the prohibited acts prescribed under Article 53 of this Act shall be displayed in a manner readily recognizable by the public.
- (iv) When the functions of said facilities may be damaged by other objects including building structures and vegetation, necessary measures such as removal of said objects shall be taken.
- (v) The necessary organization or system to communicate with the Minister of Land, Infrastructure, Transport and Tourism shall be established in order to be prepared for such cases where the operation of aeronautical radio navigation facilities must be terminated, rated coverage and course must be altered, or identification code transmission or other functions of said facilities are in failure due to certain inevitable reasons as well as when the operation or functions of said aeronautical radio navigation facilities are restored.
- (vi) When the operation of aeronautical radio navigation facilities is affected by natural disasters or other accidents, immediate actions shall be taken to restore the operation and appropriate measures shall be taken to continue the operation to the maximum possible extent and to prevent dangers in aviation.
- (vii) When repair or other types of work is to be conducted for aeronautical radio navigation facilities, appropriate measures shall be taken to prevent aircraft navigation from any danger or damage.
- (viii) In the precincts of aeronautical radio navigation facilities, a unit replacement part quantity corresponding to one third of currently used quantity of each part composing the circuits of a transmitting-receiving equipment shall be secured as spare parts.
- (ix) The administrator of aeronautical radio navigation facilities shall maintain a services log for said facilities and store it for one year to record the matters listed below:
 - (a) Results of monitoring with a monitoring equipment (at least once a day) and the date and time of recording
 - (b) In the event any accident such as interrupt of operation of said facilities has occurred, the date and time of the event, cause(s) and measures taken for it
 - (c) Matters notified to the Minister of Land, Infrastructure, Transport and Tourism and the date and time of the notification
 - (d) Other matters for reference

(Notification of charges for using facilities)

Article 109 (1) Pursuant to the provisions of paragraph (1) of Article 54 of the Act, a person intending to submit a notification on the setting or change of charges for air navigation facilities for public services shall submit a written notification of air navigation facilities charges setting (changing) describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name and address
 - (ii) Name and address of aeronautical radio navigation facilities
 - (iii) The type and amount of said charges to be set or changed (in the case of a change, the comparison of old and new descriptions or values shall be clearly indicated).
 - (iv) Scheduled date of implementation
 - (v) In the case of a notification for a change, reasons for the need of change
- (2) The written notification prescribed in the preceding paragraph shall be attached with documents describing the basis for calculating the charges.

(Application for permission of the succession in title of the aeronautical radio navigation facilities provider)

Article 110 (1) A person intending to obtain permission for the succession in title of the provider of air navigation facilities pursuant to the provisions of paragraph (1) of Article 55 of this Act shall submit a written application for permission of the succession in title of air navigation facilities provider describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address of the successor
 - (ii) Name and address of the inheritee
 - (iii) Location and address of aeronautical radio navigation facilities
 - (iv) Conditions of succession
 - (v) Timing for attempting a succession
 - (vi) Reasons for the need of succession
- (2) The documents and drawings listed below shall be attached to the written application prescribed in the preceding paragraph:
- (i) Documents verifying the conditions of succession
 - (ii) In the case of a corporate entity or union, documents verifying the decisions made for the succession
 - (iii) Documents verifying that said successor possesses the capabilities that suffice the administration of said facilities

(Notification of succession in title of the aeronautical radio navigation facilities provider, as a result of inheritance)

Article 111 (1) A person intending to submit the notification for the succession in

title of the provider of aeronautical radio navigation facilities pursuant to the provisions of paragraph (4) of Article 55 of this Act shall submit a written notification of the succession in title of aeronautical radio navigation facilities provider describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address of the notifier
 - (ii) Name and address of inheritee and the relationship with the inheritee
 - (iii) Location and address of aeronautical radio navigation facilities
 - (iv) Date of commencing the inheritance
- (2) The documents listed below shall be attached to the written notification prescribed in the preceding paragraph:
- (i) Documents verifying the relationships between the notifier and the inheritee
 - (ii) In the case where any inheritee(s) other than the notifier exists, documents describing the name and address of said inheritee(s) and the statement of consent signed by said inheritee(s)

Article 112 Deleted

Section 3 Aeronautical Lights

(Types of aeronautical beacon)

Article 113 The aeronautical beacon prescribed under item (i) of Article 3 shall be classified into one of the four items listed below:

- (i) Airway beacon (A light installed to indicate a point on an air route to aircraft during cruising flight)
- (ii) Landmark beacon (A light installed to indicate a specific point to aircraft during cruising flight)
- (iii) Hazard beacon (A light installed to indicate an area of particular danger to aircraft during cruising flight)

(Aerodrome lights)

Article 114 The types of aerodrome light prescribed under item (ii) of Article 4 shall be as listed below:

- (i) Aerodrome beacon (A beacon installed in an aerodrome and peripheral facilities other than identification beacons to indicate the location of aerodrome, etc. to aircraft during cruising flight)
- (ii) Identification beacon (A beacon that blinks in Morse codes to indicate the location of an aerodrome, etc. to aircraft during cruising)
- (iii) Approach lights (Arrays of lights installed in an approach area and landing strip to indicate to aircraft intending to land the location of the final

- approach path)
- (iv) Precision approach path indicator (Arrays of lights installed in the vicinity of a runway threshold in the case of a land aerodrome or in the vicinity of a landing area in the case of a land heliport to inform aircraft intending to land that its approach slope is appropriate)
 - (v) Circling guidance lights (Arrays of lights installed on the outside of a runway and projecting a lamp light beam upward from the runway outside location in order to notify aircraft performing a circular flight of the runway location)
 - (vi) Approach light beacon (A light other than approach beacons installed to indicate a critical point within an approach area to aircraft intending to land)
 - (vii) Approach guidance lights (Arrays of lights installed to indicate a flight path after take-off to an aircraft that has taken off, or to indicate the approach path until reaching the final approach path to the aircraft intending to land)
 - (viii) Runway edge light (Arrays of lights installed on both sides of a runway to indicate its location to an aircraft taking off or landing)
 - (ix) Runway threshold lights (Arrays of lights installed on each end of a runway to indicate the location of each edge, other than emergency runway edge lights, to an aircraft taking off or landing)
 - (x) wing bar lights (Arrays of lights installed in the proximity of runway threshold lights to assist their function)
 - (xi) Runway threshold identification lights (Arrays of lights, other than threshold wing bar lights, installed in the vicinity of each of runway ends to indicate the runway threshold to aircraft intending to land)
 - (xii) Runway centerline lights (Arrays of lights installed on the centerline of a runway to indicate it to aircraft intending to take off or land)
 - (xiii) Runway touchdown zone lights (Arrays of lights installed in the touchdown zone to indicate it to aircraft intending to land)
 - (xiv) Runway distance marker lights (Arrays of lights installed to notify an aircraft running on a runway of the distance of each pair from the runway end edge ahead)
 - (xv) Overrun area edge lights (Arrays of lights installed in the vicinity of an overrun zone to indicate it to an aircraft intending to take off or land)
 - (xvi) Take-off aiming lights (Arrays of Lights installed to serve an aircraft taking off as a target of the taking off direction)
 - (xvii) Emergency runway lights (Mobile lights used as an emergency replacement when runway edge lights and runway threshold lights malfunction)
 - (xviii) Channel lights (Arrays of lights laid out on either one of the sides or

- each side of a landing strip of a water aerodromes or similar aerodrome to indicate the location of the strip)
- (xix) Channel threshold lights (Arrays of lights laid out on each end edge of a landing strip of a water aerodrome, etc. to indicate the ends)
 - (xx) Taxiway edge lights (Arrays of lights installed to indicate the edges of a taxiway (excluding a turning area (which refers to an area provided adjacent to a runway to allow aircraft to perform a turning in the vicinity of a runway edge; hereafter the same applied); the same shall apply in this Section;) and an apron to aircraft taxiing on the ground)
 - (xxi) Taxiway centerline lights (Arrays of lights installed on the centerline of a taxiway or entering or exiting path to or from a runway or an apron area to indicate each location and to notify aircraft performing a taxiing on the ground of each)
 - (xxi)-2 Stop bar lights (Arrays of Lights installed to notify aircraft taxiing on the ground whether or not a temporary stop is required and where to perform a temporary stop)
 - (xxi)-3 Runway guard lights (Arrays of Lights installed to notify aircraft taxiing on the ground where to perform a temporary stop prior to entering a runway)
 - (xxi)-4 Intermediate holding position lights (Arrays of Lights other than stop bar lights and runway guard lights installed to notify aircraft taxiing on the ground where to make a temporary stop)
 - (xxii) Taxiway guidance signs (Arrays of Lights installed to notify each aircraft taxiing on the ground of the destination, path, branch point, etc.)
 - (xxii)-2 Turning point identification lights (Arrays of lights installed in the vicinity of a turning area to notify aircraft taxiing on the ground of the turning path in a turning area)
 - (xxii)-3 Visual docking guidance system t (Arrays of lights installed to advise an aircraft taxiing on the ground of the deviation from the taxiing path to a docking position in an apron area and the distance to the docking position)
 - (xxiii) Taxi channel lights (Arrays of lights laid out to indicate a taxi channel to aircraft)
 - (xxiv) Landing direction indicator lights (Arrays of lights installed in such a way that it appears as a T-shaped or tetrahedral form to indicate the landing direction to an aircraft intending to land)
 - (xxv) Wind direction indicator lights (Arrays of Lights installed to indicate wind direction to aircraft)
 - (xxvi) Direction signaling lights (Arrays of lights installed to send signals required for aviation traffic safety to aircraft and others)
 - (xxvii) Unserviceable area lights (Arrays of Lights installed to notify aircraft of an area that shall not be used)

- (xxviii) Landing area flood lights (Arrays of Lights installed to illuminate a landing area)
- (xxix) Boundary lights (Arrays of Lights installed in the periphery of an area serviceable for aircraft landing and take-off and made noticeable to aircraft intending to take off or land)
- (xxx) Water boundary lights (Arrays of Lights installed in the periphery of a water area serviceable for aircraft landing and take-off and made noticeable to aircraft intending to take off or land)
- (xxxii) Range lights (arrays of lights installed in parallel to an array of boundary light in order to indicate a direction suited for landing and take-off to an aircraft intending to take off or land)
- (xxxii) Water range lights (arrays of lights laid out with a specific color distinction in parallel to an array of water boundary light in order to indicate a direction suited for landing and take-off to an aircraft intending to take off or land)

(Application for permission of establishment)

Article 115 (1) Pursuant to the provision of paragraph (2) of Article 38 a person intending to apply for permission of the installation of aeronautical lights shall submit a written application for permission of the installation of aeronautical lights, in triplicate, describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Purpose of installation
 - (ii) Name and address
 - (iii) Type and name of aeronautical lights
 - (iv) Location and address of aeronautical lights
 - (v) Name and address of owner of the planned site for installing aeronautical lights
 - (vi) Outline of the facilities
 - (vii) Administration plan
 - (viii) Cost incurred in the establishment and administration
 - (ix) Schedule dates of commencement and completion of the works
- (2) The documents listed under paragraph (2), items (i) to (iii) and items (viii) to (xi) of Article 76 shall be attached to the written application prescribed in the preceding paragraph.

Article 116 The standards of the location, structure, etc. of aeronautical beacon prescribed under paragraph (1) of Article 39 of the Act (including the case where they apply mutatis mutandis in accordance with paragraph (2) of Article 43) shall be as listed below:

- (i) Airway beacon

- (a) An airway beacon shall be installed at a location in the proximity of the centerline of an airway in such a manner that it is visible from all the directions above the horizontal plane comprising the light source.
- (b) The lamp light shall be alternating flashing light of white and red.
- (c) The number of flashes per minute shall be 12 to 20.
- (d) The effective intensity shall be 150,000 candela or more in the case of a white light, and the effective intensity shall be 23,000 candela or more in the case of a red light
- (ii) Landmark beacon
 - (a) Beacons emitting flashing light
 1. The color of beacon light shall be white.
 2. The number of flashes per minute shall be 12 to 100.
 3. The effective intensity shall be 8,000 candela or more.
 - (b) Beacons emitting signal beams based on Morse codes
 1. The signal shall be based on International Morse Codes.
 2. The transmitting speed shall be 6 to 8 words per minute, and the duration of each dot shall be 0.15 to 1.0 second.
 3. The color of beacon light shall be white or red in the case of a parallel installation with an airway beacon, or white in other cases.
 4. The maximum intensity shall be 2,000 candela or more.
 5. Said beacons shall emit lamp light to all the azimuths at angles 45 or less from the horizontal plane.
- (iii) Hazard beacon
 - (a) A hazard beacon shall be installed in such a location where a hazard object of which hazard marking with a obstacle lights is improper, or where a particular danger to cruising aircraft is conceivable.
 - (b) The lamp light shall be a flashing light in red.
 - (c) The number of flashes per minute shall be 20 to 60.
 - (d) The effective intensity shall be 3,000 candela or more.
 - (e) A hazard beacon shall emit a lamp light in all the azimuths in a range from 5 degrees below the horizontal plane upward.

(Installation standards of aerodrome lights)

Article 117 (1) The standards of the location, structure, etc. of aeronautical lights prescribed under paragraph (1) of Article 39 of the Act (including the case where they apply mutatis mutandis in accordance with paragraph (2) of Article 43) shall be as listed below:

- (i) Aerodrome lights of a land aerodrome and a land heliport that serve for the instrument landing implementing a nighttime landing or precision approach shall be installed pursuant to the prescriptions in Tables 1, 2 and 3 in accordance with each classification of aerodromes and runways.

Table 1. Aerodrome lights of land aerodromes, etc.

Aerodrome beacon	o
Identification beacon	x
Taxiway edge lights	o
Taxiway centerline lights	x
Stop bar lights	x
Runway guard lights	x
Intermediate holding position lights	x
Taxiway guidance signs	x
Turning point identification lights	x
Visual docking guidance system	x
Landing direction indicator lights	x
Wind direction indicator lights	o
Direction signaling lights	x
Unserviceable area lights	x

Legend o: A light required to be installed

x: Arrays of lights that shall be installed when deemed necessary for safety of aircraft taking off or landing from the viewpoint of site conditions of said aerodrome, etc. securing

Table 2. Aerodrome lights of land aerodromes, etc.

	Runway for instrument landing by precision approach		Runway for nighttime landing
	Runway for Category I precision approach	Runways for Category II precision approach and Category III precision approach	
Approach lights	o	o	x
Precision approach path indicator	o	o	x
Circling guidance lights	x	x	x
Approach light beacon	x	x	x
Approach guidance lights	x	x	x
Runway edge lights	o	o	o
Runway threshold lights	o	o	o
wing bar lights	x	x	x
Runway threshold identification lights	x	x	x

Runway centerline lights	x	o	x
Runway Touchdown zone light	x	o	x
Runway distance marker lights	x	x	x
Overrun area edge lights	x	x	x
Take-off aiming lights	x	x	x
Emergency runway lights	x	x	x

Remarks:

- i. [Legend] o: A light required to be installed
x: Arrays of lights that shall be installed when deemed necessary for securing safety of aircraft taking off or landing from the viewpoint of site conditions of said aerodromes, etc.
- ii. Category I Precision Approach refers to the precision approach in the case where the minimum descent altitude (which refers to the minimum altitude from a horizontal plane comprising a runway approach end (which refers to the runway threshold on the closer side as seen from an aircraft intending to land; hereafter the same shall apply) attainable by instrumental flight; hereafter the same shall apply) is 60 meters or more, and the runway visual range (which refers to the maximum distance in which a runway marking, runway edge light or runway centerline can be visually recognized from an aircraft on a runway centerline; hereafter the same shall apply) is 550 meter or more, or the visibility range is 800 meters or more. Hereafter the same shall apply.
- iii. Category II Precision Approach refers to the precision approach in the case where the minimum descent altitude is 30 meters or more to 60 meters or less, and the runway visual range is 350 meters or more. Hereafter the same shall apply.
- iv. Category III Precision Approach refers to the approach in the case where the minimum descent altitude is less than 30 meters or has not yet been determined, and the runway visual range is 350 meters or more. Hereafter the same shall apply.

Table 3. Aerodrome lights of land heliports

Aerodrome beacon	x
Identification beacon	x
Precision approach path indicator	x
Taxiway edge lights	x
Wind direction indicator lights	o

Direction signaling lights	x
Unserviceable area lights	x
Landing area flood lights	x
Boundary lights	o
Range lights	x

Legend o: A light required to be installed

x: Arrays of lights that shall be installed when deemed necessary for securing safety of aircraft taking off or landing from the viewpoint of site conditions of said aerodrome, etc.

(i)-2 As to aerodrome lights of land aerodromes, etc. other than those used for nighttime landing or instrument landing of aircraft performing a precision approach, when deemed necessary for securing safety of the landing of aircraft from the viewpoint of site conditions, etc. of said aerodrome, etc., a visual approach slope indicator system and runway threshold identification lights shall be installed.

(ii) The aerodrome lights of water aerodromes, etc. and heliports shall be installed pursuant to the prescriptions listed in the following table:

	Aerodrome, etc., comprising a wide range of water landing strip	Other aerodromes, etc.
Aerodrome beacon	o	o
Identification beacon	x	x
Channel lights		o
Channel threshold lights		o
Taxi channel lights		x
Landing direction indicator lights	x	x
Wind direction indicator lights	o	o
Direction signaling lights	x	x
Unserviceable area lights	x	x
Water boundary lights	o	
Water range lights	o	

(iii) Aerodrome lights shall have the locations of installation, performance characteristics and structural designs specific to the respective light types as listed below:

(a) Aerodrome beacon

1. The aerodrome beacon shall be installed in such a manner that it is located where none of anode lights that may be present in the precinct of an aerodrome, etc. or its peripheral area will obstruct the operation of aircraft taking off or landing and the control tower and that it is visible from all the directions above the horizontal plane comprising the lamp light of said beacon.
2. In the case it is difficult to install said beacon in the location prescribed

- under sub-item 1, an identification beacon shall be installed in said location and said beacon shall be installed in another suitable place.
3. The lamp light shall be alternate flashing lights of white and green or flashing lights of white in the case of a land aerodrome, while in the case of a water aerodrome, it shall be alternate flashing lights of white and yellow or flashing lights of white, and in the case of a heliport, it shall be flashing lights of white.
 4. The flashing lights shall be emitted in the manners listed below:
 - a. In the case of a land aerodrome, etc. or water aerodrome, etc., the number of flashes per minute shall be 20 to 30.
 - b. In the case of a heliport, a flashing lights with a period of 0.5 millisecond or more to 2 millisecond or less shall be emitted 4 times at equal intervals in a period of 0.8 second and leave a pause of 1.2 seconds.
 5. The effective intensity shall be 2,000 candela or more in the case of a land aerodrome, etc. or water aerodrome, etc. and 2,500 candela or more in the case of a heliport.
- (b) Identification beacon
1. In the case of an identification beacon installed pursuant to the prescription under subitem (a) 2, or in the case where it is located in juxtaposition with another aerodrome, etc., it shall be installed in the location prescribed under sub-tem (a) 1 in order to verify the identity of said aerodrome, etc.
 2. The color of the lamp light shall be green for a land aerodrome, etc. and yellow for a water aerodrome, etc.
 3. The lights of said beacon shall have the performance characteristics listed under item (ii) b (excluding sub-sub-item 3).
- (c) Approach lights
1. An approach lights shall be either precision approach lighting system or simplified approach lighting system. It should be noted, however, that, in the case of a runway for an aircraft performing a precision approach in its instrument landing, the precision approach lighting system shall be employed.
 2. Precision approach lighting system
 - a. The lamp unit of said system shall be installed in the location indicated either Figure A or B. Nevertheless, in the cases of the runways for Categories II and III Precision Approach, said lamp device shall be installed in the location limited to the zone from the end edge to 300 meters away from it of a runway as indicated in Figure C.
- Figure A (Omitted)

Figure B (Omitted)

Figure C (Omitted)

Remark:

- i. Approach center line refers to the arrays of lamp units, each consisting of a single or two lamp units or barrette (an array composed of 3 or more lamp units, which are closely spaced aeronautical lights which are designed to appear from a distance as a short bar of light orthogonal to the center line of an aerodrome runway; hereafter the same shall apply), arranged on the extended line of runway centerline. Hereafter the same shall apply.
 - ii. Side row barrette refers to each row of a pair of barrettes symmetrically arranged along an approach centerline within the zone of 270 meters from the runway end edge. Hereafter the same shall apply.
 - iii. Crossbar refers to an array of lamp units (excluding the approach centerline and side row barrettes) arranged on a straight line perpendicular to the extended line of runway centerline at a location with a specific distance from runway threshold. Hereafter the same shall apply
- b. Besides the lamp units prescribed under "a", flash lights may be installed in addition to the lamp units prescribed under "a" that are installed within the zone on the extended line of runway centerline from the runway threshold to 60 to 420 meters or more to 900 meters or less.
 - c. The lamp lights for the approach centerline and crossbars prescribed under "a" shall be variable, white, while in the case of side row barrettes, they shall be constant, red, and for the case prescribed under "b", they shall be flashing lights in white.
 - d. In the case prescribed under "a", the anode light pertaining to precision approach shall be visible within at least the range listed in the right-hand side column of the following Table for the respective classifications given in the left-hand side column in the same Table, and the cross-section in the vertical plane perpendicular to the extended line of runway centerline shall be oval.

Classification		Range of anode light
Composite lamp light	Lamp unit position	

Approach centerline and crossbar	A section from runway threshold to 315-meter point	In azimuth angles, a range comprising the light source center, and 10 degrees each leftward and rightward from a vertical plane comprising the runway centerline or from a vertical plane parallel to the runway centerline, and another range of 11 degrees upward from a horizontal plane comprising the light source center
	A section from runway threshold to a point more than 315 meters to 475 meters or less from the runway threshold	In azimuth angles, a range comprising the light source center, and 10 degrees each leftward and rightward from a vertical plane comprising the runway centerline or from a vertical plane parallel to the runway centerline, and another range of 0.5 to 11.5 degrees upward from a horizontal plane comprising the light source center
	A section from runway threshold to a point more than 475 meters to 640 meters or less from the runway threshold	In azimuth angles, a range comprising the light source center, and 10 degrees each leftward and rightward from a vertical plane comprising the runway centerline or from a vertical plane parallel to the runway centerline, and another range of 1.5 to 12.5 degrees upward from a horizontal plane comprising the light source center
	A section from runway threshold to a point more than 640 meters to 900 meters or less from the runway threshold	In azimuth angles, a range comprising the light source center, and 10 degrees each leftward and rightward from a vertical plane comprising the runway centerline or from a vertical plane parallel to the runway centerline (in the case of a crossbar in a section more than 22.5 meters from the extended line of runway centerline, a range of 12 degrees or less toward the runway centerline and 8 degrees or less toward the other side), and another range of 2.5 to 13.5 degrees upward from a horizontal plane comprising the light source center
Side row barrette	A section from runway threshold to 115-meter point	In azimuth angles, a range comprising the light source center, and 9 degrees from a vertical plane parallel to the runway centerline toward the runway centerline and 5 degrees toward the other side, and another range of 0.5 to 10.5 degrees upward from a horizontal plane comprising the light source center

A section from runway threshold to a point more than 115 meters to 215 meters or less from the runway threshold	In azimuth angles, a range comprising the light source center, and 9 degrees from a vertical plane parallel toward the runway centerline and 5 degrees toward the other side, and another range of 1 to 11 degrees upward from a horizontal plane comprising the light source center
A section from runway threshold to a point more than 215 meters to 270 meters or less from the runway threshold	In azimuth angles, a range comprising the light source center, and 9 degrees from a vertical plane parallel to the runway centerline toward the runway centerline and 5 degrees toward the other side, and another range of 1.5 to 11.5 degrees upward from a horizontal plane comprising the light source center

- e. The anode light intensity prescribed under "a" shall be 20,000 candela or more in the case of an approach line for precision approach, 5,000 candela or more in the case of a side row barrette, or 2,000 candela or more in the case of others, and the effective intensity of the lamp light prescribed under "b" shall be 5,000 candela or more.
 - f. The light distribution shall be such that no dizziness will be given to aircraft.
 - g. A lamp unit, in the case of an embedded type, shall have such a design that it will withstand the load of aircraft wheels passing on it and it will not affect the landing and taking off of aircraft, and in the case of other types, when an aircraft comes into touch with it, it will not cause obstruction to the aircraft and it will not affect the functions of other lamp units.
 - h. A flashing lights shall be emitted in a sequential order from an approaching end to the far runway threshold and the number of flashing shall be 2 per seconds.
 - i. A control unit enabling a prompt control of light intensity (hereafter called "control unit") shall be installed.
 - j. A unit that can monitor the operation status of a flashing lights and, should any fault occur in the operation, notify the event to a control station (hereafter said unit is called "monitor unit") shall be installed.
 - k. A secondary power supply system shall be provided.
3. Simplified approach lighting system
- a. The lamp unit of said system shall be installed pursuant to the prescriptions listed below:
 - i. A unit shall be installed at each of the locations with spacing of 60

meters within a section 420 meters or more to 900 meters or less on the extended line of a runway centerline from the runway threshold.

- ii. Said lamp unit shall be installed such that, at the fifth point from the runway threshold among the points prescribed under "i" on the 30 meter-long straight line that crosses the extended line of a runway centerline (said "point" shall hereinafter under "ii" and "iii" be called "orthogonal cross point"), on a 4-meter straight line whose center matches said orthogonal cross point, 2 or 4 units are arranged in the positions in a section of 4.5 meters or more to 6 meters or less farther away from the orthogonal cross point and symmetrically against the extended line of runway centerline with approximately equal spacing of 0.9 meters or more to 3.6 meters or less.
 - iii. Said lamp unit in a quantity of 2 or 4 units may be installed on the said 4-meter straight line with its center matching the said orthogonal cross point and intersecting the extended line of runway centerline at the point prescribed under "i" (excluding the orthogonal cross point) symmetrically against said centerline and with approximately equal spacing. Note that the number of said lamp units shall be equal to that of said 4-meter section of the straight line with its center matching the orthogonal cross point on the 30-meter long straight line that crosses the extended line of a runway centerline.
 - b. The lamp light of said system shall be of a constant light type in red, yellow, white or variable white.
 - c. The light intensity toward an approaching aircraft shall be 500 candela or more.
 - d. The light distribution shall be such that no dizziness will be given to aircraft.
 - e. A lamp unit, in the case of an embedded type, shall have such a design that it will withstand the load of aircraft wheels passing on it and it will not affect the landing and taking off of aircraft, and in the case of other types, when an aircraft comes into touch with it, it will not cause obstruction to the aircraft and it will not affect the functions of other lamp units.
 - f. A control unit shall be installed.
 - g. A monitoring unit shall be installed.
 - h. A secondary power supply system shall be provided.
- (d) Precision approach path indicator
- 1. Said lamp unit shall conform to the installation standards listed below:

- a. In the case of a land aerodrome, etc. of which class is one of A through F, one of the installation standards of lamp units pursuant to PAPI system shall be applied.
 - b. In the case of a land aerodrome, etc. of which class is one of G through J, one of the installation standards of lamp units pursuant to PAPI system or APAPI system shall be applied.
 - c. In the case of a land heliport, one of the installation standards of lamp units pursuant to PAPI, the installation standards of lamp units pursuant to APAPI, or the installation standards of lamp units pursuant to HPAPI shall be applied.
2. Installation standards of lamp units pursuant to PAPI
- a. In the location indicated in Figure 1, 4 lamp units shall be installed on the left side as seen from an aircraft. In the case of a land aerodrome, etc., however, when deemed required where no approach light is installed in the subject aerodrome, 8 lamp units shall be installed in the location indicated in Figure 2 in such a manner that they are symmetrical against the runway centerline.

Figure 1 (omitted)

Figure 2 (omitted)

- b. Each lamp unit shall emit an anode light in white or variable white from its upper layer and another in red from its lower layer toward the direction of approaching aircraft at an angle indicated in Figure 2.

Figure 3 (omitted)

Remark: The range from angle "a" to angle "d" shall coincide with the angle formed by the angle formed by the boundary plane of the upper and lower layers of an anode light from lamp units A through D and the horizontal plane.

- c. The anode light intensity of each lamp unit shall be such that within a cone comprising a boundary plane between the upper and lower layers of the anode light and the light source center and an axis formed by a cross-line of a vertical plane parallel to the runway centerline and the light source center as the apex with apical angle against the light source of 4 degrees, the lower layer shall be 15,000 candela or more and the upper layer shall be 2 times to 6.5 times of the intensity of the lower layer; and within a space corresponding to the locus in the case of a cone with said cross-line as an axis and the apex with an apical angle of 7 degrees is allowed to rotate around the apex for 4.5 degrees toward left and right along the boundary plane between the upper and lower layers of the anode light, the lower layer shall be 4,000 candela or more and the upper layer shall be 2

- times to 6.5 times of the intensity of the lower layer.
- d. The light distribution shall be such that no dizziness will be given to aircraft.
 - e. The lamp unit shall be such that when an aircraft comes into touch with it, it will not cause obstruction to the aircraft, and it will not affect the functions of other lamp units.
 - f. A control unit shall be installed.
 - g. In the case of a land aerodrome, etc., a monitoring unit shall be installed.
 - h. In the case of a land aerodrome, etc., a secondary power supply system shall be provided.
3. Installation standards of lamp units pursuant to APAPI
- a. In the location indicated in Figure 4, 2 lamp units shall be installed on the left side as seen from an aircraft. In the case of a land aerodrome, etc., however, when deemed required where no approach light is installed in the subject aerodrome, 4 lamp units shall be installed in the location indicated in Figure 5 in such a manner that they are symmetrical against the runway centerline.
 Figure 4 (omitted)
 Figure 5 (omitted)
 - b. Each lamp unit shall emit an anode light in white or variable white from its upper layer and another in red from its lower layer toward the direction of approaching aircraft at an angle indicated in Figure 6.
 Figure 6 (omitted)
 Remark: Each of angles "e" and "f" shall be the corresponding one of the angles formed by the boundary plane of upper and lower layers of the anode light from lamp units E and F and the horizontal plane, respectively.
 - c. The anode light intensity of each lamp unit shall be such that within a cone comprising a boundary plane between the upper and lower layers of the anode light and the light source center and an axis formed by a cross-line of a vertical plane parallel to the runway centerline and the light source center as the apex with apical angle against the light source of 4 degrees, the lower layer shall be 5,000 candela or more and the upper layer shall be 2 times to 6.5 times of the intensity of the lower layer; and within a space corresponding to the locus in the case of a cone with said cross-line as an axis and the apex with an apical angle of 7 degrees is allowed to rotate around the apex for 4.5 degrees toward left and right along the boundary plane between the upper and lower layers of the anode light, the lower

layer shall be 1,500 candela or more and the upper layer shall be 2 times to 6.5 times of the intensity of lower layer.

- d. The subject units shall conform to the standards listed under "2", "d" and "e".
 - e. In the case of a land aerodrome, the subject units shall conform to the standards listed under "2", "g" and "h".
4. Installation standards of lamp units pursuant to HA
- a. Said lamp unit shall be installed in the periphery of a landing area and in such a location where it will not cause obstruction to aircraft navigation.
 - b. Said lamp unit shall be such that it emits a blinking light in green, a constant light in green and a constant light in red and blinking light in red toward the direction of approaching aircraft at an angle indicated in Figure 7.

Figure 7 (omitted)

- c. The number of blinking per minute shall be 120 or more.
 - d. The maximum light intensity of a constant light and a blinking light shall be such that in the azimuth angles, a range within 3 degrees each leftward and rightward from a vertical plane comprising the light source center and take-off or landing path, or a vertical plane parallel to said path, and a range within 2 degrees upward and downward from the boundary plane between green and red, the intensity being 9,000 candela or more and such that in the azimuth angles, a range within 15 degrees each leftward and rightward from a vertical plane comprising the light source center and take-off or landing path, or a vertical plane parallel to said path, and a range within 10 degrees upward and downward from the boundary plane between green and red, the intensity being 375 candela or more, and, the cross-section of the anode light in the plane perpendicularly intersecting the crossing line of a vertical plane comprising the take-off or landing path or a vertical plane parallel to said path and the boundary plane between green and red shall be oval.
 - e. The subject units shall conform to the standards listed under "2", "e" and "f".
- (e) Circling guidance lights
- 1. Said light units shall be installed within a section of 300 meters at approximately equal spacing on a straight line parallel to the runway centerline on the outside of the side of the array of runway lights where circling approaches are performed.
 - 2. The lamp light of said system shall be of a constant light type in white, variable white, or yellow.

3. The maximum intensity in the direction of aircraft circling path shall be 2,000 candela or more.
4. Said lamp unit shall be such that when an aircraft comes into touch with it, it will not cause any obstruction to the aircraft.

(f) Approach light beacon

1. Said lamp unit shall be installed at the 600-meter point and at the 900-meter point from the runway threshold on the extended line of a runway centerline. It should be noted, however, that in the case where approach lights are not installed, said lamp unit shall also be installed at the 300-meter point from the runway threshold on the extended line of a runway centerline.
2. The lamp light shall be a flashing lights in white.
3. The number of flashes per minute shall be 60.
4. The light distribution shall be such that no dizziness will be given to aircraft.

(g) Approach guidance lights

1. The lamp light of said system shall be a flashing lights or constant light in white or yellow.
2. The number of flashes shall be 2 per second.
3. The light intensity shall be such that in the case of a flashing lights, its effective intensity be 5,000 candela or more, and in the case of a constant light, 10,000 candela.

(h) Runway edge lights

1. In the case of the subject light pertaining to instrument landing, high intensity type runway edge lights shall be employed, while in the case of others, low intensity type runway edge lights shall be employed.
2. High intensity type runway edge lights
 - a. Said lamp units shall be installed on a pair of straight lines arranged on both side edges of a runway or further outside by 3 meters each in parallel to the runway centerline with approximately equal spacing of 60 meters or less and with maximum possible symmetry against the runway centerline.
 - b. The lamp light of said lamp units shall be a constant light in variable white. However, in the case where it is installed within a range either the shorter of one-third of the total runway length or 600 meters from the runway farther threshold (which refers to the farther threshold of a runway as seen from an aircraft intending to land; hereafter the same shall apply as seen from an aircraft intending to land), the light shall be in yellow.
 - c. The anode light of a runway edge light shall be such that it is visible within the minimum range listed in the right-hand side section of

the following table corresponding to the runway edge light array spacing given in the left-hand side of the table, and in the case of the cross-section of the anode light on the vertical plane perpendicularly intersecting the extended line of a runway edge lights array, the lamp light shall be visible from all the angles up to the minimum limit of 15 degrees from the horizontal plane comprising the light source center and all the bearing directions.

Spacing of runway edge lights array	Range of anode light
60 meters or more	In azimuth angles, a range of 11 degrees from a vertical plane comprising a runway edge lights array line toward the runway centerline, another range of 2 degrees toward the opposite side, and a range of 7 degrees upward from a horizontal plane comprising the light source
Less than 60 meters	In azimuth angles, a range of 9 degrees from a vertical plane comprising a runway edge lights array line toward the runway centerline, another range of 2 degrees toward the opposite side, and a range of 7 degrees upward from a horizontal plane comprising the light source

- d. The light intensity of an anode light shall be 10,000 candela or more in the case of precision approach, and in the other cases, it shall be 1,000 candela or more. However, in the case of lamp lights in yellow, the intensity shall be 40% or more.
 - e. The light distribution shall be such that no dizziness will be given to aircraft.
 - f. A lamp unit, in the case of an embedded type, shall have such a design that it will withstand the load of aircraft wheels passing on it and it will not obstruct the landing and taking off of aircraft, and in the case of other types, when an aircraft comes into touch with it, it will not cause obstruction to the aircraft and it will not affect the functions of other lamp units.
 - g. The height of a lamp unit shall not exceed 60 centimeters above the ground surface.
 - h. A control unit shall be installed.
 - i. A monitoring unit shall be installed.
 - j. A secondary power supply system shall be provided.
3. Low intensity type runway edge light
- a. Said lamp units shall be installed on a pair of straight lines arranged on both side edges of a runway or further outside by 3 meters each in parallel to the runway centerline with approximately equal spacing

- of 100 meters or less and with maximum possible symmetry against the runway centerline.
- b. The lamp light shall be a constant light in white or variable white and visible from all the angles up to the minimum limit of 15 degrees from the horizontal plane comprising the light source center and all the bearing directions.
 - c. The light intensity toward an approaching aircraft shall be 50 candela or more.
 - d. The lamp unit shall be such that when an aircraft comes into touch with it, it will not cause obstruction to the aircraft, and it will not affect the functions of other lamp units.
 - e. The subject units shall conform to the standards listed under "2", "e", "g" and "j".
- (i) Runway threshold lights
1. In the case of a runway threshold light pertaining to a runway intended for instrument landing, high intensity type runway threshold lights shall be employed, while in other cases, low intensity type runway threshold lights shall be employed.
 2. High intensity type runway threshold light
 - a. The lamp unit for said light shall be installed on a straight line perpendicularly intersecting the extended line of a runway centerline and 3 meters or less apart from the runway threshold toward the approaching area side, and between the two points each crossing the extended line of the runway edge lights array line in either of the following methods: In the case of a runway intended for Category II precision approach of a runway for Category III precision approach, said unit shall be installed pursuant to the provision under the proviso of sub-subitem "i".
 - i. A total of 6 or more of said units shall be symmetrically installed against the extended line of runway centerline with equal spacing (of the 6 units, 2 to be installed on each of the extended line of runway edge lights arrays). In the case of said units pertaining to a runway intended for instrument landing by means of precision approach, however, 12 units or more shall be installed symmetrical against the extended line of runway centerline with equal spacing of 3 meters or less (of the 12 units, 2 to be installed on each of the extended line of runway edge lights arrays).
 - ii. Spacing of 18 to 22.5 meters shall be provided with the extended line of runway centerline as its center, and 6 or more units shall be installed with the equal spacing and outside the spacing symmetrically against the extended line of runway centerline (of

the 6 units, 2 units shall be installed on each of the extended line of the runway edge lights arrays). In the case of said units pertaining to a runway intended for instrument landing by means of precision approach, however, spacing of 18 to 22.5 meters shall be provided with the extended line of runway centerline as its center, a number of lamp units equal to or more than the number required in the case of installation pursuant to the proviso of sub-subitem "i" shall be installed with the equal spacing and outside the spacing symmetrically against the extended line of runway centerline (of said number of units, 2 units shall be installed on each of the extended line of the runway edge lights arrays)

- b. Said lamp light shall be in green in the case of indicating the runway approach end as seen from an aircraft intending to land or in red in the case of indicating the farther threshold of a runway.
- c. Said lamp units shall be such that, in the case of indicating the approach end of a runway as seen from aircraft intending to land, all of them are visually recognizable, and in the case of indicating the farther threshold of a runway, 6 units or more are visually recognizable.
- d. The anode light pertaining to precision approach shall be visible within at least the range listed in the right-hand side column of the following Table for the respective classifications given in the left-hand side column in the same Table, and the cross-section in the vertical plane perpendicular to the extended line of runway centerline shall be oval.

Type of runway threshold	Range of anode light
Runway approach end	In azimuth angles, a range comprising the light source center, and 9 degrees from a vertical plane parallel toward the runway centerline and 2 degrees toward the other side (in the case that a light source is on the extended line of runway centerline, 2 degrees or less from the vertical plane comprising the runway centerline), and another range of 1 to 10 degrees upward from a horizontal plane comprising the light source center
Runway farther threshold	In azimuth angles, a range comprising the light source center, and 6 degrees or less each leftward and rightward from a vertical plane comprising the runway centerline or from a vertical plane parallel to the runway centerline, and another range of 0.25 to 4.75 degrees upward from a horizontal plane comprising the light source center

- e. The light intensity of an anode light shall be such that, in the case of

indicating a runway approach threshold, 10,000 candela or more is required for precision approach, and for other purposes, 1,000 candela or more is required, while in the case of indicating a runway farther threshold, 2,500 candela is required for precision approach, and for other purposes, 250 candela is required.

- f. The light distribution shall be such that no dizziness will be given to aircraft.
- g. A lamp unit, in the case of an embedded type, shall have such a design that it will withstand the load of aircraft wheels passing on it and it will not obstruct the landing and taking off of aircraft, and in the case of other types, when an aircraft comes into touch with it, it will not cause obstruction to the aircraft and it will not affect the functions of other lamp units.
- h. A control unit shall be installed.
- i. A monitoring unit shall be installed.
- j. A secondary power supply system shall be provided.

3. Low intensity type runway threshold lights

- a. The lamp unit for said light shall be installed on a straight line perpendicularly intersecting the extended line of a runway centerline and 3 meters or less apart from the runway threshold toward the approaching area side, and between the two points each crossing the extended line of the runway edge lights array line in either of the following methods:
 - i. A total of 6 or more of said units shall be symmetrically installed against the extended line of runway centerline with equal spacing (of the 6 units, 2 to be installed on each of the extended line of runway edge lights arrays).
 - ii. Spacing of 18 to 22.5 meters shall be provided with the extended line of runway centerline as its center, and 6 or more units shall be installed with the equal spacing and outside the spacing symmetrically against the extended line of runway centerline (of the 6 units, 2 units shall be installed on each of the extended line of the runway edge lights arrays)
- b. The light intensity toward an approaching aircraft shall be 50 candela or more.
- c. The subject units shall conform to the standards listed under "2", "b", "c", "f" "g" and "j".

(j) wing bar lights

- 1. Said lamp unit shall be installed such that 10 or more units are arranged in symmetrical positions against the runway centerline and with equal spacing along the 10 meters or more outside of the

intersection of the extended line of runway threshold lights array and the extended line of runway edge lights array.

2. The lamp light shall be a constant light in green.
 3. The anode light of a wing bar light for precision approach shall be such that, within the minimum azimuth angle as seen from an aircraft intending to land, it is visible in a range up to 9 degrees toward the runway centerline and 5 degrees toward the other side from a vertical plane that is parallel to the runway centerline, and in a range of 0.5 to 10.5 degrees upward from a horizontal plane comprising the light source center; and the cross-section of the anode light shall be oval.
 4. The light intensity of said anode light shall be 10,000 candela in the case of the light intended for precision approach.
 5. The subject unit shall conform to the standards listed under "2", "f", "g", "h". and "i".
- (k) Runway threshold identification light
1. Said lamp unit shall be installed such that 1 unit each is located in symmetrical position against the runway centerline and in a section from 10 to 20 meters outward from the intersection of the extended line of runway threshold lights array and the extended line of runway edge lights array.
 2. The lamp light shall be a flashing lights in white.
 3. The number of flashes per minute shall be 60 to 120.
 4. The effective intensity shall be 5,000 candela or more.
 5. The light distribution shall be such that no dizziness will be given to aircraft.
 6. The lamp unit shall be such that when an aircraft comes into touch with it, it will not cause obstruction to the aircraft, and it will not affect the functions of other lamp units.
 7. A secondary power supply system shall be provided.

(l) Runway centerline lights

1. Said light units shall be installed within a section of approximately 15 meters or 30 meters (in the case of a runway intended for Category II precision approach or a runway for Category III precision approach, said section shall be limited to 15 meters) with approximately equal spacing along the runway centerline.
2. Said lamp lights shall be such that, in the case of those located within a range of 300 meters from the runway far end as seen from a landing aircraft, a constant light in red is applied, while in the case of those within a range exceeding 300 meters and 900 meters or less (in the case of a runway with a length less than 1,800 meters, one-half of the length) from said far end, alternate red and variable white, and in

other cases, constant light in variable white is applied.

3. The anode light pertaining to precision approach shall be visible within at least the range listed in the right-hand side column of the following Table for the respective classifications given in the left-hand side column in the same Table, and the cross-section in the vertical plane perpendicular to the extended line of runway centerline shall be oval.

Spacing between light units	Range of anode light
Approximately 30 meters	In azimuth angles, a range comprising the light source center, and 5 degrees or less each leftward and rightward from a vertical plane comprising the runway centerline and another range of 7 degrees upward from a horizontal plane comprising the light source center
Approximately 15 meters	In azimuth angles, a range comprising the light source center, and 5 degrees or less each leftward and rightward from a vertical plane comprising the runway centerline and another range of 9 degrees upward from a horizontal plane comprising the light source center

4. The anode light intensity of the lamp intended for precision approach shall be 2,500 candela or more in the case of the spacing of approximately 15 meters (in the case of Category III precision approaches, 5,000 candela or more), in the case of spacing of 30 meters, it shall be 5,000 candela or more. However, in the case of lamp lights in red, the intensity shall be 15% or more of it.
 5. The light distribution shall be such that no dizziness will be given to aircraft.
 6. A lamp unit shall have such a design that it will withstand the load of aircraft wheels passing on it and it will not obstruct the landing and taking off of aircraft.
 7. A control unit shall be installed.
 8. A monitoring unit shall be installed.
 9. A secondary power supply system shall be provided.
- (m) Runway Touchdown zone lights
1. The lamp units of said light shall be installed in the section from the runway threshold on a runway to 900 meters with equal spacing of 60 meters (in the case of a runway intended for Category II or Category III precision approach, approximately 30 meters), and in locations symmetrical against the runway centerline as shown in the following table. In the case of a runway with a length of 1,800 meters, said lamp units shall be installed within a range not exceeding one-half of the runway length.

Figure (omitted)

2. Said lamp light shall be a constant light in variable white
 3. The anode light of a Runway Touchdown zone light shall be such that, within the minimum azimuth angle as seen from an aircraft intending to land, it is visible in a range up to 9 degrees toward the runway centerline and 1 degree toward the other side from a vertical plane that is parallel to the runway centerline, and in a range of 2 to 9 degrees upward from a horizontal plane comprising the light source center; and the cross-section of the anode light in the vertical plane intersecting the extended line of the runway center line shall be oval.
 4. The effective intensity shall be 5,000 candela or more.
 5. The light distribution shall be such that no dizziness will be given to aircraft.
 6. A lamp unit shall have such a design that it will withstand the load of aircraft wheels passing on it and it will not obstruct the landing and taking off of aircraft.
 7. A control unit shall be installed.
 8. A monitoring unit shall be installed.
 9. A secondary power supply system shall be provided.
- (n) Runway distance marker lights
1. Said light units shall be installed with approximately equal spacing of 300 meters on a straight line, on the extended line connecting the runway ends and parallel to the runway centerline on the outside of the side of the array of runway edge lights.
 2. Said light units shall be marked with Arabic figures such that the one installed at a point approximately 300 meters from the extended line from a runway far end is marked with "1", another installed at a point approximately 600 meters from said end marked with "2", and further ones installed with spacing of approximately 300 meters in the order of the numbers, and, said figures shall be sufficiently visible both during daytime and nighttime.
 3. The lamp light of said system shall be of a constant light type in yellow, white, or variable white.
 4. The light distribution shall be such that no dizziness will be given to aircraft.
 5. Said lamp unit shall be such that it will not affect the functions of other lights.
- (o) Overrun area edge lights
1. Said light units shall be installed such that 3 units or more are arranged on both side edges of an overrun zone with approximately equal spacing of 60 meters or less and along the threshold of the overrun zone with maximum possible symmetry against the runway centerline.

2. The height of a lamp unit shall not exceed 60 centimeters above the ground surface.
 3. Said lamp light shall be a constant light in red.
 4. The light intensity toward the runway centerline and its extended line shall be 30 candela or more.
 5. The light distribution shall be such that no dizziness will be given to aircraft.
 6. The lamp unit shall be such that when an aircraft comes into touch with it, it will not cause obstruction to the aircraft, and it will not affect the functions of other lamp units.
- (p) Take-off aiming lights
1. The lamp unit of said light shall be installed such that 1 unit or more on the extended line of runway centerline or 2 units or more arranged symmetrically on the outside of the landing strip against said extended line.
 2. The lamp light of said system shall be of a constant light type in red, yellow, white or variable white.
 3. The light distribution shall be such that no dizziness will be given to aircraft.
 4. Said lamp unit shall be such that it will not affect the functions of other lights.
- (q) Emergency runway lights
1. Said lamp units shall be installed on a pair of straight lines arranged on both side edges of a runway or further outside in parallel to the runway centerline with approximately equal spacing of 180 meters or less and with maximum possible symmetry against the runway centerline.
 2. Said lamp light shall be a constant light in variable white.
 3. The light intensity toward an approaching aircraft shall be 10 candela or more.
 4. Said lamp unit shall be such that when an aircraft comes into touch with it, it will not cause any obstruction to the aircraft.
- (r) Channel lights
1. A channel light shall be either in single array or multi-array channel lights.
 2. Single-array channel lights
 - a. Said lamp unit shall be installed such that 8 or more units are arranged with equal spacing in a section of 300 meter or less of a straight line along the left-hand side of a landing strip as seen from an approach area side
 - b. The lamp light shall be a constant light in green and visible from all

the angles up to the minimum limit of 30 degrees from the horizontal plane comprising the light source center

- c. The light intensity shall be 10 candela or more.
- d. The lamp unit shall be such that when an aircraft comes into touch with it, it will not cause obstruction to the aircraft, and it will not affect the functions of other lamp units.

3. Multi-array channel lights

- a. The lamp units shall be installed on a pair of straight lines with a mutual distance 300 meters arranged on both side edges of a landing strip in parallel to the landing strip centerline with approximately equal spacing of 150 meters or less and with maximum possible symmetry against the landing strip centerline
- b. The lamp light shall be a constant light in green and visible from all the angles up to the minimum limit of 30 degrees from the horizontal plane comprising the light source center.
- c. The light intensity shall be 10 candela or more.
- d. The lamp unit shall be such that when an aircraft comes into touch with it, it will not cause obstruction to the aircraft, and it will not affect the functions of other lamp units.

(s) Channel threshold lights

- 1. In the case of a channel strip where single array channel lights are to be installed, single array threshold lights shall be installed, while in the case where multi-array channel lights are to be installed, multi-array channel threshold lights shall be installed.
- 2. Single-array channel threshold lights
 - a. Said lamp unit shall be installed such that 1 unit is installed on each extended line of the pair of channel lights arrays at a distance stipulated under "(r), 2, a" from each threshold of said channel light arrays. When the width of a landing strip is required to be indicated, one of said units may be installed at a point with a distance of 150 to 300 meters from the required location on the right-hand side as seen from the direction of approach area and, when the landing strip threshold is required to be indicated, additional lamp units may be installed between said lamp units with spacing of 100 meters or less.
 - b. The lamp light shall be a constant light in yellow and visible from all the angles up to the minimum limit of 30 degrees from the horizontal plane comprising the light source center.
 - c. The light intensity shall be 10 candela or more.
 - d. The lamp unit shall be such that when an aircraft comes into touch with it, it will not cause obstruction to the aircraft, and it will not affect the functions of other lamp units.

3. Mull-array channel threshold lights
 - a. The lamp units of said light shall be installed on a straight line perpendicularly intersecting the landing strip centerline at both threshold of the landing strip in such a way that, in the case where the width of landing strip is less than 150 meters, two each at both thresholds of the channel lights array, and in the case where the width of landing strip is 150 meters or more, said units shall be installed between said lamp units with equal spacing of 60 to 100 meters.
 - b. The lamp light shall be a constant light in yellow and visible from all the angles up to the minimum limit of 30 degrees from the horizontal plane comprising the light source center.
 - c. The light intensity shall be 10 candela or more.
 - d. The lamp unit shall be such that when an aircraft comes into touch with it, it will not cause obstruction to the aircraft, and it will not affect the functions of other lamp units.
- (t) Taxiway edge lights
 1. The lamp units of said light shall be installed such that, on both side of a taxiway and on the edges of an apron area or lines along each of the edges that is within 3 meters from the taxiway or apron, in the case of a straight line, said lamp units shall be arranged with approximately equal spacing of 60 meters and in the case of a curved line, they shall be arranged with the spacing that can clearly indicated the curvature.
 2. In a place where a taxiway is connected with a runway or an apron area, a lamp unit shall be installed on each side of the entrance to said place in order to indicate the entrance.
 - a. A pair of said units shall be installed with spacing of 1.5 meters.
 - b. A lamp unit having a light-emitting section with a length of 1.5 meters shall be installed at each location.
 3. The lamp light shall be a constant light in blue and visible from all the angles up to the minimum limit of 30 degrees from the horizontal plane comprising the light source center.
 4. The light distribution shall be such that no dizziness will be given to aircraft.
 5. The lamp unit shall be such that when an aircraft comes into touch with it, it will not cause obstruction to the aircraft, and it will not affect the functions of other lamp units.
- (u) Taxiway centerline lights
 1. The lamp units of said light shall be installed such that, on the taxiway centerline and on the entrance path to a runway or an apron area, in the case of a curved section and in the vicinity, said units shall be

installed with such spacing that can clearly indicate the curved section, and in the other areas, with approximately equal spacing of 30 meters (15 meters in the case of high speed exit taxiway and a taxiway that can be used when runway visual range is less than 350 meters (hereafter called "low visibility taxiway")).

2. The lamp light shall be a constant light in green. However, in the case of a lamp installed along the entry/exit path of a taxiway to and from a runway in order to indicate the centerline and entry/exit path of the taxiway to an aircraft intending to leave the runway, arrays of a constant green and a constant yellow lights shall be arranged in an alternate order.
3. The anode light of lamp lights installed along a low visibility taxiway shall be visually recognizable from taxiing aircraft at least within the range prescribed in the right-hand side column as to each corresponding classification in the left-hand side columns of the following table.

Classification	Range of anode light
Straight line section (1)	In azimuth angles, a range comprising the light source center, and 10 degrees each leftward and rightward from a vertical plane comprising the tangential line of runway centerline, and another range of 1 to 8 degrees upward from a horizontal plane comprising the light source center
Straight line section (2)	In azimuth angles, a range comprising the light source center, and 3.5 degrees each leftward and rightward from a vertical plane comprising the runway centerline, and another range of 1 to 8 degrees upward from a horizontal plane comprising the light source center
Curved section	In azimuth angles, a range comprising the light source center, and 35 degrees toward the runway centerline and 3.5 degrees toward the opposite side from a vertical plane comprising the tangential line of said runway centerline, and another range of 1 to 10 degrees upward from a horizontal plane comprising the light source center

Remark:

- i. The straight line section (1) refers to a portion(s) of a straight line(s) of a taxiway in the vicinity of a curved section and to a section of a curve with a curvature radius exceeding 400 meters. Hereafter the same shall apply.
- ii. The straight line section (2) refers to portion(s) of a straight line(s) of a taxiway other than the straight line section (1). Hereafter the same shall apply.
- iii. The curved section refers to portion(s) of curved section(s) of a taxiway other than the straight line section (1). Hereafter the same shall apply.

4. The anode light installed on a low visibility taxiway intensity shall be

200 candela or more in the case where the subject lamp units are installed in the straight line sections (1) and (2), 100 candela or more in the case of curved section, or 20 candela or more in the case of installing other taxiways.

5. The light distribution shall be such that no dizziness will be given to aircraft.
6. A lamp unit shall have such a design that it will withstand the load of aircraft wheels passing on it and it will not obstruct the ground taxiing of aircraft.
7. In the case where said lamp unit is installed on a low visibility taxiway, a control unit shall be installed.
8. In the case where said lamp unit is installed on a low visibility taxiway, a monitoring unit shall be installed.
9. In the case where said lamp unit is installed on a low visibility taxiway, a secondary power supply system shall be provided.

(v) Stop bar lights

1. Said lights shall be installed such that a pair of them are arranged with approximate symmetry against the taxiway centerline and with equal spacing of approximately 3 meters in a location of temporary halt before entering a runway, on a straight line intersecting the taxiway centerline, and as required, along the line 3 meters or more on both outside of the taxiway, or a required number of them arranged within the taxiway with approximately equal spacing of 3 meters.
2. The lamp light shall be a constant light in red.
3. A lamp unit, in the case of an embedded type, shall have such a design that it will withstand the load of aircraft wheels passing on it and it will not obstruct the taxiing of aircraft, and in the case of other types, when an aircraft comes into touch with it, it will not cause obstruction to the aircraft and it will not affect the functions of other lamp units.
4. A secondary power supply system shall be provided.
5. Said lamp unit shall conform to the standards prescribed under (u) 3, 4, 5, 7 and 8.

(w) Runway guard light

1. Said lamp units shall be installed such that a pair of them arranged symmetrically against the taxiway centerline in a location of temporary halt before entering a runway, on a straight line intersecting with the runway centerline, and on both outside of the taxiway, or a required number of them arranged within the taxiway with approximately equal spacing of approximately 3 meters.
2. The lamp light shall be a blinking light in yellow.
3. The number of blinking per minute shall be 30 to 60.

4. The anode light shall, in the case of lamp units installed both outside of a taxiway, be visible at least within a cone having the light source center as its apex and an apical angle of 16 degrees, and in the case of those installed within a taxiway, be visible at least in azimuth angles, within 10 degrees leftward and rightward from a vertical plane comprising the light source center and the taxiway centerline or the tangential line of the taxiway centerline and a range from 1 to 8 degrees upward from a horizontal plane comprising the light source center.
 5. The effective light intensity shall, in the case of lamp units installed on both side of a taxiway, be 300 candela or more, or in the case of lamp units installed within a taxiway, be 200 candela or more.
 6. The light distribution shall be such that no dizziness will be given to aircraft.
 7. A lamp unit, in the case of an embedded type, shall have such a design that it will withstand the load of aircraft wheels passing on it and it will not obstruct the taxiing of aircraft, and in the case of other types, when an aircraft comes into touch with it, it will not cause obstruction to the aircraft and it will not affect the functions of other lamp units.
 8. A control unit shall be installed.
 9. A monitoring unit shall be installed.
 10. A secondary power supply system shall be provided.
- (x) Intermediate holding position lights
1. Said lamp units shall be installed such that 3 or more units are arranged with spacing of approximately 1.5 meters on a straight line perpendicularly intersecting the taxiway centerline with approximate symmetry against the taxiway centerline in the position where aircraft should make a temporary halt on the taxiway.
 2. The lamp light shall be a constant light in yellow.
 3. Said lamp units shall conform to the standards stipulated under (u) 3 through 9.
- (y) Taxiway guidance signs
1. Said lamp units shall be installed in such locations as in the vicinity of taxiway branch point, connecting spots of a taxiway with a runway or apron area, or in the vicinity of apron where the units will not cause obstruction to taxiing aircraft and readily visible from taxiing aircraft.
 2. Said lamp unit shall be such that they clearly exhibit markings with symbols, Arabic figures or upper case alphabets in lamp lights or illuminations so that they can be recognized night and day.
 3. The lamp light of said system shall be of a constant light type in red, yellow, white or variable white.

4. Said markings shall be colored in the manners listed below:
 - a. In the case of a marking that indicates a location where aircraft should make a temporary halt or unserviceable area in an aerodrome to aircraft, symbols shall be marked in white others in red.
 - b. In the case of indicating locations other than a temporary halt to taxiing aircraft, symbols and similar marks shall be in yellow, others in black, and when said marking is installed independently, a yellow hemming shall be added.
 - c. In the case of others, symbols and similar marks shall be in black and other portions in yellow.
 5. The mean luminosity of the surface of marking shall be 10 candela per square meter for red, 50 candela per square meter for yellow, and 100 candela per square meter for white. In the case of markings used when runway visual range is less than 800 meters, the mean luminosity shall be 30 candela per square meter for red, 150 candela per square meter for yellow, and 300 candela per square meter for white.
 6. The light distribution shall be such that no dizziness will be given to aircraft.
 7. Said lamp unit shall be such that it will not affect the functions of other lights.
 8. In the case of markings used when runway visual range is less than 800 meters, a control unit shall be installed.
- (z) Turning point identification lights
1. Said lamp units shall be installed in such a location as an edge of a turning area and where a turning radius can be indicated, and a location where 3 units shall be installed with equal spacing of 5 meters on a straight line passing the turning start point (which refers to a point where an aircraft start to turn along its turning path;) and parallel to the runway centerline, and further 3 units shall be installed with equal spacing of 5 meters on a straight line passing the turning start point and intersecting the runway centerline and from the intersection with the left side shoulder outer edge as seen from an aircraft intending to turn and from approximately 1 meter toward outside of the shoulder.
 2. The lamp light shall be a constant light in blue.
 3. The light distribution shall be such that no dizziness will be given to aircraft.
 4. The lamp unit shall be such that when an aircraft comes into touch with it, it will not cause obstruction to the aircraft, and it will not affect the functions of other lamp units.
- (aa) Visual docking guidance system

1. Said lamp units shall be installed in such locations that are in the vicinity of an apron area and where said units will not cause obstruction to taxiing aircraft and said units are readily visible from taxiing aircraft.
2. Said lamp unit shall be such that they clearly exhibit markings with symbols, Arabic figures or upper case alphabets in to notify an aircraft of the deviation from its taxiing path and the distance to the apron in lamp lights so that the markings can be clearly recognized night and day.
3. The lamp light of said system shall be of a constant light type in red, yellow, green, white or variable white.
4. The light distribution shall be such that no dizziness will be given to aircraft.

(bb) Taxi channel lights

1. Said lamp unit shall be installed on a line along a taxi channel.
2. The lamp light shall be a constant light in blue and visible from all the angles up to the minimum limit of 30 degrees from the horizontal plane comprising the light source center.
3. The lamp unit shall be such that when an aircraft comes into touch with it, it will not cause obstruction to the aircraft, and it will not affect the functions of other lamp units.

(cc) Landing direction indicator lights

1. Said lamp light shall be installed in such a location that is within the precinct of an aerodrome and readily visible from the sky above.
2. Such shaped objects as a T-shaped body and a tetrahedron shall be marked with red, green and other lamp lights as indicated in the following figures:

Figure (omitted)

3. Said lamp lights shall be such that they are visible from all the directions above a horizontal plane comprising said lamp lights and their light intensity shall be adequate enough to recognize visually from an altitude of 300 meters.
4. Said T-shaped and tetrahedral objects shall be prepared in the dimensions and colors indicated in the following figure:

Figure (omitted)

5. Said lamp lights shall be such that their indicating directions can be controlled.

(dd) Wind direction indicator lights

Said indicator light shall have such illumination with which the direction indicated by the wind direction indicator can be clearly recognized from an altitude of at least 300 meters.

(ee) Direction signaling lights

1. Said lamp light shall be such a signaling light that can be converted to any of red, green and white, and can be directed to an arbitrary object.
2. The light beam angle shall be in a range from 1 to 3 degrees.
3. The anode light intensity shall be 6,000 candela or more and the intensity in the directions more than 3 degrees from the anode light axis shall be negligibly minimal.
4. Said lamp unit shall be capable of transmitting Morse codes at a speed of 4 words or more per minute.

(ff) Unserviceable area lights

1. The lamp units of said light shall be installed such that, in the case where a runway or taxiway is in the area where use of aircraft is forbidden, they shall be installed at both ends with approximate spacing of 3 meters, and in the case said unserviceable area is a place other than a runway or a taxiway within the precinct of an aerodrome, they shall be installed on the borderline of in the middle of said unserviceable area.
2. The lamp light shall be a constant light in red and visible from all the angles above the horizontal plane comprising the light source center.
3. The light intensity shall be 10 candela or more.

(gg) Landing area flood lights

1. Said lamp unit shall be installed in the periphery of a landing area and in such a location where it will not cause obstruction to aircraft navigation.
2. Said lamp light shall be a constant light in variable white.
3. The light distribution shall be such that the entire landing area is illuminated and will give no dizziness aircraft.
4. The normal luminance in the middle of an illuminated touch-down zone shall be 10 lux or more.

(hh) Boundary lights

1. The lamp unit shall be installed on the boundary line of a landing area such that in the case of a land heliport, 8 or more units are arranged with approximately equal spacing of 15 meters or less, in the case of other aerodromes, etc. they are arranged with approximately equal spacing of 100 meters or less. However, in the case of such a building area where part of the boundary of landing area is properly marked with such a means as a lighting for an apron area, the lamp units of said part may be omitted.
2. The lamp light shall be a constant light in yellow and visible from all the angles up to the minimum limit of 30 degrees from the horizontal plane comprising the light source center.

3. The light intensity shall be 10 candela or more.

(ii) Water boundary lights

1. The lamp units of said light shall be installed on the borderline in a water landing area with spacing of approximately 150 meters.
2. The lamp light shall be a constant light in green and visible from all the angles up to the minimum limit of 30 degrees from the horizontal plane comprising the light source center.
3. The light intensity shall be 10 candela or more.

(jj) Range lights

1. Said lamp unit shall be installed on a straight line perpendicularly intersecting the path of take-off or landing in the vicinity of the borderline of landing area in symmetrical positions against the path of take-off or landing. However, in the case there are two or more paths of take-off or landing, a different number of lamp units shall be installed in each path.
2. The lamp light shall be a constant light in green and visible from all the angles up to the minimum limit of 30 degrees from the horizontal plane comprising the light source center.
3. The light intensity shall be 50% or more of the intensity of a boundary light.

(kk) Water range lights

1. Said lamp unit shall be installed such that the units are arranged on the straight line that perpendicularly intersects said path and in the vicinity of an intersection of the path of take-off or landing with the borderline of landing area in symmetrical positions against the path of take-off or landing.
2. The lamp light shall be a constant light in yellow and visible from all the angles up to the minimum limit of 30 degrees from the horizontal plane comprising the light source center.
3. The light intensity shall be 10 candela or more.

(2) The provision of (2) of Article 99 shall apply mutatis mutandis to the installation of aerodrome lights. In this case, the term "preceding paragraph" in said paragraph shall refer to "paragraph (1) of Article 117" and the "air navigation facilities" shall refer to "aerodrome lights."

(Application for works completion inspection)

Article 118 (1) Pursuant to the provision of paragraph (1) of Article 42 of the Act, a person intending to apply for the completion inspection of works of aeronautical lights shall submit a written application for completion inspection of completed works of aeronautical lights describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
 - (ii) Name and address of aeronautical lights
 - (iii) Work completion date
- (2) The provisions of the preceding paragraph shall apply mutatis mutandis to the application for the inspection of the works pertaining to the alteration of aeronautical lights pursuant to the provisions of paragraph (1) of Article 42 of the Act that shall be applied mutatis mutandis in compliance with the provision of paragraph (2) of Article 43 of the Act.

(Notification of services commencement date)

Article 119 (1) Pursuant to the provision of paragraph (3) of Article 42 of the Act, a person who intends to submit a notification on the date of services commencement of aeronautical lights shall submit a written notification of services commencement of aeronautical lights describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
 - (ii) Name and address of aeronautical lights
 - (iii) Date of commencing services
- (2) Provisions of the preceding paragraph shall apply mutatis mutandis to the notification of services resumption date of aeronautical lights that have been altered or whose services have been suspended pursuant to the provisions of paragraph (3) of Article 42 of the Act that is applied mutatis mutandis in compliance with the provisions of paragraph (5) of Article 44 of the Act that is applied mutatis mutandis in compliance with the provision of paragraph (2) of Article 43 of the Act and paragraph (2) of Article 45 of the Act, respectively.

(Important change or alteration)

Article 120 Important changes and alterations for which the applicant shall receive the permission prescribed in paragraph (1) of Article 43 of the Act shall differ with respect to the type of aerodrome, etc. as listed below:

- (i) Alteration of lamp quality, light intensity or range of anode light
- (ii) In the case of aerodrome lights, alteration of the layout and combination of lights
- (iii) Alteration of the structure or circuits of control unit or of constant current circuits (limited to such a case where the circuits may affect the light quality, intensity, or other optical properties of lights)
- (iv) New installation, additional installation of control unit or additional installation of power supply facilities

(Application for permission for change and alteration)

Article 121 (1) A person intending to apply for permission of change or alteration

of aeronautical lights, pursuant to the provision of paragraph (2) of Article 38 of the Act that shall be applied mutatis mutandis in compliance with the provision of paragraph (2) of Article 43 of the Act shall submit a written application for permission of the change or alteration of aeronautical lights in triplicate describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name and address
 - (ii) Name and address of aeronautical lights
 - (iii) Matters desired to be changed or altered (Documents and drawings comparing the old and new matters shall be attached.)
 - (iv) Cost incurred in implementing the changes or alterations
 - (v) Scheduled dates of commencement and completion of the works
 - (vi) When an alteration in administration plans is required, the administration plan as a consequence of the alteration
 - (vii) Reasons for the need of change or alteration
- (2) The documents and drawings listed below shall be attached to the written application prescribed in the preceding paragraph:
- (i) Documents describing the cost incurred by the change or alteration and the methods for procuring land and objects
 - (ii) Work design drawings and documents, specifications and work budget statement
 - (iii) In the case where an applicant is a corporate entity or union, documents verifying the decision of intent pertaining to the change or alteration.

(Application for permission of suspension or demolition of services)

Article 122 (1) Pursuant to the provision of paragraph (1) of Article 45 of the Act, a person intending to submit a notification on the suspension or demolition of services of aeronautical lights shall submit a written notification of services suspension (demolition) of aeronautical lights describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
 - (ii) Name and address of aeronautical lights
 - (iii) In the case of application for permission of demolition, the scheduled date of demolition
 - (iv) In the case of application for permission of suspension, the commencement date and duration of the suspension
 - (v) Reasons for the need of suspension or demolition
- (2) In the case where an applicant is a corporate entity or union, the documents verifying the decision of intent pertaining to the suspension or demolition shall be attached to the "written application" prescribed in the preceding paragraph.

(Application for services resumption inspection)

Article 123 (1) A person intending to receive a services resumption inspection of aeronautical lights pursuant to the provision of paragraph (4) of Article 44 of the Act that shall be applied mutatis mutandis in compliance with the provisions of paragraph (2) of Article 45 of the Act shall submit a written application for receiving services resumption inspection of aeronautical lights describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name and address
- (ii) Name and address of aeronautical lights
- (iii) Scheduled date of services resumption

(2) In the case where an applicant is a corporate entity or union, the documents verifying the decision of intent pertaining to the resumption of services shall be attached to the "written application" prescribed in the preceding paragraph.

(Public notice of services commencement)

Article 124 (1) Pursuant to the provision of Article 46 of the Act, the matters that shall be put on public notice when a notification of the date of services commencement of aeronautical lights is submitted are as listed below:

- (i) Name and address
- (ii) Type and name of aeronautical lights
- (iii) Location and address of aeronautical lights
- (iv) Light quality, light intensity, layout and other important matters pertaining to aeronautical lights
- (v) Operation time
- (vi) Date of services commencement
- (vii) Special notes on the use of aeronautical lights

(2) The provision of the preceding paragraph shall apply mutatis mutandis to the case where the Minister of Land, Infrastructure, Transport and Tourism installs aeronautical lights.

(Public notice of change, alteration, suspension etc.)

Article 125 Pursuant to the provision of Article 46 of this Act, the matters that shall be notified in the case where any change or alteration occurs in regard to aeronautical lights or when the services of aeronautical lights are suspended, resumed or demolished (including a case where the provision shall apply mutatis mutandis in compliance with the provisions of paragraph (2) item (ii) of Article 55 of the Act) the matters that shall be put on public notice in the case where any change or alteration, resumption or demolition occurs in regard to aeronautical lights shall be as listed below in addition to those listed under items (i), (ii) and (iii) of paragraph (1) of the preceding Article:

- (i) In the case where any change or alteration occurs in the matters that have been put on public notice, the matters changed or altered
- (ii) In the case of a suspension, the scheduled date and duration of the suspension
- (iii) In the case of a resumption or demolition, the scheduled date

(Air navigation facilities not requiring public notice)

Article 125-2 Air navigation facilities stipulated by the Ordinances of Minister of Land, Infrastructure, Transport and Tourism shall be termed as the aerodrome lights pertaining to airfields for non-public uses.

(Administration standards)

Article 126 The standards for administering aeronautical lights pursuant to the provision of paragraph (1) of Article 47 of the Act (including a case where the provision shall apply mutatis mutandis in compliance with the provision of paragraph (2) item (ii) of Article 55 of the Act) shall be as listed below:

- (i) The operation of said lights shall be securely maintained during a specified operation time.
- (ii) Said lights shall be sustained in perfect conditions by conducting the repair and cleaning services of them.
- (iii) A signboard(s) indicating the prohibited acts prescribed under Article 53 of the Act shall be displayed in a manner readily recognizable by the public.
- (iv) When the functions of aeronautical lights may be damaged by other objects including building structures and vegetation, necessary measures such as removal of said objects shall be taken.
- (v) The necessary organization or system to communicate with the Minister of Land, Infrastructure, Transport and Tourism shall be established in order to be prepared for such cases where the operation of aeronautical lights must be interrupted or the functions of them are affected due to certain inevitable reasons as well as when the operation or functions of aeronautical lights are restored.
- (vi) When the operation of aeronautical lights is affected by natural disasters or other accidents, immediate actions shall be taken to restore the operation and appropriate measures shall be taken to continue the operation to the maximum possible extent and to prevent dangers in aviation.
- (vii) When repair or other types of work is to be conducted for aeronautical lights, appropriate measures shall be taken to prevent aircraft navigation from any danger or damage.
- (viii) The administrator of aeronautical lights shall maintain a services log for said lights and store it for one year to record the matters listed below:
 - (a) In the case of an aeronautical light, results of monitoring by a monitoring

- unit (number of recording shall be at least once a day) and the date and time of recording
- (b) Results of inspection and the date and time of inspection
- (c) In the event any accident such as interrupt of operation of aeronautical lights has occurred, the date and time of the event, cause(s) and measures taken for it
- (d) Matters notified to the Minister of Land, Infrastructure, Transport and Tourism and the date and time of the notification
- (e) Other matters for reference
- (ix) Required quantities of spare articles for each replacement unit of components constituting lamp units and lamp bulbs of aeronautical light shall be securely provided.
- (x) Aerodrome Beacons and aeronautical beacon shall be continuously lit during the entire period of specified operation time.
- (xi) Aerodrome light (except aerodrome beacons) shall, when an aircraft takes off or lands or when required to assist aircraft passing over sky, be lit with the methods listed below (In the case of aerodrome lights other than Precision approach path indicator, runway threshold identification light, and Runway distance marker light, this prescription shall be limited to such cases as nighttime, aerodrome, etc. subjected to instrument meteorological condition, or other cases where visibility is restricted)
 - (a) When an aircraft is scheduled to land, preparatory services shall be started 1 hour before the scheduled landing, and shall be lit at least 10 minutes before said landing time. Nevertheless, in the case of emergency lighting, the above-mentioned need not be observed.
 - (b) At a take-off an aircraft, the lighting of said lights shall be continued for at least 5 minutes.
- (xii) The aerodrome beacon administrator of an aerodrome shall provide said lights with an aerodrome lights guidebook describing matters listed below:
 - (a) Name and address of the aerodrome lights provider
 - (b) Type and name of aerodrome lights
 - (c) Location and address of aerodrome lights
 - (d) Name and address of owner of the site for aerodrome lights
 - (e) Outline of aerodrome lights
 - (f) Specific method for administering pursuant to the standards prescribed under item (i) to the preceding item

(Types and administration standards of obstacle lights)

Article 127 (1) The standards for administering aeronautical lights installed pursuant to the provision of paragraphs (1) and (2) of Article 51 of the Act (including a case where said provision shall apply mutatis mutandis in

compliance with the provision of paragraph (2) or (3) of Article 55-2 of the Act) shall include high intensity obstacle lights, white medium intensity obstacle light, red medium intensity obstacle lights, and low intensity obstacle light, and the standards for installing them shall be as listed below:

(i) Performance characteristics of obstacle lights are classified and listed below for high intensity obstruction light, medium intensity white obstacle lights, medium intensity red obstacle lights, and low intensity obstacle lights, respectively:

(a) High intensity obstacle lights

1. The lamp light shall be a flashing lights in white and visible from all the directions upward from 5 degrees below horizontal plane comprising the light source center.
2. The number of flashes per minute shall be 40 to 60.
3. Effective intensity shall conform to the standards listed below:
 - a. Maximum value of effective intensity shall be 250,000 candela or less.
 - b. The effective intensity on the horizontal plane comprising the light source shall be 150,000 candela or more to 250,000 candela or less.
 - c. The effective intensity at a level 1 degree below the horizontal plane comprising the light source shall be 75,000 candela or more to 112,500 candela or less.
 - d. The effective intensity at a level 10 degrees below the horizontal plane comprising the light source shall be 7,500 candela or less.
 - e. Said light shall be capable of switching effective intensities pursuant to the provision of Article 128, item (vii).
4. In the case where two or more obstacle lights are installed for a single object, these lights shall be capable of emitting flashing lights simultaneously.

(b) Medium intensity white obstacle lights

1. The lamp light shall be a flashing lights in white and visible from all the directions upward from 5 degrees below horizontal plane comprising the light source center.
2. The number of flashes per minute shall be 20 to 60.
3. Effective intensity shall conform to the standards listed below:
 - a. Maximum value of effective intensity shall be 25,000 candela or less.
 - b. The effective intensity on the horizontal plane comprising the light source shall be 15,000 candela or more to 25,000 candela or less.
 - c. The effective intensity at a level 1 degree below the horizontal plane comprising the light source shall be 7,500 candela or more to 11,250 candela or less.
 - d. The effective intensity at a level 10 degrees below the horizontal plane comprising the light source shall be 750 candela or less.

- e. Said light shall be capable of switching effective intensities pursuant to the provision of Article 128, item (viii).
 - 4. In the case where two or more obstacle lights are installed for a single object, these lights shall be capable of emitting flashing lights simultaneously.
- (c) Medium intensity red obstacle lights
- 1. The lamp light shall be a blinking light in red and visible from all the directions upward from 15 degrees below horizontal plane comprising the light source center.
 - 2. The number of blinking per minute shall be 20 to 60.
 - 3. Effective intensity shall conform to the standards listed below:
Nevertheless, when the Minister of Land, Infrastructure, Transport and Tourism certifies that it is technically difficult to install a light having an intensity conforming to the prescriptions under a, b and c, the intensity of the light shall meet the intensity value set forth by the Minister of Land, Infrastructure, Transport and Tourism.
 - a. Maximum value of effective intensity shall be 2,500 candela or less.
 - b. The effective intensity on the horizontal plane comprising the light source center shall be 1,500 candela or more to 2,500 candela or less.
 - c. The effective intensity at a level 1 degree below the horizontal plane comprising the light source center shall be 750 candela or more to 1,125 candela or less.
- (d) Low intensity obstacle lights
- 1. The lamp light shall be a constant light in red and visible from all the directions upward from 15 degrees below horizontal plane comprising the light source center.
 - 2. The intensity shall conform to the standards listed below:
 - a. In the case of said light used in a location prescribed under item (x), sub-item "a" and used in the location prescribed under item (xi), the location prescribed under sub-item "c" that is every other location prescribed under said item in descending order from the location prescribed under item (x), sub-item "a" (except the lowest location), the intensity at a level 10 degrees above the horizontal plane comprising the light source center shall be 100 candela or more, and at a level 3 degrees below the horizontal plane comprising the light source center shall be 100 candela or more to 150 candela or less.
 - b. In the case of medium intensity red obstacle light or the object prescribed under item (xi), said light used in combination with that prescribed under sub-item "a" (except that prescribed under sub-item "a"), the intensity at levels 6 degrees and 10 degrees above the horizontal plane comprising the light source center shall be 32

candela or more.

- c. In the case of said lamps other than those prescribed under sub-item "a" and "b", the intensity at levels 6 degrees and 10 degrees above the horizontal plane comprising the light source center shall be 10 candela or more.

- (ii) In the case of objects listed under paragraph (1) items (i), (ii) and (v) of Article 132-2 (except branch lines) and those at elevations of 150 meters or more (except those certified by the Minister of Land, Infrastructure, Transport and Tourism that it is difficult to install a high intensity obstacle lights due to topological reasons, relationships with existing objects, or installed conditions of said object), in the locations listed below (such an object (except lightening arresters; hereafter called "supporting object") that supports the objects listed under paragraph (1), item (ii) of Article 132-2, sub-item (a) is excluded), one or more high intensity obstacle light(s) shall be installed so that said object can be recognized by aircraft in all the directions.
 - (a) Top of an object (except lightening arresters; hereafter the same applies to this item, item (iv), a, b and c, item (v), a, b and c, and item (x), a, b, c and d). Nevertheless, when installing a high intensity obstacle lights on top of a stack or other tall object, if there is a risk of affecting the functions of said light, in the case where the Minister of Land, Infrastructure, Transport and Tourism certifies that it is technically difficult to install a high intensity obstacle lights while there is an antenna or other objects exists in a section 1.5 to 3 meters from the top, said light shall be installed at the highest position.
 - (b) In the case of an object of which elevation of the location prescribed under (a) (limited to that of which vertical distance of the section corresponding to the prescriptions under paragraph (1) item (i), (ii) and (v) of Article 132-2), a vertical distance of 105 meters or less with approximately equal spacing between said location to the bottom of said object.
 - (c) In the case of a bridge or similar other object of which width is remarkably greater than its height, at a location prescribed in sub-item (a) or (b) and locations certified by the Minister of Land, Infrastructure, Transport and Tourism
- (iii) In the case of an object that is certified by the Minister of Land, Infrastructure, Transport and Tourism to be difficult to install a high intensity obstacle lights on its top pursuant to the proviso of the preceding item, sub-item "a", the vertical distance between the highest location where a high intensity obstacle lights can be installed (hereafter called "mountable location") and the top exceeds 12 meters, one or more medium intensity white obstacle lights shall be installed at the highest possible location between the mountable location and the top. However, for an object that is

certified to be technically difficult to install a medium intensity white obstacle lights by the Minister of Land, Infrastructure, Transport and Tourism certifies, it may be treated as an exception.

- (iv) In the case of objects listed under paragraph (2) items (i), (ii) and (v) of Article 132-2 (except branch lines) and those at elevations of 150 meters or more (except those certified by the Minister of Land, Infrastructure, Transport and Tourism that it is inappropriate to install a medium intensity obstacle lights and a daytime obstacle marking is installed due to topological reasons, relationships with existing objects, or installed conditions of said object), one or more medium intensity white obstacle light(s) shall be installed in the locations listed below (in the case of a supporting object, sub-item "a" shall be excluded) so that said object can be recognized by aircraft in all the directions.
 - (a) Top of an object. Nevertheless, when installing a medium intensity white obstacle lights on top of a stack or other tall object, if there is a risk of affecting the functions of said light, in the case where the Minister of Land, Infrastructure, Transport and Tourism certifies that it is technically difficult to install a medium intensity white obstacle lights while an antenna or other objects exists in a section 1.5 to 3 meters from the top, said light shall be installed at the highest possible position.
 - (b) In the case of an object of which elevation of the location prescribed under (a) exceeds 105 meters (limited to those of which vertical distance of the section corresponding to the prescriptions under paragraph (1) item (i), (ii) and (v) of Article 132-2 exceeds 105 meters), between said location to the bottom of said object with approximately equal spacing.
 - (c) In the case of a bridge or similar other object of which width is remarkably greater than its height, at a location prescribed in sub-item (a) or (b) and locations certified by the Minister of Land, Infrastructure, Transport and Tourism
- (v) On the objects other than those prescribed in item (ii) and the preceding item (limited to those listed in each item of paragraph (1) of Article 132 (excluding item (iii))), one or more medium intensity red obstacle light(s) or low intensity obstacle light(s) shall be installed on the location(s) listed below (in the case of a supporting object, item (a) is excluded) in order to allow aircraft from all the directions to recognize said object(s).
 - (a) Top of an object. Nevertheless, when installing a medium intensity red obstacle lights or low intensity obstacle lights on top of a stack or other tall object, in the case of an object that may affect the functions of said light, said light shall be installed in a section 1.5 to 3 meters from the top, in the case of another object that is below an approach surface or transition surface, said light shall be installed at the nearest location to such a

- surface.
- (b) In the case of an object of a height exceeding 45 meters, said lights shall be installed in the section with a vertical distance of 52.5 meters or less between the top of the object and the ground with approximately equal spacing.
 - (c) In the case of an object having a width exceeding 45 meters at an elevation of 45 meters, or another object having a width of 45 meters at a point that is at a remarkable proximity to an approach surface, transition surface or horizontal plane, said lights shall be installed at points that indicate the approximate outline of the object and the neighboring points do not exceed a horizontal distance of 45 meters.
- (vi) Of the objects listed below (limited to those corresponding to the prescriptions in the preceding item), at each of their positions of an object prescribed in said item (a) (excluding the case where said object is a supporting object) deemed particularly dangerous to aircraft navigation by the Minister of Land, Infrastructure, Transport and Tourism and every other position downward from said position prescribed in said item (b) (excluding the lowest position), a medium intensity red obstacle lights shall be installed.
- (a) Objects with a height of 9 meters or more
 - (b) Gas tanks, oil tanks, and other object that may be afflicted with heavy disaster at a collision of aircraft
 - (c) Objects located in the path of aircraft frequently cruising at a low altitude
- (vii) For the objects listed in paragraph (1) item (iii) of Article 132-2, on top of a supporting object (excluding the case where installing a high intensity obstacle light is deemed inappropriate by the Minister of Land, Infrastructure, Transport and Tourism because of the topological conditions, relationships with existing objects or installed conditions of said object) instead of said object, one or more high intensity obstacle light(s) in order to allow aircraft in all the directions to recognize said object. However, in the case where the spacing of said objects (limited to those having a height less than 150 meters) are 1,200 meters or less and deemed proper by the Minister of Land, Infrastructure, Transport and Tourism, one or more medium intensity white obstacle light(s) shall be installed on top of said object in order to allow aircraft in all the directions to recognize said object.
- (viii) On said supporting object prescribed in the preceding item, one or more medium intensity red obstacle light(s) shall be installed on top of said object in order to allow aircraft in all the directions to recognize said object.
- (ix) Of the lights on the objects prescribed in items (ii) and (iv) and the supporting objects prescribed in item (vii), those deemed inappropriate to operate a high intensity obstacle light(s) or medium intensity white obstacle light(s) during nighttime by the Minister of Land, Infrastructure, Transport

and Tourism, said light(s) shall be substituted by, notwithstanding the prescriptions under items (ii) to (iv) and item (vii), a medium intensity red obstacle light(s) or a low intensity obstacle light(s) installed in the case of objects prescribed under items (ii) and (iv) during nighttime pursuant to the prescriptions under items (v) and (vi), and in the case of the supporting object prescribed in item (vii), a medium intensity red obstacle light(s) shall be installed.

- (x) The objects other than those prescribed in items (ii), (iv), (v) and (vii), one or more medium intensity red obstacle light(s) or low intensity obstacle light(s) in the positions listed below (in the case of supporting object, those under sub-items (a) and (b) shall be excluded) in order to allow aircraft in all the directions to recognize said object.
 - (a) On top of an object (excluding the cases where said light is installed on a tower or on the roof of similar objects; nevertheless, said exclusion shall not apply to objects other than those prescribed in sub-item (d) where a medium intensity red obstacle light(s) (limited to medium intensity red obstacle light(s) in the case of an object with a height of 150 meters or more) or low intensity obstacle light(s) are installed in the position(s) prescribed in sub-item (b)). Nevertheless, in the case of an object located below an approach surface of transition surface, when the installation of a medium intensity red obstacle light(s) or low intensity obstacle light(s) on top of said object at the nearest location to such a surface is deemed technically difficult by the Minister of Land, Infrastructure, Transport and Tourism, said light(s) shall be installed at the highest possible position(s).
 - (b) On top of an object installed on a tower or on the roof of similar objects. Nevertheless, this shall not be applicable to those that are approved by the Minister of Land, Infrastructure, Transport and Tourism.
 - (c) In the case of an object with a height of 150 meters or more, said light(s) shall be installed at positions downward from the position prescribed in sub-item (a) in sequence with approximately equal spacing of 52.5 meters or less (in the case of an elevation of 150 meters or less, at the highest position).
 - (d) In the case of an object having a width exceeding 45 meters at an elevation of 45 meters or more, or another object having a width of 45 meters at a point that is at a remarkable proximity to an approach surface, transition surface or horizontal plane, said lights shall be installed at points that indicate the approximate outline of the object and the neighboring points do not exceed a horizontal distance of 90 meters.
- (xi) Of the objects listed below (limited to those corresponding to the prescriptions in the preceding item), at each of their positions of an object prescribed in said item (a) deemed particularly dangerous to aircraft

navigation by the Minister of Land, Infrastructure, Transport, one or more medium intensity red obstacle light(s) shall be installed in order to allow aircraft in all the directions to recognize said object.

- (a) Objects with a height of 150 meters or more
- (b) Object that may be afflicted with heavy disaster at a collision of aircraft
- (c) Objects present in the path of aircraft frequently cruising at a low altitude

(xii) In the case of the objects listed below, a medium intensity red obstacle light(s) shall be installed at locations deemed appropriate by the Minister of Land, Infrastructure, Transport and Tourism notwithstanding the prescriptions in items (v) to the preceding item (excluding items (vii) and (viii)):

- (a) Mountains, hills and forests
- (b) Items spreading in a wide range and the marking with low intensity obstacle lights are deemed inappropriate by the Minister of Land, Infrastructure, Transport and Tourism

(2) In the case where the installation of obstacle lights pursuant to the preceding paragraph is deemed inappropriate by the Minister of Land, Infrastructure, Transport and Tourism because of topological reasons, relationships with existing objects, or the structural design of said object, said light(s) may be installed in a location or by changing its light intensity deemed appropriate by the Minister of Land, Infrastructure, Transport and Tourism notwithstanding the prescriptions in said paragraph.

(Objects on which obstacle lights are installed)

Article 127-2 The objects on which an obstacle light(s) shall be installed pursuant to the provision of paragraph (2) of Article 51 of the Act (including a case where the provision shall apply mutatis mutandis in compliance with the provision of paragraph (2) item (ii) of Article 55 of the Act) shall be as listed below:

- (i) An object that is in an extreme proximity to approach surface, transition surface or horizontal surface
- (ii) Objects other than prescribed in the preceding item and may heavily affect the safety of aircraft navigation

(Methods of administering obstacle lights)

Article 128 The methods listed below shall apply to the administration of obstacle light pursuant to the provision of paragraph (5) of Article 51 of the Act (including a case where the provision shall apply mutatis mutandis in compliance with the provision of paragraph (2) item (ii) of Article 55 of the Act):

- (i) Said lights shall be sustained in perfect conditions by conducting the repair and cleaning services of them.
- (ii) When the functions of obstacle lights may be affected by other objects including building structures and vegetation, necessary measures such as removal of said objects shall be taken.
- (iii) The necessary organization or system to communicate with the Minister of Land, Infrastructure, Transport and Tourism shall be established in order to be prepared for such cases where the operation of obstacle lights must be interrupted or the functions of them are affected due to certain inevitable reasons as well as when the operation or functions of obstruction lights are restored.
- (iv) When the operation of obstruction lights is affected by natural disasters or other accidents, immediate actions shall be taken to restore the operation and appropriate measures shall be taken to continue the operation to the maximum possible extent and to prevent dangers in aviation.
- (v) obstacle light shall be provided with electric bulbs and fuses as spare parts.
- (vi) In the case of a high intensity obstacle light(s) and medium intensity white obstacle light(s), the lit state shall be constantly maintained throughout every day (in the case of high intensity obstacle light(s) and medium intensity white obstacle light(s) pertaining to a supporting object(s) prescribed in paragraph (1) item (vii) of Article 127, and during the nighttime, the continued lighting is deemed unnecessary by the Minister of Land, Infrastructure, Transport and Tourism and the high intensity obstacle light(s) and medium intensity white obstacle light(s) pertaining to objects prescribed in said paragraph, item (xi), the lighting shall be limited to daytime.), while in the case of medium intensity red obstacle light(s) and low intensity obstacle light(s), the lit state shall be maintained during nighttime. Nevertheless, in the case where decorative lights, outdoor light projectors and other lighting facilities are lit and deemed acceptable as functional substitutes by the Minister of Land, Infrastructure, Transport and Tourism, said exceptional means may apply.
- (vii) In the case of a high intensity obstacle light(s), the lamp light with the effective intensity given in the right-hand column of the following table shall be emitted for the corresponding category of background luminosity indicated in the left-hand side column.

Background luminosity	Effective intensity
-----------------------	---------------------

	Maximum effective intensity	Effective intensity on a horizontal plane comprising a light source center	Effective intensity at a level 1 degree below a horizontal plane comprising a light source center	Effective intensity at a level 10 degrees below a horizontal plane comprising a light source center
Less than 50 candela per square meter	2,500 candela or less	1,500 candela or more to 2,500 candela or less	750 candela or more to 1,125 candela or less	75 candela or less
50 candela per square meter or more to less than 500 candela per square meter	25,000 candela or less	15,000 candela or more to 25,000 candela or less	7,500 candela or more to 11,250 candela or less	750 candela or less
500 candela per square meter or more	250,000 candela or less	150,000 candela or more to 250,000 candela or less	75,000 candela or more to 112,500 candela or less	7,500 candela or less

(viii) In the case of a medium intensity white obstacle light(s), the lamp light with the effective intensity given in the right-hand column of the following table shall be emitted for the corresponding category of background luminosity indicated in the left-hand side column.

Background luminosity	Effective intensity			
	Maximum effective intensity	Effective intensity on a horizontal plane comprising a light source center	Effective intensity at a level 1 degree below a horizontal plane comprising a light source center	Effective intensity at a level 10 degrees below a horizontal plane comprising a light source center
Less than 50 candela per square meter	2,500 candela or less	1,500 candela or more to 2,500 candela or less	750 candela or more to 1,125 candela or less	75 candela or less

50 candela per square meter or more	25,000 candela or less	15,000 candela or more to 25,000 candela or less	7,500 candela or more to 11,250 candela or less	750 candela or less
-------------------------------------	------------------------	--	---	---------------------

(Notification of charges for using facilities)

Article 129 (1) Pursuant to the provisions of paragraph (1) of Article 54 of the Act, a person intending to submit a notification on the setting or change of charges for aeronautical lights for public services shall submit a written notification of aeronautical lights charges setting (changing) describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism:

(i) Name and address

(ii) Name and address of aeronautical lights

(iii) The type and amount of said charges to be set or changed (in the case of a change, the comparison of old and new descriptions or values shall be clearly indicated).

(iv) Scheduled date of implementation

(v) In the case of a change, reasons for the need of change

(2) The written notification prescribed in the preceding paragraph shall be attached with documents describing the basis for calculating the service charges.

(Application for permission of the succession in title of aeronautical lights provider)

Article 130 (1) Pursuant to the provision of paragraph (1) of Article 55 of the Act, a person intending to obtain permission of the succession in title of the provider of aeronautical lights shall submit a written application for permission of the succession in title of aeronautical lights provider describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

(i) Name and address of the successor

(ii) Name and address of the inheritee

(iii) Name and address of aeronautical lights

(iv) Conditions of succession

(v) Timing for attempting a succession

(vi) Reasons for the need of succession

(2) The documents and drawings listed below shall be attached to the written application prescribed in the preceding paragraph:

(i) Documents verifying the conditions of succession

(ii) In the case of a corporate entity or union, documents verifying the decisions

made for the succession

- (iii) Documents verifying that said successor possesses the capabilities that suffice the administration of said facilities

(Notification of succession in title of the aeronautical lights, as a result of inheritance)

Article 131 (1) A person intending to submit a notification of the succession in title of the provider of aeronautical lights pursuant to the provision of paragraph (4) of Article 55 of the Act shall submit a written application for permission of the succession in title of aeronautical lights provider describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address of notifier and the relationship with the inheritee

- (ii) Name and address of the inheritee

- (iii) Name and address of aeronautical lights

- (iv) Date of commencing the inheritance

(2) The documents listed below shall be attached to the written notification prescribed in the preceding paragraph:

- (i) Documents verifying the relationships between the notifier and the inheritee

- (ii) In the case where any inheritee(s) other than the notifier exists, documents describing the name and address of said inheritee(s) and the written statement of consent signed by said inheritee(s)

Article 132 Deleted

Section 4 obstacle Markings

(Objects installed with obstacle markings)

Article 132-2 (1) The objects required to be installed with obstacle markings pursuant to the provision of paragraph (2) of Article 51-2 of the Act, shall be as listed below (except those deemed unnecessary to be installed with obstacle markings by the Minister of Land, Infrastructure, Transport and Tourism and those to be installed with high intensity obstacle lights and medium intensity white obstacle lights):

- (i) Chimney flues, steel towers, columns, and other objects whose width is extremely narrow relative to its height (including their stay wires)

- (ii) Objects in skeleton structures

- (iii) Overhead wire stipulated and notified by the Minister of Land, Infrastructure, Transport and Tourism

- (iv) Captive balloons (including their suspension cables)

- (v) Gas tanks, oil tanks, and other similar objects having colors that make it difficult to distinguish these objects from background scenery as observed from aircraft (limited to those present within an area coinciding with the projection area of an approach surface, horizontal surface, transition surface, extended approach surface, conical surface or outer horizontal surface area)
- (2) The objects on which obstacle markings are installed pursuant to the provision of paragraph (2) of Article 51-2 of the Act shall include, in addition to the objects stipulated in the preceding paragraph, those within a landing strip or those present within an area coinciding with the projection area of an approach surface, horizontal surface, transition surface, extended approach surface, conical surface or outer horizontal surface area, and may heavily endanger the safety of aircraft navigation.

(Type and installation standards of obstacle markings)

Article 132-3 (1) The obstacle markings installed pursuant to the provision of paragraph (1) or (2) of Article 51-2 of the Act shall include color of coatings, flags and marking means and their installation standards shall be as listed in the following table:

Type object		Type of obstruction marking	Installation method
(i) Objects other than those listed under items (ii), (iii) and (iv)	(a) Both height and width of the projection area of an object shall be 1.5 meters or less to any vertical surface.	Color of coatings	The color of coating shall be a monochrome in red or yellowish red.
	(b) Both height and width of the projection shall be 4.5 meter or more to any vertical plane and the object have its surface without any gap (except those having a width is extremely narrow relative to its height)		(i) Each object shall be coated in red and white or yellowish red and white and in the pattern of square cross stripes with an edge length of 1.5 meters or more to 10 meters or less. In this case, each corner shall be in colors other than white. (ii) Portions that are shielded with peripheral object(s) need not be color-coated.

		(iii) A spherical or similarly formed portion of an object may be coated in a pattern that suits well with the form.
	(c) Objects other than (a) and (b)	(i) Shall be coated in an alternate order of yellowish red and white stripes from top of it. In this case, the width of said stripe shall be one-seventh of the height of object in the case of a height of 210 meters or less, while in other cases, the height of object divided by an odd number and the quotient not exceeding and closest to 30 meters. (ii) Portions that are shielded with peripheral object(s) need not be color-coated.
(ii) Stay cable	Flag	A stay wire shall be attached in its middle portion with a flag shaped in a rectangular or square with its short side has a length of 0.6 meter or more coated in a monochrome of red or yellowish red or the pair of sections as a result of dividing the flag with a diagonal line coated in red and white or yellowish red and white.

(iii) Overhead wire	Marking means	A spherical object as a marking means with a diameter of 0.5 meter or more and colored in monochrome of red or yellowish red and another marking means colored in monochrome of white shall be installed alternately with equal spacing of 45 meters.
(iv) Captive balloon (excluding its suspension cable) and the objects listed in paragraph (2) item (v) of the preceding Article	Color of coating	Colored coating(s) shall be applied in such a way that the object can be identified in a clear contrast with the background.

(2) The provision of (2) of Article 127 shall apply mutatis mutandis to the installation of obstacle markings. In this case, the term "preceding paragraph" described in said paragraph shall refer to "paragraph (1) of Article 132-3" and "obstacle lights" to "obstacle marking" and "(at a light intensity" to "(in type".

(Administration method of obstacle markings)

Article 132-4 obstacle markings shall be administered with the methods listed below:

- (i) obstacle markings shall be maintained in order to conform to the standards prescribed in the preceding Article.
- (ii) The necessary organization or system to communicate with the Minister of Land, Infrastructure, Transport and Tourism shall be established in order to be prepared for conducting said communication required when any disorder in or concerning an obstacle marking (other than flags) and causes the loss of its function (limited to a case where the restoration of its function requires 7 days or more) and when said function is restores.

Chapter VI Operation of Aircraft

(Marks of Nationality and Registration)

Article 133 Aircraft nationality shall be displayed as "JA" in alphanumeric characters, in capitals (hereinafter referred to as "nationality mark") and without ornamentation.

Article 134 Marks of registration pursuant to Article 5 of this Act (hereinafter referred to as "registration marks") shall be displayed as four Arabic numerals or as four Roman numerals in capitals, without ornamentation.

(Location and Method of Display for Nationality Marks and Registration Marks)

Article 135 Nationality marks and registration marks shall be displayed clearly, using a durable method.

Article 136 Registration mark shall follow nationality mark.

Article 137 The location and method of display for nationality marks and registration marks shall be as follows.

(i) For aeroplane and gliders, the marks shall be displayed on the wing and the tail; or on the wing and the fuselage.

(a) Where nationality marks and registration marks are displayed on the wing, they shall be located on the upper surface of the starboard wing and the lower surface of the port wing, equidistant from the leading edge and trailing edge of the wing, and with the tops of the letters and numerals oriented toward the leading edge of the wing. However, marks shall not extend onto the ailerons or flaps.

(b) Marks on the tail plane shall be displayed vertically or horizontally on the vertical stabilizer, 5 cm or more from the outermost edges of the tail plane.

(c) Marks on the fuselage shall be displayed vertically or horizontally on both sides of the fuselage between the wings and tail plane, immediately in front of the leading edge of the horizontal stabilizer.

(ii) For rotorcraft, marks shall be displayed on the bottom and on the sides of the fuselage.

(a) Where marks are displayed on the bottom of the fuselage, they shall be placed near the widest cross-section of the fuselage, with the beginning of each mark toward the left side of the fuselage.

(b) Where marks are displayed on the sides of the fuselage, the marks shall be displayed vertically or horizontally on both sides of the fuselage between the main rotor axis and the tail rotor axis; or on both sides of the fuselage in the vicinity of the power unit.

(iii) For airships, marks shall be displayed on the hull surface; or on the surfaces of the horizontal stabilizers and vertical stabilizers.

(a) Where marks are displayed on the hull surface, they shall be placed on the top and both sides, at right angles to the axis of symmetry, and in the vicinity of the widest cross-section.

- (b) Where nationality marks and registration marks are displayed on the surface of the horizontal stabilizer, they shall be located on the right of the upper surface and the left of the lower surface, and with the tops of the letters and numerals oriented toward the leading edge of the stabilizer.
- (c) Where nationality marks and registration marks are displayed on the surface of the vertical stabilizers, the marks shall be located horizontally on both sides of the lower vertical stabilizer.

Article 138 Letters and numerals used for nationality marks and registration marks (hereinafter referred to as "both marks") shall be of the following height:

(i) Aeroplane and Gliders

- (a) Fifty centimeters or greater, where the marks are displayed on a wing surface.
- (b) Fifty centimeters or greater, where marks are displayed on a vertical stabilizer.
- (c) Fifty centimeters or greater, where marks are displayed on the fuselage.

(ii) Rotorcraft

- (a) Fifty centimeters or greater, where marks are displayed on the bottom of the fuselage.
- (b) Fifteen centimeters or greater, where marks are displayed on the side of the fuselage.

(iii) Airships

- (a) Fifty centimeters, where marks are displayed on the hull.
- (b) Fifteen centimeters or greater, where marks are displayed on a horizontal stabilizer or vertical stabilizer.

Article 139 For both marks, dimensions and thickness of strokes and separation between letters and numerals shall be as follows:

- (i) Width of letters and numerals shall be two-thirds of height. However, this shall not apply to the Arabic numeral "1".
- (ii) Strokes in both marks shall be solid lines, and stroke width shall be one-sixth the height of the letter or numeral.
- (iii) Separation between letters or numerals used in both marks shall be one-fourth or greater than the width of the letters or numerals, but not greater than half the width.
- (iv) Both marks shall be displayed in a color that can be clearly distinguished from the background color.

Article 140 Notwithstanding the provisions of Article 37 to the preceding Article inclusive, this shall not apply in cases where the Minister of Land Infrastructure, Transport and Tourism approves that there is no hindrance in

that regard.

(Identification Plate)

Article 141 An identification plate, made from fireproof materials, measuring 7 centimeters long by 5 centimeters wide, on which the name or title and the address of the owner of the aircraft, the nationality mark and the registration mark of the aircraft are inscribed, shall be affixed in an easily visible position near the exit of the aircraft.

(Aircraft Logbook)

Article 142 (1) The aircraft logbook which the user of an aircraft is required to keep under the provisions of Article 58 paragraph (1) of the Act are: for aircraft other than those listed under any of the items of Article 131 of the Act, a flight logbook, an engine logbook and a propeller logbook or glider logbook; and for aircraft listed under any of the items of Article 131 of the Act, a flight logbook.

(2) Matters to be entered into an aircraft logbook under the provisions of Article 58 paragraph (2) of the Act shall be as follows:

(i) Flight Logbook

(a) Nationality, registration mark, registration number and registration date of the aircraft;

(b) Category, type and type certificate number of the aircraft;

(c) Airworthiness category and airworthiness certificate number;

(d) Name of the manufacturer, and the serial number and date of manufacture of the aircraft;

(e) Type of engine and type of propeller;

(f) The following records concerning flight:

1 Date of flight;

2 Names and duties of flight crew-members;

3 Purpose of flight, or flight number;

4 Place and time of departure;

5 Place and time of arrival;

6 Flight hours;

7 Matters affecting the safe operation of the aircraft;

8 Signature of Pilot in Command;

(g) Total flight hours after manufacturing and total flight hours after latest overhaul;

(h) The following records concerning replacement of the engine and propeller;

1 Date and location where replacement was carried out;

2 Name of manufacturer and the serial number of the engine and propeller;

3 Date and location where replacement was carried out;

(i) The following records concerning the execution of repairs, modifications,

- or maintenance;
- 1 Date and location where work was carried out;
- 2 Reason why work was carried out, and the location and description of the parts replaced;
- 3 Date of confirmation, and the signature or the name and seal of the person who carried out the confirmation;
- (ii) Engine logbook and propeller logbook:
 - (a) Type of the engine or propeller;
 - (b) Manufacturer, the serial number and the date of manufacture of the engine and propeller;
 - (c) The following records concerning the replacement of the engine and propeller:
 - 1 Date and location where the replacement was carried out;
 - 2 Type, nationality, registration mark and registration number of aircraft where engine or propeller was installed;
 - 3 Reason why replacement was carried out;
 - (d) The following records concerning the execution of repairs, modifications, or maintenance to the engine or propeller:
 - 1 Date and location where work was carried out;
 - 2 Reason why work was carried out, and the location and description of the parts replaced;
 - 3 Date of confirmation, and the signature or the name and seal of the person who carried out the confirmation;
 - (e) The following records of concerning the use of the engine and propeller:
 - 1 Date and hours to use;
 - 2 Total hours to use after manufacturing and total hours of use after latest overhaul;
- (iii) Glider Logbook
 - (a) Gilder nationality, registration mark, registration number and the date of registration;
 - (b) Type of gilder and type certificate number of the glider;
 - (c) Airworthiness category and the number of airworthiness certificate;
 - (d) Manufacturer, the serial number and the date of manufacture of gilder;
 - (e) The following records concerning the flight:
 - 1 Date of flight;
 - 2 Names of flight crew-members;
 - 3 Purpose of Flight;
 - 4 Flight sectors and place;
 - 5 Time and number of flight;
 - 6 Matters affecting the safe operation of the gilder;
 - 7 Signature of Pilot in Command;

- (f) The following records concerning the execution of repairs, modifications, or maintenance:
- 1 Date and location where work was carried out;
 - 2 Reason why work was carried out, and the location and description of the parts replaced;
 - 3 Date of confirmation, and the signature or the name and seal of the person who carried out the confirmation;
- (3) Notwithstanding the provisions of the previous paragraph, matters to be entered into a flight logbook for aircraft listed under any of the item of Article 131 of the Act may be those listed under the (i) (a) and (f) of the same paragraph.

Article 143 Aircrafts as a specified under the Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism under Article 59 of the Act are gliders.

Article 144 Flight logbook under Article 59 item (iii) of the Act shall be on-board flight logbooks.

Article 144-2 (1) Documents necessary for flight safety as specified under the Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism under Article 59 item (iv) of the Act shall be those listed below:

- (i) Documents specifying operating limitation
 - (ii) Flight Manual
 - (iii) Aeronautical charts appropriate for flight sectors, flight method, and other particular aspects of flight operations
 - (iv) Operating Manuals (Limited to operations for air transport services)
- (2) Notwithstanding the provisions of the preceding paragraph, where an operating manual contains matter equivalent to a flight manual, a flight manual shall not be included in the documents required for flight safety under Article 59 item (iv) of the Act.

(Devices for Ensuring the Safe Operation of Aircraft)

Article 145 (1) An aircraft making an instrument flight, etc. under the provisions of Article 60 of the Act shall be equipped with devices as specified in the following table under the column for Devices, and the minimum number of devices required shall be as specified under the column for Number in the following table. However, aircraft equipped with a gyroscopic attitude indicator capable of indicating all possible aircraft attitudes shall not be required to be equipped with a Gyro Turn Indicator; aircraft of the types specified by the Minister for Land, Infrastructure, Transport and Tourism used by Self Defense Forces shall not be required to be equipped with an Outside Air (Free Air)

Temperature Gauge; and aeroplanes with maximum take-off weight exceeding 5,700 kilograms used for air transport services (limited to aircraft required to be equipped with a VOR Receiver under the regulations of the following Table) shall not be required to be equipped with a DME Interrogator.

Classification of flight	Instrument	Number Required
Instrument Flight	1. Gyroscopic Attitude Indicator	1, (or 2 in the case of aircraft exceeding 5,700 kilograms maximum take-off weight engaged in air transport services).
	2. Gyroscopic Heading Indicator	1
	3. Gyroscopic Turn Indicator	1
	4. Slip Indicator	1
	5. Sensitive Altimeter	1, (or 2 in the case of aircraft exceeding 5,700 kilograms maximum take-off weight employed in air transport services).
	6. Rate of Climb and Descent Indicator	1
	7. Airspeed Indicating System with means of preventing malfunctioning due to either condensation or icing	1, (or 2 in the case of aircraft exceeding 5,700 kilograms maximum take-off weight employed in air transport services).
	8. Outside Air Temperature Gauge	1
	9. Timepiece indicating the time in hours, minutes and seconds	1
	10. Onboard DME Interrogator	1
	11. Whichever of the following listed instruments is capable of receiving signal during the whole time of the flight from NDB, VOR or TACAN (a) Direction Finding Equipment (b) VOR Receiver (c) Onboard TACAN Unit	1, (or 2 in the case of aircraft exceeding 5,700 kilograms maximum take-off weight engaged in air transport services)

For flight as described in Article 34 paragraph (1) item (ii) of the Act.	Instruments listed in Items 8 through 11 under the Instrument Flight paragraph.	Instruments listed in Items 8 through 11 under the Instrument Flight paragraph, in the quantities listed under the relevant Item.
IFR Flight	1. The instruments listed under Items 1 through 10 of the Instrument Flight paragraph.	Instruments listed in Items 1 through 10 under the Instrument Flight paragraph, in the quantities listed under the relevant Item.
	2. Whichever of the following listed instruments is capable of receiving signal during the flight from NDB, VOR, or TACAN which constitute the flight route situated along the flight route. (a) Direction Finding Equipment (b) VOR Receiver (c) Onboard TACAN Unit	1, (or 2 in the case of aircraft exceeding 5,700 kilograms maximum take-off weight engaged in air transport services).

(2) Notwithstanding the provisions of the preceding paragraph, Direction Finder, VOR Receiver, and Onboard TACAN Unit are not required for flights under Article 191-2 paragraph (1) item (v).

Article 146 Pursuant to the provisions of Article 60 of the Act, aircraft operating in control area, control zone, information zone, or civilian training airspace shall be equipped with the devices listed under the relevant items, in numbers not less than the quantity given for each device listed under the relevant item.

(i) When operating in control area or control zone, a radio-telephone capable of communications with air traffic control authorities at all times: One (1); or two (2) for aircraft with minimum take-off weight exceeding 5,700 kilograms.

(ii) Aircraft operating in control areas or control zones in accordance with the flight rules (whether instrument flight rules or visual flight rules, as prescribed for the relevant area or zone) designated by public notice of the Minister of Land, Infrastructure, Transport and Tourism, shall be equipped with one (1) air traffic control automatic transponder. The transponder shall have a minimum of 4,096 code capability, and shall also be capable of responding to Mode A interrogation or Mode 3 interrogation by reporting identification, and of responding to Mode C interrogation by reporting pressure altitude.

(iii) Aircraft operating in flight information regions or civilian training

airspace (with the exception of cases under Article 202-5 paragraph (1) item (i) or paragraph (2) item (i)) shall be equipped with one (1) radiotelephone capable at all times of communication with air traffic control authorities or with facilities providing aircraft with aviation-related information (hereinafter referred to as "air traffic information") for the relevant airspace.

Article 147 Pursuant to the provisions of Article 60 of the Act, aircraft engaged in air transport services shall be equipped with the following devices.

- (i) One (1) radiotelephone capable of communication with air traffic control authorities at all times during flight; or two (2) in the case of aircraft exceeding 5,700 kilograms maximum take-off weight.
- (ii) One (1) ILS Receiver (limited to aeroplane exceeding 5,700 kilograms maximum take-off weight landing at ILS-equipped airports etc.).
- (iii) One (1) weather radar (radar for detecting cloud configuration) (limited to aeroplane exceeding 5,700 kilograms maximum take-off weight).
- (iv) One (1) Ground Proximity Warning System which possesses the capabilities listed below (limited to aeroplane with more than nine passenger seats or maximum take-off weight exceeding 5,700 kilograms, and with turbine engines).
 - (a) Capable of issuing an alert to warn of excessive descent rate.
 - (b) Capable of issuing an alert warning of excessive proximity to ground.
 - (c) Capable of issuing an alert to warn of excessive loss of altitude after take-off or immediately after a go-around.
 - (d) Capable of issuing an alert to warn of insufficient distance to terrain, when landing gear is not extended and flaps are also not in landing configuration.
 - (e) Capable of issuing an alert to warn of excessive downward deviation from the glide path.
 - (f) Capable of issuing an alert warning of excessive proximity to the terrain ahead.
- (iv)-2 One (1) Ground Proximity Warning System with the following capabilities (limited to aeroplane with more than nine passenger seats or maximum take-off weight exceeding 5,700 kilograms, and with piston engines).
 - (a) With the capabilities listed in (a), (c) and (f) of the preceding item
 - (b) Capable of issuing an alert when there is insufficient distance to terrain.
- (v) One (1) collision avoidance system in compliance with the standards laid down in Annex 10 Vol. 4 Amendment 77 of the Convention on International Civil Aviation (limited to aeroplane with more than nineteen passenger seats or maximum take-off weight exceeding 5,700 kilograms, and with turbine engines).

- (vi) For each exit which connects the cabin with the cockpit, a locked or lockable cockpit door separating the pilot's regular seat prevent entry to the cockpit by persons not authorized to enter it, and prevent penetration by bullets, grenades, or shrapnel (limited to aeroplane engaged in air transport services with more than sixty passenger seats or maximum take-off weight exceeding 45,500 kilograms).

Article 147-2 Pursuant to the provisions of Article 60 of the Act, aeroplane used for purposes other than air transport services (limited to aeroplane with more than nine passenger seats or maximum take-off weight exceeding 5,700 kilograms, with the exception of aircraft used by the Self-Defense Forces) shall be equipped with Ground Proximity Warning System which possesses the capabilities listed below.

- (i) Capabilities listed under (a), (c), and (f) of the preceding Article.
- (ii) Capable of issuing an alert warning of excessive proximity to the terrain ahead.

Article 147-3 Pursuant to the provisions of Article 60 of the Act, aircraft used for operations under Article 191-2 paragraph (1) shall be equipped with devices as listed for each category of operations under the relevant item. The devices shall be those required for flight safety purposes, as prescribed by the Minister of Land, Infrastructure, Transport and Tourism by public notice, and shall be equal to or greater than the quantities prescribed in the public notice.

(Application for Permission under Proviso of Article 60 of the Act)

Article 148 Persons who intend to obtain permission under the proviso to Article 60 of the Act shall present application documents containing the items listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
- (ii) Aircraft type, and aircraft nationality and registration marks.
- (iii) Summary of flight plan (clear statement of purpose and route of flight (persons who intend to obtain permission relating to installation of devices under the provisions of Article 146 must state destination, date, time, and route of flight, and whether instrument flight rules or visual flight rules are used)).
- (iv) Flight operations as categorized under the various items of Article 34 paragraph (1) of the Act (limited to persons who intend to obtain permission relating to installation of devices under the provisions of Article 145 paragraph (1)).
- (v) Number and names of devices which cannot be installed
- (vi) Reason why installation is not possible

- (vii) Name and qualifications of pilot
- (viii) Other matters for reference

(Devices for Recording Aircraft Operations)

Article 149 (1) Pursuant to the provisions of Article 61 paragraph (1) of the Act, aircraft (except those used by Self-Defense Force) shall be equipped with and operate the devices for recording aircraft flight operations, as listed in the Table for each aircraft category.

Aircraft category		Device
Aeroplane	Aeroplane used for the purpose of air transport services with maximum take-off weight exceeding 5,700 kilograms but not more than 27,000 kilograms, and with an initial airworthiness certificate under the provisions of Article 10 paragraph (1) of the Act, or a certificate of airworthiness or other acts from a foreign country party to the Convention on International Civil Aviation (hereinafter referred to as "airworthiness certificate") issued before 11 October 1991.	1. Flight recording devices capable of recording the following matters <ul style="list-style-type: none"> (a) Time or relative time count (b) Pressure altitude (c) Airspeed (d) Heading (e) Pitch angle (f) Roll angle (g) Vertical acceleration (h) Lateral acceleration (i) Rudder pedal selection or rudder position, pitch control selection or elevator position, or lateral control selection or aileron position (for aircraft equipped with non-mechanical controls - amount of rudder pedal selection and rudder position, pitch control selection and elevator position, and also lateral control selection and aileron position) (j) Pitch trim position

	<ul style="list-style-type: none"> (k) Flap trim selection or flap position (l) Power and thrust for each engine (m) Thrust reverse status (n) Time of communications with air traffic control authorities <p>2. Cockpit Voice Recorder capable of retaining the voice information recorded during at least the last 30 minutes</p>
<p>Aeroplane used for the purpose of air transport services with maximum take-off weight exceeding 5,700 kilograms but not more than 27,000 kilograms, and with an initial airworthiness certificate issued later than 11 October 1991 and on or before 01 January 2003.</p>	<p>1. Flight recording devices capable of recording the following matters (hereinafter in this Table referred to as "Type II Flight Data Recorder")</p> <ul style="list-style-type: none"> (a) Time or relative time count (b) Pressure altitude (c) Outside air temperature (d) Airspeed (e) Heading (f) Pitch angle (g) Roll angle (h) Vertical acceleration (i) Lateral acceleration (j) Rudder pedal selection or rudder position, pitch control selection or elevator position, or lateral control selection or aileron position (for aircraft equipped with non-mechanical controls - amount of rudder pedal selection and rudder position, pitch control selection and elevator position, and also lateral control selection and aileron position) (k) Pitch trim position (l) Leading edge flap trim selection or leading edge flap position

	<p>(m) Trailing edge flap trim selection or trailing edge flap position</p> <p>(n) Ground spoiler selection or ground spoiler position, and speed brake selection or speed brake position</p> <p>(o) Power and thrust for each engine</p> <p>(p) Thrust reverse status</p> <p>(q) Engagement status and modes for auto-pilot system, auto-throttle for engine power or thrust, and automatic flight control system</p> <p>(r) Time of communications with air traffic control authorities</p> <p>2. Cockpit Voice Recorder capable of retaining the voice information recorded during at least the last 30 minutes</p>
<p>Aeroplane used for the purpose of air transport services with maximum take-off weight exceeding 27,000 kilograms, and with an initial airworthiness certificate issued later than 11 October 1991 and on or before 01 January 2003.</p>	<p>1. Aircraft used for purposes of air transport services shall be equipped with flight recording devices of the types provided for under Annex 6 Part One Amendment 27 of the Convention on International Civil Aviation, or for aircraft used for purposes other than air transport services shall be equipped with flight recording devices of the types provided for under Part Two Amendment 22 of the same Annex (hereinafter in this Table referred to as simply "Type I Flight Data Recorder").</p> <p>2. Cockpit Voice Recorder capable of retaining the voice information recorded during at least the last 30 minute</p>

	<p>Aeroplane used for the purpose of air transport services with maximum take-off weight exceeding 5,700 kilograms but not more than 27,000 kilograms, and with an initial airworthiness certificate issued later than 1 January 2003 and on or before 01 January 2005.</p>	<p>1. Type II Flight Data Recorder</p> <p>2. Cockpit Voice Recorder capable of retaining the voice information recorded during at least the last 2 hours</p>
	<p>Aeroplane with maximum take-off weight exceeding 27,000 kilograms, and with an initial airworthiness certificate issued later than 01 January 2003 and on or before 01 January 2005</p>	<p>1. Type I Flight Data Recorder</p> <p>2. Cockpit Voice Recorder capable of retaining the voice information recorded during at least the last 2 hours</p>
	<p>Aeroplane with maximum take-off weight exceeding 5,700 kilograms, and with an initial airworthiness certificate issued later than 01 January 2005</p>	<p>1. Aircraft shall be equipped with Type 1A flight recording devices as provided for under Annex 6 Part 1 Amendment 27 of the Convention on International Civil Aviation for aircraft used for purposes of air transport services, or under Part 2 Amendment 22 of the same Annex for aircraft used for purposes other than air transport services.</p> <p>2. Cockpit Voice Recorder capable of retaining the voice information recorded during at least the last 2 hours</p>
Rotorcraft	<p>Rotorcraft used for the purpose of air transport services with maximum take-off weight exceeding 3,180 kilograms but not more than 7,000 kilograms, and with an initial airworthiness certificate issued on or after 11 October 1991.</p>	<p>Cockpit Voice Recorder capable of retaining the voice and main rotor speed information (in the cases where the main rotor speed information is recorded in Flight Data Recorder, the voice information) recorded during at least the last 30 minutes.</p>

<p>Rotorcraft with maximum take-off weight exceeding 7,000 kilograms, and with an initial airworthiness certificate issued on or after 11 October 1991.</p>	<p>(i) Flight Recording Devices capable of recording the following matters:</p> <ul style="list-style-type: none"> (a) Time or relative time count (b) Pressure altitude (c) Outside air temperature (d) Airspeed (e) Heading (f) Pitch angle (g) Roll angle (h) Vertical acceleration (i) Lateral acceleration (j) Acceleration for shaft (k) Yawing angle acceleration or angle acceleration (l) Rudder pedal selection or tail rotor pitch position, cyclic lever selection or cyclic pitch position, and corrective lever selection or corrective pitch position (for aircraft equipped with non-mechanical controls - rudder pedal selection and tail rotor pitch position, cyclic lever selection and cyclic pitch position, and also corrective lever selection and corrective pitch position) (m) Power for each engine (n) Oil pressure for main gearbox (o) Oil temperature for main gearbox (p) Main rotor speed (q) Landing gear operating unit selection and position of landing gear (r) Engagement status and modes for auto-pilot system, auto-throttle for engine power or thrust, and automatic flight control system
---	---

		<ul style="list-style-type: none"> (s) Engagement status of stability augmentation system (t) Frequency selected for Inertial Navigation System (limited to cases where frequency may be input digitally) (u) Onboard DME Interrogator reading (limited to cases where the relevant data can be input by digital signal) (v) Deviation from glide path (w) Deviation from course (x) Passing marker beacon (y) Signal altitude (z) Status of major warning devices (aa) Status of all low-pressure warning devices for each hydraulic system (bb) Navigational data (longitude, latitude, and ground speed) (limited to cases where the relevant data can be input) (cc) Loading of external hanging (dd) Time of communications with air traffic control authorities (ii) Cockpit Voice Recorder capable of continuous recording of the latest 30 minutes or more of voice records
--	--	--

(2) Flight Data Recorder shall be operated continuously over the period from the commencement of the take-off run to the completion of the landing run.

(3) Voice recording devices shall be operated continuously over the period from the commencement of engine operation for the purpose of flight to the cessation of engine operation.

(Application for Permission under Proviso of Article 61 paragraph (1) of the Act)

Article 149-2 Persons who intend to obtain permission under the proviso to Article 61 paragraph (1) of the Act shall present application documents

containing the items listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
- (ii) Aircraft type, and aircraft nationality and registration number
- (iii) Summary of Flight Plan (clearly stating purpose, date, time, and route of flight)
- (iv) Devices which cannot be installed, or which cannot be operated
- (v) Reason why devices cannot be installed, or reason why they cannot be operated
- (vi) Name and qualifications of pilot
- (vii) Other matters for reference

(Records Required to be Kept by Users of Aircraft under Article 61 paragraph (2) of the Act)

Article 149-3 The records that users of aircraft are required to keep, pursuant to the provisions of paragraph (2) of Article 61 of the Act, are Flight Data Recorder records related to the operations listed below (with the exception of periods when the engine(s) are stopped) (with the exception of records created more than 60 days previously).

- (i) Where the aircraft concerned is an aircraft the last 25 hours of aircraft operations
- (ii) Where the aircraft concerned is a rotorcraft, the last 10 hours of aircraft operations

(Emergency Equipment)

Article 150 (1) No aircraft shall be used for navigation unless equipped with the emergency equipment listed in the Table below.

Classification	Item	Number Required	Conditions
----------------	------	-----------------	------------

(i)	(a) In case that multi-engine aeroplane (limited to aircraft used for air transport purposes) in any of the following cases, when making a flight over water that is the equivalent in distance of 2 hours flying at cruising speed or 740 kilometers away from land suitable for emergency landing, whichever is the shorter distance	Emergency Signal Light	1	(i) Lifejackets or equivalent emergency equipment shall be placed where they can be easily accessed and removed from all passenger seating, and the location and usage of this equipment shall be made clear to passengers.
	(i) Aeroplane able to fly and maintain the minimum safe altitude prescribed in the operating manual and to land at the destination airport etc. or the alternative airport etc., even with a critical engine inoperative	Waterproof Portable Light	1	(ii) Lifeboats shall be capable of accommodating all persons on board.
	(ii) Aeroplane able to land at an airport etc. suited to emergency landings even with two engines inoperative	Lifejackets or equivalent emergency equipment	Numbers equal to number of persons on board	(iii) First aid kits shall contain a full set of medical supplies.

<p>(b) In case that multi-engine aeroplane (excluding aircraft used for air transport purposes) is able to land at an airport etc. suited to emergency landings even with one engines inoperative flying over water 370 kilometers or more from land suited to an emergency landing</p> <p>(c) In case that multi-engine rotorcraft is flying over water at a over-distance equivalent to 10 minutes flight at cruising speed from land suited to an emergency landing</p> <p>(d) In case that single engine rotorcraft flying over water beyond the point where it is possible to make a landing on land using autorotation.</p>	Lifeboats (excluding rotorcraft operating as in c) or d), not engaged in air transport services transporting passengers, and which are not making a flight over water that is the equivalent over the distance of 30 minutes flying at cruising speed or 185 kilometers away from land suitable for emergency landing, whichever is the shorter).		(iv) Emergency flotation equipment shall enable safe water landing.
	First Aid Kit	1	
	Emergency Rations	three meals for the number of persons on board	

	(e) In case that aircraft other than those listed in (a) through (d) above is making a flight over water that is the equivalent in over-distance of 30 minutes flying at cruising speed or 185 kilometers away from land suitable for emergency landing, whichever is the shorter	Emergency Flotation Equipment (limited to rotorcraft operating as in (c) or (d), not engaged in air transport services transporting passengers, and which are not making a flight over water that is the equivalent in distance of 30 minutes flying at cruising speed or 185 kilometers away from land suitable for emergency landing, whichever is the shorter distance. (In all cases, excluding rotorcraft capable of landing safely in water without use of emergency flotation equipment.))	
(ii)	(a) In case that multi-engine aeroplane (limited to aeroplane used for air transport services) in any of the following cases, when making a flight over water that is more than 93 kilometers away from land suitable for emergency landing.	Emergency Signal Light	1

<p>(i) Aeroplane able to fly and maintain the minimum safe altitude prescribed in the operating manual and to land at the destination airport etc. or an alternative airport etc., even with a critical engine inoperative</p> <p>(ii) Aeroplane able to land at an airport etc. suited to emergency landings even with two engines inoperative</p> <p>(b) In case that multi-engine aircraft (excluding rotorcraft, and aircraft used for air transport services) is flying over water 93 kilometers or more from land suited to an emergency landing</p> <p>(c) In case that multi-engine aeroplane other than those listed in (a) (limited to aircraft used for air transport purposes) and single engine aircraft (excluding rotorcraft) are flying over water too far to permit gliding to a point suited to an emergency landing on land</p> <p>(d) When take-off or landing path lies over water</p>	Waterproof Portable Light	1
	Lifejackets or equivalent emergency equipment	Numbers equal to number of persons on board
	First Aid Kit	1

(iii))	Flights other than the cases listed in (i) and (ii)	Emergency Signal Light	1
		Waterproof Portable Light	1
		Lifejackets or equivalent emergency equipment	Numbers equal to number of persons on board
		First Aid Kit	1

(2) Aircraft used for the air transport services (excluding those used for air transport services by the operators listed in the various items of paragraph (1) of Article 4 of the Act) with more than 60 passengers, shall be equipped with medical supplies and medical equipment for emergency use.

(3) The aircraft listed below shall be equipped with sufficient parachutes for all persons on board to use.

(i) Aircraft operating under the proviso of paragraph (1) of Article 11 of the Act (including cases where it is applied mutatis mutandis to paragraph (3) of the same Article, paragraph (3) of Article 16 of the Act, and paragraph (3) of Article 19 of the Act) and with the designation of the Minister of Land, Infrastructure, Transport and Tourism.

(ii) Aircraft carrying out aerobatics pursuant to the provisions of Article 197-3

(4) Aircraft which is listed in the left column of the Table below shall be equipped with the number of emergency locator transmitter listed in the center column, in accordance with the conditions noted in the right column.

Classification	Number	Conditions

(i)	(a) Aeroplane used for air transport services	Aeroplane authorized to carry more than 19 passengers	Aeroplane of which airworthiness certificate under the provisions of Article 10 paragraph (1) of the Act, or the airworthiness certificate etc. by a Contracting State to the Convention on International Civil Aviation (hereinafter referred to as "airworthiness certificate etc." in this Table) is first issued before 30 June 2008 (limited to aircraft equipped with emergency locator transmitter activated automatically by impact)	1	(i) Emergency locator transmitters shall operate on both 121.5MHz and 406MHz.
			Aeroplane which airworthiness certificate etc. is first issued before 30 June 2008 (excluding aircraft equipped with emergency locator transmitter activated automatically by impact) and aircraft which airworthiness certificate etc. is first issued after 1 July 2008	2	(ii) Aeroplane (limited to aeroplane which airworthiness certificate etc. is first issued after 1 July 2008) and rotorcraft shall be equipped with one emergency locator transmitter activated automatically by impact.

	Aeroplane authorized to carry 19 passengers or less	1	(iii) Rotorcraft listed in paragraph (ii) (a) or (b) shall be equipped with one emergency locator transmitter activated manually (excluding those listed under the preceding item) in a life jacket or a raft.
	(b) Aeroplane other than those listed in (a)	1	
(ii)	(a) In case that multi engine rotorcraft flying over water at a distance equivalent to more than 10 minutes at normal cruise speed from land suited to an emergency landing	2	
	(b) In case that single engine rotorcraft is flying over water beyond autorotational distance from land suited to an emergency landing	2	
	(c) In case that rotorcraft is operating other than those listed in (a) or (b)	1	
(iii)	In case that aircraft other than those listed in (i) and (ii) flying over water at a distance equivalent to more than 30 minutes at normal cruise speed or 150 kilometers away from land suited to an emergency landing, whichever is the shorter distance.	1	

Article 151 Emergency equipment installed in aircraft shall be inspected at the following periods: However, equipment installed on aircraft used for air transport services shall be inspected at the periods prescribed in the air transport service operator's maintenance manuals.

- (i) Parachutes, 60 days
- (ii) Emergency Signal Light, Portable Light and Waterproof Portable Light, 60 days
- (iii) Lifejackets, equivalent emergency equipment and lifeboats, 180 days
- (iv) First Aid Kit, 60 days
- (v) Emergency Rations, 180 days
- (vi) Emergency Locator Transmitter, 12 months

(Inspection of Prescribed Emergency Equipment)

Article 152 (1) The emergency signal lights, life vests or equivalent emergency equipment, lifeboats, emergency locator transmitters and parachutes to be installed in an aircraft in accordance with the provisions of Article 150 (hereinafter referred to as "prescribed emergency equipment") shall have

passed inspection by the Minister of Land, Infrastructure, Transport and Tourism as to their performance and structure. However, this shall not apply to equipments which type have been approved by the Minister of Land, Infrastructure, Transport and Tourism, or which have been recognized by the Minister of Defense as suitable in performance and structure for installation to aircraft used by the Self-Defense Forces.

- (2) Persons who intend to obtain permission under the proviso to the previous paragraph shall submit an Application for Approval of Prescribed Emergency Equipment (Form 28-3 format).
- (3) Approval for types under the proviso to paragraph (1) shall be by issue of a document of Type Approval of Prescribed Specified Emergency Equipment (Form 28-4) to the applicant.
- (4) The Minister of Land, Infrastructure, Transport and Tourism may cancel approval granted under the proviso to paragraph (1) for the relevant type of specified emergency equipment if it is deemed that safety or uniformity are not being maintained or that the relevant prescribed emergency equipment is not being used.
- (5) Persons who manufacture prescribed emergency equipment approved under the proviso to paragraph (1) shall display on the prescribed emergency equipment concerned, the fact that approval was received under the proviso to paragraph (1).
- (6) The method for displaying this information pursuant to the provisions of the previous paragraph shall be specified in the document of Type Approval of Prescribed Emergency Equipment under paragraph (3).

Article 153 The quantity of fuel that must be carried under the provisions of Article 63 of the Act shall be as specified in the following Table, with the quantities shown at right given for each classification shown in the left column.

Classification		Quantity of Fuel
(i) Aeroplane used for air transport services, equipped with turbo jet engines or turbofan engines	Aeroplane intended to fly by IFR with the alternate airport etc. indicated on flight plan	Whichever is the smaller of the following quantities of fuel:

	<p>i) Quantity of fuel sufficient to complete flight to destination, plus a quantity of fuel sufficient to complete flight to the alternate airport etc. (where there are two alternate airports, to whichever is further from the destination. Hereinafter the same shall apply in this Table.), and sufficient fuel to hold above the relevant alternate airport etc at an altitude of 450 meters, plus the quantity of fuel prescribed by public notice of the Minister of Land, Infrastructure, Transport and Tourism in consideration of the irregular events.</p> <p>ii) Quantity of fuel sufficient to complete flight to alternate airport via points along the flight route to the [original] destination, plus sufficient fuel to hold for 30 minutes above the relevant alternate airport etc at an altitude of 450 meters, plus the quantity of fuel prescribed by public notice of the Minister of Land, Infrastructure, Transport and Tourism in consideration of the irregular events (limited to cases where the quantity of fuel is less than that required to complete flight to the relevant destination plus a quantity of fuel sufficient to hold for two hours at cruising altitude).</p>
Aeroplane intended to fly by IFR with no alternate airport indicated on flight plan	Quantity of fuel sufficient to complete flight to destination, plus sufficient fuel to hold for 30 minutes above the relevant alternate airport etc at an altitude of 450 meters, plus the quantity of fuel prescribed by public notice of the Minister of Land, Infrastructure, Transport and Tourism in consideration of the irregular events (or plus sufficient fuel to fly for two hours at cruising altitude, in cases where there is no suitable alternate airport etc).
Aeroplane intended to fly by VFR	Quantity of fuel sufficient to complete flight to destination, plus the following quantities of fuel: i) In cases where night flight is intended, a quantity of fuel sufficient to fly 45 minutes at cruising altitude

		ii) In cases where daytime flight is intended, a quantity of fuel sufficient to fly 30 minutes at cruising altitude.
(ii) Propeller aeroplane used for air transport services	Aeroplane intended to fly by IFR with alternate airport indicated on flight plans	<p>Whichever is the smaller of the following quantities of fuel:</p> <p>i) Quantity of fuel sufficient to complete flight to destination, plus sufficient fuel to complete the flight from that destination to an alternate airport etc., plus sufficient fuel to fly 45 minutes at cruising altitude</p> <p>ii) Quantity of fuel sufficient to complete flight to alternate airport via points along the flight route to the [original] destination, plus sufficient fuel to fly 45 minutes at cruising altitude (limited to cases where the quantity of fuel is less than that required to complete flight to the relevant destination plus a sufficient quantity of fuel to fly for a period equivalent to 15% of the distance flown at cruising altitude to the destination, plus a quantity of fuel sufficient to hold for two hours at cruising altitude).</p>
	Aeroplane intended to fly by IFR with no alternate airport indicated on flight plans	Quantity of fuel sufficient to complete flight to destination, plus sufficient fuel to fly 45 minutes at cruising altitude (or in cases where there is no suitable alternate airport etc., plus sufficient fuel to complete flight to the destination, plus a sufficient quantity of fuel to fly for a period equivalent to 15% of the distance flown at cruising altitude to the destination, or plus sufficient fuel to fly 2 hours at cruising altitude, whichever is the lesser quantity).
	Aeroplane intended to fly by VFR	<p>Quantity of fuel sufficient to complete flight to destination, plus the following</p> <p>i) In cases where night flight is intended, a quantity of fuel sufficient to fly 45 minutes at cruising altitude</p> <p>ii) In cases where daytime flight is intended, a quantity of fuel sufficient to fly 30 minutes at cruising altitude.</p>

(iii) Rotorcraft used for air transport services	Rotorcraft intended to fly by IFR with alternate airport indicated on flight plans	Quantity of fuel sufficient to complete flight to destination, plus sufficient fuel to complete flight from that destination to alternate airport etc, plus sufficient fuel to hold for 30 minutes above the relevant alternate airport etc at an altitude of 450 m, plus the quantity of fuel prescribed by Ordinance of the Minister of Land, Infrastructure, Transport and Tourism in consideration of the irregular events.
	Rotorcraft intended to fly by IFR with no alternate airport indicated on flight plans	Quantity of fuel sufficient to complete flight to destination, plus sufficient fuel to hold for 30 minutes above the relevant alternate airport etc at an altitude of 450 m, plus the quantity of fuel prescribed by Ordinance of the Minister of Land, Infrastructure, Transport and Tourism in consideration of the irregular events (or plus sufficient fuel to hold above the destination for two hours at cruising altitude, in cases where there is no suitable alternate airport etc.)
	Rotorcraft intended to fly by VFR	Quantity of fuel sufficient to complete flight to destination, plus sufficient fuel to fly 20 minutes at whatever speed the aircraft can fly at for the longest period, plus a sufficient quantity of fuel to fly for a period equivalent to 10% of the distance flown to the destination, plus the quantity of fuel prescribed by Ordinance of the Minister of Land, Infrastructure, Transport and Tourism in consideration of the irregular events.
(iv) Aeroplane intended to fly by IFR (excluding aircraft used for air transport services).	Aeroplane with alternate airport etc. indicated on flight plan	Quantity of fuel sufficient to complete flight to destination, plus a quantity of fuel sufficient to fly from that airport to an alternate airport etc. and to fly 45 minutes at cruising altitude.
	Aeroplane with no alternate airport etc. indicated on flight plan	Quantity of fuel sufficient to complete flight to destination, plus a quantity of fuel sufficient to fly 45 minutes at cruising altitude.

(v) Rotorcraft intended to fly by IFR (excluding those used for air transport services).	Rotorcraft with alternate airport etc. indicated on flight plan	Quantity of fuel sufficient to complete flight to destination, plus sufficient fuel to complete flight from that destination to alternate airport etc. and to hold for 30 minutes above that alternate airport etc at an altitude of 450 meters, plus the quantity of fuel prescribed by Ordinance of the Minister of Land, Infrastructure, Transport and Tourism in consideration of the irregular events.
	Rotorcraft with no alternate airport etc. indicated on flight plan	Quantity of fuel sufficient to complete flight to destination, plus sufficient fuel to hold for 30 minutes above that destination at an altitude of 450 meters, plus the quantity of fuel prescribed by Ordinance of the Minister of Land, Infrastructure, Transport and Tourism in consideration of the irregular events (or in cases where there is no suitable alternate airport etc., sufficient fuel to complete the flight to the destination, plus sufficient fuel to hold above the destination for two hours.)

(Aircraft Lights)

Article 154 Pursuant to the provisions of Article 64 of the Act, aircraft engaged in operations in air or on the ground at night shall be marked by anti-collision lights, starboard lights, port lights, and tail lights. However, this shall not apply to cases where an aircraft is navigating on ground under tow and the towing vehicle's lights mark the aircraft, or when there is a danger of affecting the navigation of that aircraft or another aircraft, and the aircraft is marked by starboard lights, port lights, and tail lights.

Article 155 Deleted

Article 156 Deleted

Article 157 Pursuant to the provisions of Article 64 of the Act, aircraft shall be marked according to the classifications given below when in use at night and stopped at airport etc.

- (i) Where an airport has facilities for illuminating aircraft, the relevant facilities.
- (ii) Where the facilities mentioned in the previous item do not exist, starboard lights, port lights, and tail lights of the aircraft.

(Devices for Measuring Aircraft Position and Orientation, and Calculation of Navigational Documentation)

Article 157-2 Pursuant to the Table under the paragraph (1) of Article 66 of the Act, devices Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism for measuring aircraft position and orientation and calculating navigational documentation, shall consist of Inertial Navigation Systems, precision Doppler radar systems, or satellite navigation systems.

(Standards for Crew Assignment)

Article 157-3 The standards prescribed by Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism under Article 68 of the Act shall be as follows.

- (i) Duty periods for Flight Crew-members (this refers to period when crew-members are on board and are engaged in operating an aircraft, and the same shall apply hereinafter) in respect of the following matters, restrictions shall be for a minimum of 24 hours, one calendar month, 3 calendar months, and one calendar year.
 - (a) Aircraft Type
 - (b) Presence or otherwise, and number of other pilots simultaneously engaged in operations, or flight crew-members
 - (c) Conditions on route navigated by aircraft, and distance between airports etc. used on that route
 - (d) Flight method
 - (e) Presence or otherwise of suitable nap facilities on the aircraft.
- (ii) Working hours, including both flight crew duties and other duties, distributed so that flight crew-member fatigue does not adversely affect safe operation of the aircraft.

(Recent Flight Experience)

Article 158 (1) Pilot flight engaged in operating aircraft used for air transport services must have experience of take-off and landing in aircraft of the same type used for air transport services three times respectively, within the 90 period prior to the day on which they are carrying out pilot duties.

(2) When engaged in operations as in the previous paragraph including take-off or landing at night, the flight experience described in that paragraph shall include a minimum of one such experience at night. However, this shall not apply to operations as in the previous paragraph when any of the following apply:

- (i) The aircraft is operated by a person who has competence certificates related to airline transport pilot qualifications for aircraft used for air transport services as in the previous paragraph (limited to competence certificates

where the aircraft category is restricted to fixed-wing aircraft), or instrument flight certification under the paragraph (1) of Article 34 of the Act.

- (ii) Operations are carried out by an aircraft equipped with the devices required to fly by instruments or operate under instrument flight rules, under the provisions of Article 60 of the Act (excluding aircraft permitted under the proviso to the same Article to fly by instruments without being so equipped).
 - (iii) Persons carrying out take-off and the subsequent ascent, or landing and preparatory descent operations at night shall do so using the routes prescribed by the Minister of Land, Infrastructure, Transport and Tourism, or the routes as instructed by the Minister of Land, Infrastructure, Transport and Tourism pursuant to the provisions of the paragraph (1) of Article 96 of the Act, or routes as instructed by foreign countries who are party to the Convention on International Civil Aviation Annex 6 and Annex 11, and who employ the standards and methods adopted by the said Convention, or routes approved as appropriate by the Minister of Land, Infrastructure, Transport and Tourism.
- (3) Experience in operating an aircraft simulator of the type given under paragraph (1), according to methods designated by the Minister of Land, Infrastructure, Transport and Tourism, shall be regarded as experience under paragraph (1) or the preceding paragraph.

Article 159 (1) Flight engineer engaged in operating an aircraft used for air transport purposes pursuant to the provisions of Article 69 of the Act shall have 50 hours or more of experience over the year preceding the date of flight operations in operating on board the same aircraft or an aircraft of the same type used for the air transport services concerned.

- (2) Up to 25 hours of experience in maneuvering an aircraft simulator of the type described in the previous paragraph, or aircraft training device as specified by the Minister of Land, Infrastructure, Transport and Tourism shall be deemed flight experience under the provisions of the previous paragraph.

Article 160 (1) Under the provisions of Article 69 of the Act, member of the aircrew other than member of the aircrew under the preceding two Articles of the Act shall have the following experience, under the provisions of the preceding two Articles.

- (i) For member of the aircrew able to use radio equipment, more than 25 hours of flight experience while engaged in aircraft operations over the year preceding the date on which they are engaged in operating an aircraft.
- (ii) For member of the aircrew able to measure aircraft position and orientation and calculate navigational documents shall have more than 50 hours flight

experience while engaged in aircraft operations over the year preceding the date on which they are engaged in operating an aircraft. However, this shall be 25 hours flight experience in cases where the flight crew-member concerned is operating an aircraft used for domestic air transport services.

(2) Experience in operating an aircraft simulator or a flight training device according to methods designated by the Minister of Land, Infrastructure, Transport and Tourism, shall be regarded as experience in operating an aircraft under the provisions of the preceding paragraph.

Article 161 (1) Flight crew-members carrying out instrument flight under the provisions of Article 69 of the Act shall have more than 6 hours instrument flight experience (including simulator flight) over the 180 days preceding the date of flight maneuvers.

(2) Through the application of the provisions of the previous paragraph, experience of maneuvers using an aircraft simulator or flight training device according to methods designated by the Minister of Land, Infrastructure, Transport and Tourism shall be regarded as experience of carrying out instrument flight.

Article 162 Pursuant to the provisions of Article 69 of the Act, pilots shall not carry out flight training under Article 34-2 of the Act unless they have more than 10 hours of flight experience carrying out flight training over the year preceding the date on which they carry out flight training (in the case of gliders, flight experience while carrying out flight training over 2 hours and on more than 10 occasions).

Article 162-2 Notwithstanding the provision of paragraph (1) of Article 159, paragraph (1) of Article 160, paragraph (1) of Article 161, and Article 162, persons listed in the left-hand column of the Table below and acknowledged by the Minister of Land, Infrastructure, Transport and Tourism as having the equivalent or superior experience to that listed in the center column of the Table below may carry out the actions in the right-hand column of the Table below.

Flight Engineer	Flight experience under Article 159 paragraph (1)	Engaged in operation of aircraft.
Flight crew-members listed under all items of Article 160 paragraph (1)	Flight experience listed under all items of Article 160 paragraph (1).	Engaged in operation of aircraft.
Pilot	Flight experience under Article 161 paragraph (1).	Instrument Flight

	Flight experience under Article 162.	Flight training under Article 34 paragraph (2) of the Act.
--	--------------------------------------	--

(Requirements of Pilot in Command on Board an Aircraft Used for Air Transport Services)

Article 163 (1) Aircraft prescribed by Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism under paragraph (1) of Article 72 of the Act shall be aeroplane whose maximum take-off weight exceeds 5,700 kg and rotorcraft whose maximum take-off weight exceeds 9,080 kg in weight (excluding the aircraft listed below).

- (i) Aircraft operated by persons under paragraph (1) of Article 4 of the Act used for air transport services.
- (ii) Aircraft operated by an entrustee who receives permission under paragraph (1) of Article 113-2 of the Act, where the consignee is such a person who falls under any item of paragraph (1) of Article 4 of the Act.
- (iii) Aircraft operated by an entrustee who is a Pilot in Command on board who is approved under paragraph (5) of Article 72 of the Act, when the entrustee is a designated domestic air carrier with permission under paragraph (1) of Article 113-2 of the Act, where the consignee is a person who falls under any item of paragraph (1) of Article 4 of the Act.

(2) Knowledge and skill prescribed by Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism under paragraph (1) of Article 72 of the Act shall cover the matters listed below:

- (i) The following matters related to the operation of aircraft
 - (a) Pre-take-off checks
 - (b) Dispatcher's approval of aircraft departure and changes to flight plan.
 - (c) Supervision of flight crew-members and cabin crew-members
 - (d) Safety management of aircraft operations including measures to deter safety-threatening behavior etc. and crisis measures.
- (ii) Aircraft maneuvers and measures in normal and non-normal conditions.

Article 163-2 Approval under paragraph (1) of Article 72 of the Act shall be limited by aircraft type.

Article 164 (1) Any person intending to apply for the approval under the provision of Article 72 paragraph (1) of the Act shall submit a written application describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address

- (ii) Name and address of the domestic air carrier
 - (iii) The competence certification qualification, restriction and number and aviation medical certification number
 - (iv) Aircraft type pertaining to the approval
 - (v) Total flight time and the flight time of a pilot-in-command
 - (vi) Other matters for reference
- (2) The approval pursuant to Article 72 paragraph (1) of the Act shall be conducted by means of oral examination and practical examination. However, when deemed unnecessary by the Minister of Land, Infrastructure, Transport and Tourism, part or whole of the oral examination or practical examination may be disposed of.
- (3) The practical examination prescribed in the preceding paragraph shall be conducted by allowing one or more personnel appointed by the Minister of Land, Infrastructure, Transport and Tourism to be on board of an aircraft of the same type as that of the aircraft on which the person intending to receive said approval, or by using aircraft simulator or flight training devices of the same aircraft pertaining to the approval.

Article 164-2 (1) The examination pursuant to Article 72 paragraph (2) of the Act shall be conducted once a year. However, the examination of the knowledge and skill pertaining to the matters listed under Article 163 paragraph (2) item (ii) shall be conducted twice a year except for those who have received the training designated by the Minister of Land, Infrastructure, Transport and Tourism.

- (2) The provision of the preceding Article shall apply mutatis mutandis to the examination prescribed in the preceding paragraph.

Article 164-3 The provision of paragraphs (2) and (3) of Article 164 shall apply mutatis mutandis to the examination prescribed under Article 72 paragraph (3) of the Act.

(Application for designation of designated domestic air carrier)

Article 164-4 (1) Any person intending to apply for the approval under the provision of Article 72 paragraph (5) of the Act shall submit a written application describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
 - (ii) Number of assigned pilots and persons who have received the approval prescribed under Article 72 paragraph (1) of the Act
 - (iii) Other matters for reference
- (2) The written application prescribed in the preceding paragraph shall be

attached with training and examination regulations.

- (3) The training and examination regulations prescribed in the prescribed paragraph shall bear the descriptions listed below:
- (i) Matters listed below concerning a person to whom an approval is intended to be granted under Article 72 paragraph (5) of the Act (hereinafter referred to as "candidates for pilots-in-command") by a designated domestic air carrier and a person to whom a designation is intended to be given under paragraph (9) of said Article (hereinafter referred to as "candidates for check pilots")
 - (a) Selecting method
 - (b) Training system
 - (c) Training method
 - (ii) Matters listed below concerning the approval prescribed under paragraph (5) of Article 72 of the Act and the examination prescribed under paragraph (6) of said Article
 - (a) Organization
 - (b) Implementing method
 - (iii) Methods for preparation and storage of records of the matters prescribed in the preceding item

(Designating Standards for designated domestic air carrier)

Article 164-5 Pursuant to the provision under Article 72 paragraph (5) of the Act, the designation of designated domestic air carrier shall be conducted on those complying with the standards listed below:

- (i) A candidate air carrier shall have an organization for selecting the candidates for pilots-in-command and candidates for check pilots and have proper selecting standards for said candidates.
- (ii) Said air carrier shall have an organization and a required number or more of trainers for training the candidates for pilots-in-command and candidates for check pilots and the facilities for training these personnel shall sufficiently be provided.
- (iii) The subjects, time and other training methods for training the candidates for pilots in command and candidates for check pilots shall be adequate.
- (iv) Said air carrier shall have a required number or more of personnel fulfilling the requirements prescribed under the items of Article 164-9 for conducting the examination and for granting an approval prescribed under Article 72 paragraph (5) of the Act.
- (v) It shall be certain that the independence of prerogatives pertaining to the implementation of examination under Article 72 paragraph (6) of the Act and the approval under paragraph (5) of said Article concerning a person designated under paragraph (9) of Article 72 of the Act (hereinafter referred

to as "check pilot") is warranted.

- (vi) The approval under paragraph (5) of Article 72 of the Act and the details and evaluation standards of the examination under paragraph (6) of the said Article shall apply mutatis mutandis to the approval under paragraph (1) of Article 72 of the Act and the details and evaluation standards of the examination under paragraph (2) and (3) of the said Article which are operated by the Minister of Land, Infrastructure, Transport and Tourism.
- (vii) The methods for preparation and storage of related records shall be appropriate.

Article 164-6 (1) The provisions under Article 164-6 and Article 163-2 shall apply mutatis mutandis to the approval granted by a designated domestic air carrier pursuant to the Article 72 paragraph (5) of the Act.

(2) The provisions under paragraphs (2) and (3) of Article 164 shall apply mutatis mutandis to the approval under paragraph (5) of Article 72 of the Act and to the examination under paragraph (6) of said Article, both conducted by a designated domestic air carrier. In this case, the term "personnel appointed by the Minister of Land, Infrastructure, Transport and Tourism" prescribed in paragraph (3) of Article 164 shall be interpreted as "check pilot".

(3) The provisions prescribed under Article 164-2 shall apply mutatis mutandis to the approval granted by a designated domestic air carrier pursuant to paragraph (6) of Article 72 of the Act.

(Operation of services of designated domestic air carrier)

Article 164-7 A designated domestic air carrier shall fairly operate its services pursuant to the training and examination regulations prescribed under paragraph (2) of Article 164-4 in order to conform the standards listed under the items of Article 164-5.

(Designation of check pilot)

Article 164-8 The designation of a check pilot shall be conducted by restricting the type of aircraft.

(Requirements for the designation of check pilot)

Article 164-9 Requirements prescribed in Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism in paragraph (9) of the Article 72 of the Act shall be as listed below:

- (i) In accordance with the aircraft classification pertaining to the appointment given in the column at left of the following table, a check pilot shall fulfill the requirements listed in the column at right, and shall have received training required to serve as a check pilot.

Aircraft classification pertaining to the designation		Requirement
Aeroplane	(i) Aeroplane having over 60 passenger seats or a maximum take-off weight over 27,000 kilograms	The flight time of a pilot having served as a pilot in command of aircraft used for air transport services having a maximum take-off weight exceeding 5,700 kilograms shall be 2,000 hours or more.
	(ii) Types of aircraft other than listed under (i) and equipped with turbojet engines or turbofan engines	The flight time of a pilot having served as a pilot-in-command of aeroplane used for air transport services having a maximum take-off weight exceeding 5,700 kilograms shall be 1,000 hours or more and the flight time of said pilot as a pilot-in-chief of aeroplane in general shall be 2,000 hours or more.
	(iii) Other than those listed in (i) and (ii)	The flight time of a pilot having served as a pilot in command of aeroplane used for air transport services having a take-off weight exceeding 5,700 kilograms shall be 300 hours or more and the flight time of said pilot as a pilot in chief of aircraft in general shall be 2,000 hours or more.
Rotorcraft		The flight time of a pilot having served as a pilot in command of rotary wing aircraft used for air transport services having a maximum take-off weight exceeding 9,080 kilograms shall be 500 hours or more and the flight time of said pilot as a pilot in chief of rotary wing aircraft in general shall be 1,000 hours or more.

- (ii) Type of aircraft pertaining to designation shall have been granted the approved pursuant to paragraph (1) or (5) of the Article 72 of the Act.
- (iii) A check pilot shall have knowledge and skill required to grant an approval pursuant to paragraph (5) of the Article 72 of the Act and to conduct an examination pursuant to paragraph (6) of said Article.
- (iv) A check pilot shall not be a person who has not yet undergone 2 years or more after violating a law, sentenced a monetary penalty or stricter, completing the penalty or liberated from penalty.

(Application for designation of check pilot and relevant matters)

Article 164-10 (1) A designated domestic air carrier intending to apply for said designation pursuant to paragraph (9) of the Article 72 of the Act shall submit a written application describing pertaining to name, address and matters listed

below pertaining to a check pilot candidate to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
 - (ii) The competence certification qualification, restriction and number and aviation medical certification number
 - (iii) Aircraft type pertaining to the designation
 - (iv) Other matters for reference
- (2) The written application prescribed in the preceding paragraph shall be attached with documents describing that the applicant for check pilot has the requirements listed under item (i) and item (ii) of paragraph (1) of the preceding Article.
- (3) The Minister of Land, Infrastructure, Transport and Tourism shall conduct a written examination(s), practical examination(s) to determine if the candidate for check pilot has the requirements listed in the items of the preceding Article. However, when the Minister of Land, Infrastructure, Transport and Tourism deems unnecessary, the all or part of the written examination or practical examination may be disposed of.
- (4) The practical examination prescribed in the preceding paragraphs shall be conducted by allowing personnel designated by the Minister of Land, Infrastructure, Transport and Tourism to be on board of the aircraft of the same type pertaining to the aircraft to be designated together with the subject candidate for check pilot, or by using aircraft simulator or flight training device of the same type as that of the aircraft pertaining to the designation.

Article 164-11 (1) The Minister of Land, Infrastructure, Transport and Tourism shall examine once a year whether or not a check pilot have the requirements listed in the items of Article 164-9.

- (2) The provision of the preceding Article shall apply mutatis mutandis to the examination prescribed in the preceding paragraph.

Article 164-12 (1) The Minister of Land, Infrastructure, Transport and Tourism shall examine shall, when deemed necessary, occasionally examine whether a check pilot has the requirements listed under the items of Article 164-9.

- (2) The provisions under paragraphs (3) and (4) of Article 164-10 shall apply mutatis mutandis to the examination prescribed in the preceding paragraph. In this case, the term "check pilot candidate" prescribed in paragraph (4) of said Article shall be interpreted as "check pilot."

(Lapse and cancellation of the appointment of check pilot)

Article 164-13 (1) The designation pursuant to paragraph (9) of the Article 72 of the Act shall cease to be valid when a check pilot corresponds to any of the

following items:

- (i) When failing to receive the examination prescribed under paragraph (1) of the Article 164-11 or rejecting the examination prescribed in the paragraph (1) of the preceding Article
 - (ii) When failing to pass the examination prescribed under paragraph (1) of the Article 164-13 or paragraph (1) of the preceding Article
 - (iii) When ceased to belong to a designated domestic air carrier pertaining to the designation
 - (iv) When a designated domestic air carrier pertaining to the designation ceased to be the designated domestic air carrier pertaining
- (2) The Minister of Land, Infrastructure, Transport and Tourism may, when a check pilot corresponds to any of the following items, cancel the designation prescribed under paragraph (9) of the Article 72 of the Act concerning the subject check pilot:
- (i) When violating the Act or the provision of the order based on the Act
 - (ii) When illegitimacy occurs upon receiving the designation under paragraph (9) of the Article 72 of the Act
 - (iii) When illegitimacy occurs in granting the approval under paragraph (5) of the Article 72 of the Act or in conducting the examination under paragraph (6) of said Article

(Confirmation before Departure)

Article 164-14 (1) Matters that must be confirmed by the pilot in command pursuant to Article 73-2 of the Act are as listed below:

- (i) Maintenance status of a subject aircraft and its equipment
 - (ii) Take-off weight, landing weight, location of the center of gravity, and weight distribution
 - (iii) Information offered by the Minister of Land, Infrastructure, Transport and Tourism pursuant to the provision of Article 99 of the Act (hereinafter referred to as "aeronautical information").
 - (iv) Weather information required for such navigation
 - (v) Loading quantity of fuel and lubricant, and their quality
 - (vi) Safety of payloads
- (2) A pilot in command shall, in the case of confirming the matters listed under item (i), conduct the inspection of aircraft logbook and other records on maintenance services, inspection of the exterior of aircraft and ground trial run of engines, and other elemental inspection of aircraft.

(Prohibition of safety impeding act)

Article 164-15 The safety impeding acts subscribed by the Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism prescribed under

paragraph (5) of the Article 73-4 of the Act shall be as listed below:

- (i) An act of operating the opening and closing device of an entrance or an emergency door without any proper reason
- (ii) An act of smoking in a toilet
- (iii) An act of impeding execution of the duty of one or more personnel on board of aircraft and consequently may affect the maintenance of safety of subject aircraft, the protection of persons other than the one who commits said act or properties within said aircraft, or the maintenance of order or discipline within said aircraft
- (iv) An act of activating without any proper reason a mobile telephone or any other electronic device that may hinder safety of aircraft navigation, which is set forth in a public notice issued by the Minister of Land, Infrastructure, Transport and Tourism
- (v) An act of failing to use a safety belt without any proper reason in a take-off, landing, or any other case where the pilot in chief instructs the use of it.
- (vi) An act of failing in take-off or landing to return the back of a seat, table, or foot rest to its original position without any proper reason
- (vii) An act of placing without any proper reason the baggage on an aisle or any other place, eventually blocking evacuation in an emergency
- (viii) An act of operating or displacing an emergency device or equipment, or damaging the original functions of one of these objects, which are set forth in a public notice issued by the Minister of Land, Infrastructure, Transport and Tourism

Article 164-16 A pilot in command shall, when he/she gives a command pursuant to the provision of paragraph (5) of the Article 73-4 of the Act, issue a written commandment describing matters listed below to the person who has committed a safety impeding act stipulated in said paragraph:

- (i) Details of the safety impeding act committed by a subject person
- (ii) A statement that said act shall not be repeated or resume

(Report on accident)

Article 165 Pursuant to paragraph (1) of the Article 76 of the Act, a pilot in command or the user shall report the matters lists below to the Minister of Land, Infrastructure, Transport and Tourism;

- (i) Name of the pilot in command or the personal name or corporate name of the user of subject aircraft
- (ii) Date, time and place of accident
- (iii) Nationality registration marks, type of aircraft and call sign of radio station of the aircraft
- (iv) Outline of the aircraft accident

- (v) Outline of casualty or the damage of objects
- (vi) When the death or missing is involved, name of them and other matters for reference

Article 165-2 Pursuant to the provisions in Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism under item (iii) of the paragraph (1) of the Article 76 of the Act, the death on board of aircraft shall fall under any of the following:

- (i) Natural death
- (ii) Death caused by a fatal act done by oneself or any other person
- (iii) Death of a person who was hiding in an area where none of aircraft crew, cabin attendants or passengers normally enters

Article 165-3 Accidents related to aircraft prescribed in the Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism under item (v) of the paragraph (1) of the Article 76 of the Act shall be termed as the cases (excluding cases where the repair of a subject aircraft does not corresponding to the major repair work among the work classifications listed in the table under Article 5-6) where navigating aircraft is damaged (except the sole damage of engine, cowling, propeller, wing tip, antenna, tire, brake or fairing).

Article 166 Pursuant to paragraph (2) of the Article 76 of the Act, a pilot in command shall report on the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name of pilot in command
- (ii) Date and time when he/she was aware of the accident occurrence and place where the accident occurred
- (iii) Outline of the accident and other matters for reference

(Report on abnormality)

Article 166-2 Pursuant of paragraph (3) of the Article 76 of the Act, details of the abnormality case on which the pilot in command shall report shall be listed below:

- (i) Failure in functions of aerodromes and air navigation facilities
- (ii) Turbulence of air and other abnormal weather conditions
- (iii) Volcanic explosion and other violent changes in terrestrial and watery phenomena
- (iv) Cases impeding the safe flight of aircraft in addition to those listed in the preceding items

Article 166-3 Pursuant to paragraph (3) of the Article 76 of the Act, a pilot in

command shall report on the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address of the pilot in command
- (ii) Date and time when he/she was aware of the occurrence the case and the place where the case occurred
- (iii) Outline of the case and other matters for reference

(Reporting on a case likely to cause an accident)

Article 166-4 The case prescribed in the Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism under Article 76-2 of the Act include the following:

- (i) Take-off from a closed runway or a runway being used by other aircraft or aborted take off
- (ii) Landing on a closed runway or a runway being used by other aircraft or attempt of landing
- (iii) Overrun, undershoot and deviation from a runway (limited to when an aircraft is disabled to perform taxiing)
- (iv) Case where emergency evacuation was conducted with the use for emergency evacuation slide
- (v) Case where aircraft crew executed an emergency operation during navigation in order to avoid crash into water or contact on the ground
- (vi) Damage of engine (limited to such a case where fragments penetrated the casing of subject engine or a major damage occurred inside the engine)
- (vii) Continued halt or loss of power or thrust (except when the engine(s) are stopped with an attempt of assuming the engine(s) of a motor glider) of engines (in the case of multiple engines, 2 or more engines) in flight
- (viii) Case where any of aircraft propeller, rotary wing, landing gear, rudder, elevator, aileron or flap is damaged and thus flight of the subject aircraft could be continued
- (ix) Multiple malfunctions in one or more systems equipped on aircraft impeding the safe flight of aircraft
- (x) Occurrence of fire or smoke inside an aircraft and occurrence of fire within an engine fire-prevention area
- (xi) Abnormal decompression inside an aircraft
- (xii) Shortage of fuel requiring urgent measures
- (xiii) Case where aircraft operation is impeded by an encounter with air disturbance or other abnormal weather conditions, failure in aircraft equipment, or a flight at a speed exceeding the airspeed limit, limited payload factor limit operating altitude limit
- (xiv) Case where aircraft crew became unable to perform services normally due to injury or disease

- (xv) Case where parts dropped from aircraft collided with one or more persons
- (xvi) Case equivalent to those listed in the preceding items

Article 166-5 Pursuant to Article 76-2 of the Act, a pilot in command shall report on the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address of the pilot in command
- (ii) Nationality registration marks and type of aircraft
- (iii) Date, time and place of occurred case pertaining to the report
- (iv) Outline of the case and other matters pertaining to the report for reference

(Aircraft requiring approval of flight dispatcher)

Article 166-6 The aircraft stipulated in the Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism under Article 77 of the Act, shall be the aircraft having a maximum take-off weight exceeding 5,700 kilograms and rotorcraft having a take-off weight exceeding 9,080 kilograms (except the aircraft listed below).

- (i) Aircraft operated by the persons listed under the items of Article 4 paragraph (1) of the Act used for air transport services
- (ii) Aircraft operated by an entrustee who receives permission under paragraph (1) of the Article 113-2 of the Act, where the consignee is such a person who falls under any item of paragraph (1) of the Article 4 of the Act.

(Qualification to receive examination for aircraft dispatcher)

Article 167 (1) A person eligible to receive the competence examination for aircraft dispatcher under paragraph (3) of the Article 78 of the Act (hereafter called "competence test") shall be 21 years of age until the date of conducting said examination, and as regards the operation of aircraft having maximum take-off weight of 5,700 kilograms or more used for air transport services or rotary wing aircraft having maximum take-off weight of 9,080 kilograms or more, have experience of 2 years or more of number 1 among item (i) to item (v) listed below and among these experiences, the experience of number 2 for 2 year or more of each and 1 year or more of experience in item (vi).

- (i) Experience in aircraft operation
- (ii) Experience in air navigation
- (iii) Experience in weather observation services
- (iv) Experience in operating wireless facilities on board of aircraft
- (v) Experience in air traffic control services
- (vi) Experience in auxiliary services for the services of aircraft dispatcher

(2) Notwithstanding the provisions of the preceding paragraph, a person deemed by the Minister of Land, Infrastructure, Transport and Tourism to have

equivalent or more experiences prescribed in said paragraph may receive the competence test.

Article 167-2 The provisions under Article 44 (except item (i) and item (ii)) shall apply mutatis mutandis to the certification of the experience prescribed under paragraph (1) of the preceding Article.

(Application for receiving the test)

Article 168 (1) A person intending to receive the competence test shall submit a written application for receiving the competence test for aircraft dispatcher (Form No. 19 (in the case of an applicant exempted from receiving all the subjects of written examination, Form No.19-2)) attached with a piece of photograph and documents listed below or documents listed under item (v), and a duplicate, to the Minister of Land, Infrastructure, Transport and Tourism.

(i) Personal history

(ii) In the case of an applicant exempted from receiving all the subjects of written examination, an abstract of family register or certification of family register description, or a duplicate of resident's card bearing the permanent domicile

(iii) In the case of a person having experiences prescribed under paragraph (1) of the Article 167, documents verifying said fact

(iv) In the case of an applicant intending to be exempted from receiving part or whole of the written examination pursuant to the provisions under Article 170-3 or Article 170-4, a duplicate of the documents listed under Article 170-2

(v) In the case an applicant intending to be exempted from the examination pursuant to paragraph (1) or (2) of the Article 170-5, documents verifying that the applicant has passed the competence test conducted by the government of the foreign country concerned

(vi) In the case of an applicant intending to be exempted from receiving part of the practical examination pursuant to the provisions under Article 178-6 (limited to an applicant for all the subjects of written examination), the completion certificate (Form No. 19-3) issued by the administrator of a training organ designated by the Minister of Land, Infrastructure, Transport and Tourism pursuant to paragraph (4) of the Article 29 of the Act applied mutatis mutandis in compliance with paragraph (4) of the Article 78 of the Act (hereafter referred to as "designated aircraft dispatcher training facility").

(2) A person intending to receive the competence test (except the applicant for the exemption of all the subjects of written examination) and having passed the written examination, when he/she intends to receive the practical

examination (including the case of receiving the exemption of practical examination pertaining to all or part of the subjects), shall submit a written application for practical examination (Form No. 19-2) attached with a piece of photograph and documents listed in the following items to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) An abstract of family register or certification of family register description, or a duplicate of resident's card bearing the permanent domicile
- (ii) A duplicate of the documents listed under Article 170-2
- (iii) In the case an applicant intending to be exempted from the examination pursuant to paragraph (1) or (2) of the Article 170-5, documents verifying that the applicant has passed the competence test conducted by the government of the foreign country concerned
- (iv) In the case of an applicant intending to be exempted from the practical examination pursuant to Article 170-6, the completion certificate (Form No. 19-3) issued by the administrator of a designated aircraft dispatcher training facility

(Public notice and acknowledgement of data of examination, etc)

Article 169 (1) The Minister of Land, Infrastructure, Transport and Tourism, when conducting an examination pursuant to paragraph (1) of the Article 29 of the Act applied *mutatis mutandis* in compliance with paragraph (4) of the Article 78 of the Act, shall put on public notice by way of Official Gazette the data and place of conducting the examination, submission term of the competence test application pursuant to paragraph (1) of the preceding Article, and other matters required.

(2) The Minister of Land, Infrastructure, Transport and Tourism, when receiving an application for the competence test under paragraph (1) of the preceding Article, shall notify the applicant of the details of conducting the competence test and other matters required.

(Written examination)

Article 170 The written examination shall be conducted on the subjects listed below:

- (i) Aircraft: The structure, performance, and matters relative to fuel consumption of aircraft used for air transport services
- (ii) Aircraft navigation: Basic principles of weight distribution and the influence of weight distribution on aircraft navigation
- (iii) Air navigation security facilities: Specification, function/usage and operational procedure of air navigation facilities.
- (iv) Radio communications: Outline of radio communication facilities, communicating organization and facility operating methods and procedures

- (v) Knowledge of aeronautical meteorology, wind system, air disturbance, cloud, ice accretion, aerial discharge, fog and other meteorological phenomena having influence on aircraft navigation and meteorological observation methods
- (vi) Weather information: Weather information systems and methods
- (vii) Explanation on weather charts: Weather symbols, technical terms, and general principles of meteorological analysis
- (viii) Aerial navigation: Common knowledge on radio navigation and dead reckoning navigation and principles of navigation instruments
- (ix) Regulations: Domestic Aviation Law, regulations, and international civil aviation acts and regulations

(Notification of passing the written examination)

Article 170-2 The Minister of Land, Infrastructure, Transport and Tourism shall notify each person who has passed all or part of the written examination prescribed under the preceding Article of said fact.

(Exemption of examination)

Article 170-3 When a person who has passed the written examination prescribed under Article 170 applies for the practical examination, the written examination will be exempted as a result of the application from forthcoming written examinations to be conducted within a period of 2 years beginning on the day when the notification pertaining to subject passing prescribed in the preceding Article was issued.

Article 170-4 When a person who has received all the subjects of the written examination and obtained marks of passing for part of subjects applies for the practical examination, will be exempted, when applied for it, from the written examination pertaining to the subjects on which passing marks were obtained for the subjects on which said passing marks were obtained, limited to the forthcoming written examination within 1 year from the date of notification pertaining to said passing prescribed under Article 170-2.

Article 170-5 (1) The Minister of Land, Infrastructure, Transport and Tourism may, when an application is submitted, grant a person who has passed the aircraft dispatcher competence test conducted by the government of a country that has concluded the international civil aviation treaty an exemption of the examination prescribed under Article 170 (excluding those pertaining to the domestic Aviation Law referred to in item (ix) of said Article) and all or part of the examination prescribed under Article 171.

(2) The Minister of Land, Infrastructure, Transport and Tourism may, when an

application is submitted, grant a person, who has passed the aircraft dispatcher competence test conducted by the government of a country that has concluded the international civil aviation treaty and deemed by the Minister of Land, Infrastructure, Transport and Tourism to be qualified to conduct an examination of aircraft dispatcher equivalent to or higher than that prescribed under Article 170 and Article 171, an exemption of the examination prescribed under Article 170 (excluding those pertaining to the domestic Aviation Law referred to in item (ix) of said Article) and all or part of the examination prescribed under Article 171.

- (3) In the case prescribed under the two preceding paragraphs, an applicant shall pass the examination deemed necessary by the Minister of Land, Infrastructure, Transport and Tourism to determine whether the applicant as an aircraft dispatcher has required competence in Japanese or English language proficiency.

Article 170-6 The practical examination prescribed in the following Article shall not be conducted, when an application is submitted, on a person who has completed the courses of designated air dispatcher training organ. Nevertheless, when 1 year has passed since the day of completing the courses of designated air dispatcher training organ, this shall not apply.

(Practical examination)

Article 171 The practical examination shall be conducted on the subjects listed below:

- (i) Explanation of weather charts: Forecasting weather conditions relative to aircraft navigation by analyzing weather charts such as surface charts and upper stratum charts
- (ii) Aircraft navigation: Support of navigation under assumed bad weather conditions

(Passing certificate of aircraft dispatcher competence examination)

Article 171-2 A person who has passed the competence examination shall be given a passing certificate of aircraft dispatcher competence examination (Form No. 29).

(Aircraft dispatcher training facility)

Article 171-3 The provisions prescribed under Article 50-3, Article 50-4, Article 50-5, Article 50-6, Article 50-7, paragraph (2) of the Article 50-8, Article 50-10 and Article 50-11 shall apply mutatis mutandis to the training facility of aircraft dispatchers pursuant to the provision of paragraph (4) of the Article 29 of the Act applied mutatis mutandis in compliance with paragraph (4) of the

Article 78 of the Act. In this case, the provision "application for designation of airman training facility (Form No. 19-4)" under paragraph (1) of the Article 50-3 shall be interpreted as "application for designation of aircraft dispatchers training facility (Form No. 29-2)"; the provision "restriction of paragraph (1), paragraph (2) and paragraph (3) of the Article 25 of the Act, restriction pertaining to the alteration of paragraph (1) of the Article 29-2 of the Act, certification of aeronautical English speaking competence under paragraph (1) of the Article 33 of the Act, certification of instrumental navigation under paragraph (1) of the Article 34 of the Act or the courses stipulated for each subject of basic techniques in maintenance pertaining to the competence test for the qualification of first class aircraft maintenance technician, second class aircraft maintenance technician, first class aircraft line maintenance technician, second class aircraft line maintenance technician and aircraft overhaul technician prescribed in Attachment 3" under paragraph (1) of the Article 50-3 shall be interpreted as "the courses pertaining to the aircraft dispatcher competence examination prescribed under paragraph (1) of the Article 78 of the Act"; the provision "the examinations under paragraph (1) of the Article 29 of the Act (including the cases where the provisions shall apply mutatis mutandis in compliance with Article 29-2 paragraph (2) of the Act, paragraph (3) of the Article 33 of the Act or paragraph (3) of the Article 34 of the Act)" under paragraph (1) of the Article 50-4, (a) shall be interpreted as "examinations under paragraph (1) of the Article 29 applied mutatis mutandis in compliance with paragraph (4) of the Article 78 of the Act"; the provision "paragraph (4) of the Article 29 of the Act" under paragraph (1) of the Article 50-6 shall be interpreted as "paragraph (4) of the Article 29 of the Act applied mutatis mutandis in compliance with paragraph (4) of the Article 78 of the Act"; the provision "designation statement of airman training facility (Form 19-5)" under Article 50-7 shall be interpreted as "designation statement of aircraft dispatchers training facility (Form 29-3)"; the term "preceding paragraph" in paragraph (2) of the Article 50-8 shall be interpreted as "competence examiner"; the provision "paragraph (5) of the Article 50-2" under Article 50-10 shall be interpreted as "item (vi) of the paragraph (1) of the Article 168"; the provision "paragraphs (3) and (4) of the Article 50-2" shall be interpreted as "Article 170-6".

(Aircraft capable to take off and land on places other than airport etc.)

Article 172 The aircraft subscribed in Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism Said aircraft refers pursuant to the provision of Article 79 of the Act refers to gliders.

Article 172-2 A person intending to apply for the approval prescribed in the

proviso of Article 79 of the Act shall submit a written application describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
- (ii) Type of aircraft and Nationality and registration mark of aircraft
- (iii) Date, time and place of take-off or landing (sketches of said place shall be attached.)
- (iv) Reasons for take-off or landing
- (v) Measures to prevent accidents
- (vi) Outline of flight plan (Purpose, date and time, and paths shall be clearly stated.)
- (vii) Name and qualification of pilot
- (viii) Other matters for reference

(Non-fly zone)

Article 173 The non-fly zone subscribed under Article 80 shall be set forth and put on public notice by classifying it prohibited area (aircraft flight over the area is totally forbidden) and restricted area (aircraft flight over the area is forbidden under certain conditions). Nevertheless, since it may be urgently decided to specify a flight interdiction area, when no time is allowed to set forth said area by way of public notice, the Minister of Land, Infrastructure, Transport and Tourism may determine a non-fly zone or flight restriction area without putting it on public notice.

(Permission of flight within prohibited area or restricted area)

Article 173-2 A person intending to apply for the approval prescribed in the proviso of Article 80 of the Act shall submit a written application describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
- (ii) Type of aircraft and Nationality and registered symbols of aircraft
- (iii) Outline of flight plan (Purpose, date and time, and paths shall be clearly stated.)
- (iv) Reasons for flying prohibited area or restricted area
- (v) Name and qualification of pilot
- (vi) Name of co-pilot or fellow passenger and the purpose of being on board together
- (vii) Other matters for reference

(Minimum Safety Altitude)

Article 174 The minimum safety altitude pursuant to Article 81 of the Act shall

be as follows:

- (i) In the case of aircraft navigating on a visual flight rules shall take any of the highest of the altitude at which landing is feasible, when power system only has stopped during a flight, without causing danger of human beings or objects on the ground or on water and the following altitudes:
 - (a) In the case of a space over a densely populated area with human beings or houses, an altitude higher by 300 meters than the top edge of the highest object located within an area with a horizontal distance of 600 meters with the aircraft at its center.
 - (b) In the case of above an area without human beings or houses, an altitude at which an aircraft can continue flight while maintaining a distance of 150 meters or more from human beings or objects on the ground or on water.
 - (c) In the case of a space over an area other than that prescribed under (a) and (b), an altitude of 150 meters from the ground or water surface.
- (ii) In the case of aircraft navigating by instrument navigation system, the altitude set forth by a public notice.

(Permission of flight at minimum safety altitude)

Article 175 A person intending to obtain permission prescribed under proviso of Article 81 of the Act shall submit a written application describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
- (ii) Type of aircraft and Nationality and registered symbols of aircraft
- (iii) Outline of flight plan (Purpose, date and time, and paths shall be clearly stated.)
- (iv) Reasons for navigating at an altitude less than a minimum safety altitude
- (v) Name and qualification of pilot
- (vi) Name of co-pilot or fellow passenger and the purpose of being on board together
- (vii) Other matters for reference

(Special Exceptions for Search or Rescue)

Article 176 The aircraft subscribed under Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism under the Article 81-2 of the Act shall be as listed below:

- (i) Aircraft used by the Ministry of Land, Infrastructure, Transport and Tourism, Ministry of Defense, National Police Agency, prefectural police departments, or fire preventive organizations of local governments and engaged in search or rescue activities
- (ii) Aircraft used for engaged in search or rescue activities by request or

notification by the organizations listed in preceding item

(Cruising altitude)

Article 177 The cruising altitude of aircraft pursuant to the provision under paragraph (1) of the Article 82 of the Act shall, in the case where an aircraft listed in the middle column of the following table navigates in the direction listed in the left-hand side column, fly at the altitude listed in the right-hand side column (in the case where an altitude is designated pursuant to paragraph (1) of the Article 96 of the Act).

Flight direction	Aircraft		Altitude
Magnetic bearing 0 deg. or more to less than 180 deg.	Aircraft flying by Visual Flight Rules		At an altitude less than 29,000 feet and 500 feet added to the product of 1,000 feet multiplied by an odd number
	Aircraft flying by Instrumental Flight Rules	Aircraft granted the permission pursuant to Article 83-2 of the Act for performing the navigation pursuant to item (i) of the paragraph (1) of the Article 191-2 and aircraft listed under each item of paragraph (2) of the Article 191-2 and granted the approval pursuant to the provision of said paragraph for performing the navigation listed under item (i) of the paragraph (1) of said Article	At an altitude less than 41,000 feet, an altitude of 1,000 feet multiplied by an odd number At an altitude exceeding 41,000 feet, an altitude of 45,000 feet added with multiple of 4,000 feet
	Other types of aircraft		At an altitude less than 29,000 feet, an altitude of 1,000 feet multiplied by an odd number

			At an altitude exceeding 41,000 feet, an altitude of 45,000 feet added with a multiple of 4,000 feet
Magnetic bearing 180 deg. or more to less than 360 deg.	Aircraft flying by Visual Flight Rules		At an altitude less than 29,000 feet and 500 feet added to the product of 1,000 feet multiplied by an even number
	Aircraft flying by Instrumental Flight Rules	Aircraft granted the permission pursuant to Article 83-2 of the Act for performing the navigation pursuant to item (i) of the paragraph (1) of the Article 191-2 and aircraft listed under each item of paragraph (2) of the Article 191-2 and granted the permission pursuant to the provision of paragraph (2) of said Article for performing the navigation listed under item (i) of the paragraph (1) of said Article	At an altitude less than 41,000 feet, an altitude of 1,000 feet multiplied by an even number At an altitude exceeding 41,000 feet, an altitude of 43,000 feet added with a multiple of 4,000 feet
		Other types of aircraft	At an altitude less than 29,000 feet, an altitude of 1,000 feet multiplied by an even number At an altitude exceeding 41,000 feet, an altitude of 43,000 feet added with a multiple of 4,000 feet

(Pressure altimeter setting)

Article 178 The pilot in command shall set the pressure altimeter with the

following method:

- (i) In the case of navigating at an altitude less than 14,000 feet above a mean sea level, the pressure altimeter shall be set by employing the QNH value of a point on the flight path (when the QNH value of the point of departure is unavailable at departure, the altitude of the departure point).
- (ii) In a case other than prescribed in the preceding item, the setting shall be conducted by using the standard atmospheric pressure (1,013.2 hPa).

(Speed limitation in air traffic control zone etc.)

Article 179 (1) The speeds prescribed under Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to the Article 82-2f of the Act shall be as listed under the following items:

- (i) In the case of aircraft navigating in an air space prescribed under item (i) of Article 82-2 of the Act and concurrently in the air space at an altitude of 900 meters or less, the indicated air speed listed for each of the classifications of aircraft specified below:
 - (a) Aircraft equipped with reciprocating engines: 160 knots
 - (b) Aircraft equipped with turbine engines: 200 knots
 - (ii) In the case of aircraft navigating in an air space prescribed under item (i) of Article 82-2 of the Act and concurrently in the air space at an altitude exceeding 900 meters, or aircraft navigating in an air space prescribed under item (ii) of Article 82-2 of the Act, the indicated air speed is 250 knots.
- (2) Notwithstanding the provisions in the preceding paragraph, the speeds prescribed under Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 82-2 of the Act pertaining to the types of aircraft used by the Self Defense Forces and designated by the Minister of Land, Infrastructure, Transport and Tourism to navigate inevitably at a speed exceeding the speed prescribed under said paragraph shall constitute the speed subscribed by the Minister of Land, Infrastructure, Transport and Tourism. Nevertheless, when said navigation is considered to impede safety of other aircraft, this shall not apply.
- (3) Notwithstanding the provision under the two preceding paragraphs, the speeds subscribed under Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 82-2 of the Act pertaining to the types of aircraft listed below shall constitute the speeds listed in the respective items.
- (i) Aircraft instructed by the Minister of Land, Infrastructure, Transport and Tourism pursuant to Article 96 paragraph (1) of the Act to navigate at a speed exceeding the speed stipulated in the two preceding paragraphs: The speed pertaining to said instructions
 - (ii) Aircraft required to navigate at a speed exceeding the speed stipulated

under the two preceding paragraphs because of inevitable reasons for ensuring aircraft safety: The appropriate speed deemed necessary to ensure safety in flight of said aircraft

(Application for permission of flight at speeds exceeding speed limits)

Article 179-2 A person intending to apply for the permission prescribed in the proviso of Article 82-2 of the Act shall submit a written application describing the matters listed below to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name and address
- (ii) Type of aircraft and Nationality and registered symbols of aircraft
- (iii) The speed in the case when navigating at a speed exceeding that stipulated in the preceding Article (hereafter referred to as "limit speed")
- (iv) Date, time and place of flight at a speed exceeding the limit speed
- (v) Reasons for navigating at a speed exceeding the speed limit
- (vi) Outline of flight plan (Purpose, date and time, and paths shall be clearly stated.)
- (vii) Name and qualification of pilot
- (viii) Other matters for reference

(Right of way)

Article 180 When the flight paths of two aircraft intersect or come close to each other, the right of way shall be assigned to the aircraft in accordance with the following priorities:

- (i) Glider
- (ii) Aircraft with an object in tow
- (iii) Airship
- (iv) Aeroplane, rotorcraft and motorized glider

Article 181 When the flight paths of two aircraft with equal priority intersect or come close to each other, the aircraft that sees the other aircraft to its right shall yield its flight path to the other.

Article 182 When two aircraft with equal priority approach each other at head on angle or nearly head on angle, each aircraft shall change its flight path to the right.

Article 183 Aircraft in its final approach path for landing or aircraft performing the landing operation shall have the right of way priority over the aircraft on ground, on water or in flight.

Article 184 Between the two aircraft approaching the airport for landing, the aircraft at a lower altitude shall have the right of way priority. However, it shall not cut in front or overtake the aircraft on its final approach path.

Article 185 When aircraft overtakes another aircraft ahead of it in flight (includes the overtaking by ascending or descending), it shall pass the aircraft in front on the right side.

Article 186 The aircraft with the right of way priority shall maintain its flight path and speed.

(Maintenance of space)

Article 187 When aircraft flies close to another aircraft, it shall maintain space to prevent collision.

(Movement on ground)

Article 188 When aircraft moves on ground in airport etc., it shall comply with the following standards:

- (i) The forward view shall be thoroughly observed.
- (ii) The power system shall be controlled or the breaking system shall be lightly used to maintain speed that may be quickly and safely stopped.
- (iii) When there is a danger of collision with aircraft or other objects, the ground guide shall be provided.

(Navigation in the Vicinity of Airport etc.)

Article 189 (1) Aircraft at or near the airport etc. shall be navigated in accordance with the standards listed in the following items. However, this is not the case if the directions from the minister of land, infrastructure, transport and Tourism in accordance with the provision in paragraph (1) of Article 96 of the Act are different from the standards listed in items (i), (iv) to (vii) or if the aircraft used by the self defense force that navigates at or near the airport built by the self defense force and designated by the minister of land, infrastructure, transport Tourism has difficulty in complying with these standards in performing its assignment due to special circumstances and does not pose danger other than to the self defense force.

- (i) The aircraft shall follow the approach procedure based on the instrumental flight procedure and the flight procedure established for the relevant airport etc.
- (ii) The aircraft shall not take off when the Instrumental Flight Rules is being used for take off and the meteorological condition at the airports, etc. does not meet the minimum condition for take off.

- (iii) The landing approach shall not be continued when the Instrumental Flight Rules is being used for landing and one of the conditions listed below exists:
 - (a) The meteorological condition does not meet the minimum condition for continuing the landing approach at the relevant airport when the aircraft passes above the approach height threshold at a specified location.
 - (b) The position of the aircraft cannot be confirmed by visual reference of landmarks at a point below the approach height threshold.
 - (iv) When aircraft is to take off behind another aircraft, it shall not initiate the accelerating run to take off before the preceding aircraft has taken off and passed the end of the landing strip.
 - (v) When aircraft is to land behind another aircraft, it shall not enter the relevant airport zone for landing before the preceding aircraft has landed and left the landing strip.
 - (vi) When aircraft is to land following another aircraft which is taking off, it shall not enter the relevant airport zone for landing before the preceding aircraft has taken off and passed the end of the landing strip.
 - (vii) When aircraft is to take off following another aircraft which is landing, it shall not initiate the accelerating run to take off before the preceding aircraft has landed and left the landing strip.
- (2) The Minister of Land, Infrastructure, Transport and Tourism shall establish for each airport the flight method for item (i) of the previous paragraph, the meteorological conditions in accordance with the provisions in items (ii) and (iii) of the same paragraph and the approach height threshold, the specific location at a higher altitude than the approach height threshold and visual landmarks in accordance with item (iii) of the same paragraph.

Article 190 Deleted.

(Special Case for Emergency)

Article 191 When aircraft learns that another aircraft is in emergency due to a failure of its engine, fuel shortage etc., it shall be navigated so as not to interfere with the emergency measure taken by the relevant aircraft regardless of the provisions in Articles 180 through 189.

(Air Navigation under Particular Flight Rules)

Article 191-2 (1) The air navigation under particular flight rules established by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in Article 83-2 shall be as follows:

- (i) The flight of Reduced Vertical Separation Minimum to another aircraft.
- (ii) Category II Navigation (The navigation used to approach and landing using the instrumental landing system when the Decision Height (It is the height

from the landing edge of runway which necessitates the go around when the precision approach is performed and the visual land mark needed for approach and landing cannot be confirmed -- hereinafter the same shall apply in this paragraph.) is 30 meters or more and less than 60 meters and the Runway Visual Range is 350 meters or more.)

- (iii) Category IIIA Navigation (The navigation used for approach and landing mainly with auto pilot using the instrumental landing system when there is no Decision Height or the decision height is less than 30 meters and the Runway Visual Range is 200 meters or more.)
 - (iv) Category IIIB Navigation (The navigation used for approach, landing and rollout mainly with auto pilot using the instrumental landing system when there is no Decision Height or the decision height is less than 15 meters and the Runway Visual Range is 50 meters or more and 200 meters or less.)
 - (v) The flight that relies on the RNAV (area navigation) that receives the radio signals from DME, SBAS and other wireless facilities or utilizes the inertial navigation system to fly through optional paths, through the flight path or air space for which the required navigation accuracy is specified.
- (2) The navigation method listed in each item of the preceding paragraph and to be performed by the aircraft listed below shall not be included as the air navigation under particular flight rules established by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in Article 83-2 of the Act regardless of the provisions in the previous paragraph.
- (i) The aircraft that belongs to the foreign country who is a signatory to the standards, methods and procedures that have been adopted as the appendix to the convention on International Civil Aviation, has been authorized by the relevant foreign country to use the navigation method listed in each item of the preceding paragraph, and has been deemed appropriate by the Minister of Land, Infrastructure, Transport and Tourism.
 - (ii) The aircraft used by the self defense force that has been recognized by the minister of defense to be compliant to the standards listed in each item of Article 191-4 in using the navigation method listed in each item of the preceding paragraph.

(Application for the Permit to Air Navigation under Particular Flight Rules)
Article 191-3 (1) A person who applies for a permit per Article 83-2 of the Act shall submit an application with the following items to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name or title and address
- (ii) Aircraft type, nationality and registration code
- (iii) The air navigation under particular flight rules to be used
- (iv) The system required for the relevant air navigation under particular flight

rules

- (v) The planned start date for air navigation under particular flight rules
 - (vi) Other matters for references
- (2) The summary of operations with the following items shall be attached to the application described in the preceding paragraph.
- (i) Items related to the methods for the aircraft operations and maintenance needed to be performed by the aircraft crew for navigation by the relevant air navigation under particular flight rules and the counter measures for the failed system.
 - (ii) Items related to the maintenance interval for the system needed for air navigation under particular flight rules, principle items for maintenance and the method for the maintenance.
 - (iii) Items related to the method for providing the aircraft crew, the aircraft maintenance personnel and the flight dispatcher with the knowledge for relevant air navigation under particular flight rules, training subjects and duration, other training methods and examination of skill.
 - (iv) Other items needed to secure a safe navigation by the relevant air navigation under particular flight rules.

(The Standards for the Permit for Air Navigation under Particular Flight Rules)

Article 191-4 The permit per Article 83-2 of the Act shall be given to the person that complies with the following standards:

- (i) The aircraft shall have the functionality and the system which are needed for air navigation under particular flight rules.
- (ii) The aircraft crew, the aircraft maintenance personnel and the flight dispatcher shall have the knowledge and ability which are needed for air navigation under particular flight rules.
- (iii) The summary of operations shall be appropriately defined for each navigation and aircraft types based on air navigation under particular flight rules.
- (iv) Necessary measures shall be taken to secure a safe navigation of aircraft.

(Application for a Permit to Formation Flights)

Article 192 A person who applies for a permit per paragraph (1) of Article 84 of the Act shall submit an application with the following items to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name and address
- (ii) Aircraft type, nationality and registration code
- (iii) Outline of flight plan (The purpose of flight, date and time of flight and flight path shall be clearly written.)

- (iv) Date, time and location of the formation flight
- (v) Name and qualification of the pilot
- (vi) Name of the fellow passenger and his/her objective of flight
- (vii) Other matters for references

(Pre-flight Discussion for the Formation Flights)

Article 193 The following are the items that shall be discussed by the pilot in accordance with the provision in paragraph (2) of Article 84 of the Act:

- (i) Summary of the formation flights operation
- (ii) Shape of the formation flights
- (iii) Summary of turning and other movements
- (iv) Signals and their meanings
- (v) Other needed items

(Articles Prohibited from Being Transported)

Article 194 (1) Articles established the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in the paragraph (1) of Article 86 of the Act shall be as follows:

- (i) Explosives -- Gunpowder, gunpowder related substance, explosives, and other substances with explosive characteristic
- (ii) Pressurized gas -- Substance with over 300 kilopascal of evaporated gas absolute pressure at 50 degrees centigrade or substance that turns completely into gas at 20 degrees centigrade with 101.3 kilopascal of evaporated gas absolute pressure.
 - (a) Inflammable gases -- When it is mixed with air at 20 degrees centigrade and 101.3 kilopascal of evaporated gas absolute pressure, its lower explosive limit is less than or equal to 13 % and the difference between its higher and lower explosive limits is 12% or more.
 - (b) Toxic gases -- If it were inhaled by human, it would induce a strong toxic reaction.
 - (c) Other gases -- Any gases other than (a) or (b) and is liquefied or with 280 200 kilopascal or more of evaporated gas gauge pressure at 20 degrees centigrade.
- (iii) Inflammable liquid -- Liquid with flash point (Flash point measured by the Continuous Closed Cup Flash Point (CCCFP) measurement method -- applicable to the rest of the document) of less than or equal to 60 degrees centigrade (excludes the case when the liquid with flash point of over 35 degrees centigrade and with inability to burn continuously is transported at a temperature below the relevant flash point.) or liquid substance with flash point over 60 degrees centigrade (excludes the case when the substance is transported at a temperature below the relevant flash point.)

- (iv) Flammable substances are listed below:
 - (a) Flammable substance -- It is easily ignited by flame and promotes the burning during fire.
 - (b) Self igniting substance -- Substance that self heats or easily self ignites in the normal transportation condition due to friction, absorption of moist or chemical reaction.
 - (c) Substance that generates inflammable gas through interaction with water.
 - (v) Oxidizing substances are listed below:
 - (a) Oxidizing substance -- Substance other than organic peroxides that oxidizes other substances.
 - (b) Organic peroxides -- organic substance that readily releases active oxygen to oxidize other substances.
 - (vi) Toxic substances are listed below:
 - (a) Toxic substance -- if it is inhaled, comes in contact with skin or ingested, it induces a strong toxic reaction.
 - (b) Infectious Substance that promotes transmission of disease -- Pathogens, substance containing pathogens or substance known to be attached with pathogens.
 - (vii) Radioactive Material etc. -- Radioactive substance (substance that naturally radiates ionizing radiation) and the substance contaminated by the radioactive material (excludes the substances and articles established by pronouncement).
 - (viii) Corrosive substance -- If it comes into contact with life form, it will severely harm the biological tissue with chemical reaction or if it leaks, it will damage the aircraft frame and cargo.
 - (ix) Other harmful Miscellaneous substances - substance which is other than the ones listed in the preceding items and injures humans or damages other substances (limited to the ones pronounced).
 - (x) Articles such as weapons, guns and knives etc. with sufficient capability to kill or injure humans.
- (2) The articles listed in the following items shall not be included as articles established by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in paragraph (1) of Article 86 of the Act regardless of the provision in the previous paragraph.
- (i) Articles (excludes the radioactive substances etc.) established by pronouncement and transported in accordance with the following provisions:
 - (a) The technical standards established by pronouncement shall be followed.
 - (b) The articles established by public notice shall be the ones that pass the inspection to be conducted by the minister of land, infrastructure, transport and Tourism to verify that its container or packaging is compliant with the safety standards established by public notice; provided,

however, that the same shall not apply when the container or packaging is compliant with the safety standards established by foreign regulations which the Minister deems appropriate.

- (ii) The Radioactive Material etc. established by pronouncement and transported in accordance with the following provisions:
 - (a) The Radioactive Material etc. which have been established by pronouncement shall be categorized as one of the Radioactive Material (Radioactive Material etc. that are placed in containers or packaged. -- the same shall apply hereinafter.) corresponding to their classifications as defined in the following items (i), (ii), (iii) and (iv), or in accordance with the pronouncement and the approval by the minister of land, infrastructure, transport and Tourism, the Radioactive Material etc. shall be designated as a Radioactive Material which is other than the ones defined in the following items (i), (ii), (iii) and (iv). In this case, for the Radioactive Material etc. listed in item (i), (ii) or (iii) that correspond to the Radioactive Material listed in item (iv), they may be designated as the Radioactive Packages listed in item (iv).
 1. Type L Package: Radioactive material, etc., are established by pronouncement as those with an extremely small risk;
 2. Type A Package: Radioactive material, etc., (excludes the substances listed in 1.) with radioactivity which does not exceed the level established by pronouncement;
 3. Type BM or Type BU Package: Radioactive material, etc., (excludes the substances listed in item 1.) with radioactivity which exceeds the pronounced level in item 2., but does not exceed the level established by pronouncement.
 4. Type IP-1, IP-2 or IP-3 Package: LSA Radioactive material (Radioactive material with low concentration radioactivity and little risk) or surface-contaminated objects (Non-radioactive solid material which have been established by objects contaminated with radioactive materials.).
 - (b) The technical and other standards established by pronouncement shall be followed.
 - (c) Type BM or Type BU Package listed in (a)3 shall receive in accordance with pronouncement a confirmation that it complies with the technical standard established by pronouncement in (b) for Radioactive Packages from the minister of land, infrastructure, transport and Tourism before it is loaded onto aircraft. However, this does not apply to type BU Package which is transported from a foreign country to Japan or between foreign countries and has received a confirmation in accordance with the foreign country Ordinance as established by pronouncement.

- (d) The Radioactive Packages consisting of stored or packaged uranium hexafluoride shall receive in accordance with pronouncement a confirmation that it complies with the technical standard established by pronouncement from the minister of land, infrastructure, transport and Tourism before it is loaded onto aircraft.
 - (e) Type BM or Type BU Package or the Radioactive Packages listed in (d) shall receive in accordance with pronouncement a confirmation that it complies with the standards (excludes the technical standards related to the transported radioactive substances) established by pronouncement in (b) from the minister of land, infrastructure, transport and Tourism.
 - (f) The stored or packaged Radioactive Material etc. consisting of Radioactive Packages etc. that have been established by pronouncement as the ones that require special protective measures shall receive in accordance with pronouncement a confirmation that they comply with the standards established by pronouncement in (b) from the minister of land, infrastructure, transport and Tourism. In this case, the confirmation that they comply with the technical standards related to the Radioactive Packages that are established by pronouncement in (b) shall be received from the minister of land, infrastructure, transport and Tourism before they are loaded onto aircraft.
 - (iii) Substances to be transported by the relevant aircraft for safe keeping human lives as well as being used for other purposes to be established by pronouncement. (Excludes the substances established by pronouncement.)
 - (iv) Substances to be put on, carried by or lugged by the passengers
 - (v) Substance to be transported with approval from the minister of land, infrastructure, transport and Tourism when it is impossible or inappropriate to use other carriers beside aircraft.
 - (vi) Substance to be transported from a foreign country to Japan or between foreign countries with approval received in accordance with the foreign country ordinance which is deemed appropriate by the minister of land, infrastructure, transport and Tourism.
- (3) If the article passes the examination given by the local transport station manager established by the provision in paragraph (1) of Article 113 in THE REGULATIONS FOR THE CARRIAGE AND STORAGE OF DANGEROUS GOODS BY SHIPS. (ministry of transportation ordinance No. 30 of 1957) or the examination given by the registration and test institute established by the provision in the same paragraph, it shall be deemed to pass the examination prescribed in item (i)(b) in the previous paragraph.
- (4) If a confirmation (includes a confirmation in accordance with Article 61-26 of the Act of the Regulations of Nuclear Source Material, Nuclear Fuel Material and Reactors. (Act No. 166 of 1957) by the Japan Nuclear Energy Safety

Organization) is received from the competent minister in accordance with the provision in paragraph (2) of Article 59 in the same Act or a confirmation is received from the minister of land, infrastructure, transport and Tourism or the local transportation station manager in accordance with the provision in paragraph (1) of Article 87 in THE REGULATIONS FOR THE CARRIAGE AND STORAGE OF DANGEROUS GOODS BY SHIPS., it shall be deemed in accordance with pronouncement that a confirmation is received for item (ii)c, (ii)d or (ii)f (limited to technical standards related to transported radioactive substances).

- (5) If a confirmation is received for the transported substance per paragraph (2) in Article 18 of the Act concerning Prevention of Radiation Hazards due to Radioisotopes, etc. (Act No. 167 of 1957), it shall be deemed in accordance with pronouncement that a confirmation is received for item (ii) c of paragraph (2).

(Towing of Objects)

Article 195 In accordance with Article 88 of the Act, the safety standards for aircraft towing a glider shall be as follows:

- (i) A contact person shall be seated in the aircraft that can carry two or more people (except when it is possible to have wireless communications between the aircraft and the glider.).
- (ii) The following items need to be discussed before the towing begins:
 - (a) Signals and their meanings.
 - (b) Methods of starting and towing.
 - (c) Timing, location and method for disengaging the tow line
 - (d) Other required items
- (iii) The standard length of the tow line shall be 40 meters or more and 80 meters or less.
- (iv) When a take off is to be performed, a contact person shall be positioned to support thoroughly support the communication between aircraft and the glider.
- (v) When aircraft disengages the tow line, the ground contact person shall notify the aircraft whether or not the tow line is disengaged.
- (vi) The tow line shall normally be disengaged at the height equal to or greater than 80% of the tow line.
- (vii) The towing shall not be conducted in clouds or at night. (Excludes the case where a permit is granted by the Minister of Land, Infrastructure, Transport and Tourism.)

Article 196 In accordance with Article 88 of the Act, the safety standards for aircraft towing a object other than glider shall be as follows:

- (i) The tow line shall be marked with red and white cloth at 20 meters

intervals.

- (ii) The ground contact person shall be positioned when aircraft is to take off.
- (iii) When aircraft disengages an object other than the glider, the ground contact person shall notify the aircraft whether or not the object is disengaged.

(Submission of Dropping of Objects)

Article 196-2 A person who intends to submit a proviso under Article 89 of the Act shall submit a dropped object report that includes the following items to the airport office chief.

- (i) Name and address
- (ii) Type, nationality marks and registration marks of the relevant aircraft
- (iii) Purpose, date, time, path and altitude of the flight
- (iv) Purpose of dropping the objects
- (v) Description and the location of dropped objects
- (vi) Name of and qualification of pilot
- (vii) Other matters for reference

(Application for Parachute Descent)

Article 196-3 A person who intends to apply for a permit per Article 90 of the Act shall submit an application for parachute descent that includes the following items to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name and address
- (ii) Type, nationality and registration code of the relevant aircraft
- (iii) Summary of flight plan (purpose, date, time, path and altitude of flight)
- (iv) Purpose, date, time and location of the parachute diving
- (v) Name and qualification of the pilot
- (vi) Type of parachute and other necessary items about the relevant parachute
- (vii) Other matters for reference

(Altitude that Allows Acrobatic Flights Etc.)

Article 197 In accordance with the provision in the body of paragraph (1) of Article 91 of the Act, the altitude that allows the acrobatic flight of aircraft shall be listed in the following items:

- (i) For the acrobatic flights or the aircraft test flights prescribed in the provision of Article 197-3 (excludes the flight that applies to the next item.), the altitude is listed below for each aircraft category:
 - (a) Aircraft other than the glider: 500 meters or above top of the highest obstruction within the area covered by 500 meter radius from the aircraft
 - (b) Glider: 300 meters or above top of the highest obstruction within the area covered by 300 meter radius from the aircraft

- (ii) The altitude for the extremely high speed flight which is prescribed in Article 197-4 shall be set so that there is no danger for the shock wave from the relevant aircraft harming people or damaging articles on ground or water

(Flight Visibility that Allows Acrobatic Flights Etc.)

Article 197-2 Flight Visibility prescribed in the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in paragraph (1) of Article 91 of the Act shall be the ones listed in the following items:

- (i) For the acrobatic flights or the aircraft test flights (excludes the flights that applies to the next item.) prescribed in the next Article, the altitude is listed below for each air space category:
 - (a) The air space over 3,000 meters: 8,000 meters
 - (b) The air space below 3,000 meters: 5,000 meters
- (ii) For an extremely high speed flight as prescribed in Article 197-4: 10,000 meters

(Acrobatic Flights)

Article 197-3 The acrobatic flights prescribed by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in paragraph (1) of Article 91 of the Act shall be the loop, roll, turn, inversion, screw dive, hip stall and other flights that involve sudden change in direction and speed.

(Extremely High Speed Flights)

Article 197-4 The extremely high speed flights prescribed by the Ordinance of Ministry of Land, Infrastructure, Transport and Tourism in paragraph (1) of Article 91 of the Act shall be the flights with supersonic speed.

(Application for a Permit for Acrobatic Flights Etc.)

Article 198 Person who intends to obtain permission under proviso for paragraph (1) in Article 91 of the Act shall submit an application with the following items to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name and address
- (ii) Type, nationality and registration code of aircraft
- (iii) Summary of flight plan (purpose, date, time and path of the flight)
- (iv) Description of acrobatic flights etc. as well as date, time and location of the relevant flight
- (v) Reason for the acrobatic flights etc.
- (vi) Name and qualification of the pilot
- (vii) Name and the objective of passenger
- (viii) Other matters for reference

(Flights that may interfere with the safety of air traffic)

Article 198-2 The flights prescribed by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in paragraph (1) item (iii) of Article 92 of the Act to have the possibility of interfering with the safe air traffic are listed as the following items: (excludes the flights that must take place for the safe navigation.)

- (i) Flight involving frequent changes in aircraft attitude
- (ii) Flight that induces stall
- (iii) Flight that radically changes altitude

(Application for Permission to Conduct Pilot Training Flight)

Article 198-3 A person who intends to obtain permission under proviso for paragraph (1) in Article 92 of the Act shall submit an application with the following items to the Minister of Land, Infrastructure, Transport and Tourism:

- (i) Name and address
- (ii) Type, nationality and registration code of aircraft
- (iii) Summary of flight plan (purpose, date, time, path and altitude of the flight)
- (iv) Description of training flights etc. (flights listed as items of paragraph (1) in Article 92 of the Act -- the same shall apply hereinafter) as well as date, time and location of the relevant flights
- (v) Reason for the training flights etc.
- (vi) Name and qualification of the pilot as well as name, qualification of the training flight supervisor for the flights listed in items (i) and (ii) of paragraph (1) in Article 92 of the Act
- (vii) Name and qualification of the pilot for the flight listed in item (iii) of paragraph (1) in Article 92 of the Act
- (viii) Name and the objective of passenger
- (ix) Other matters for reference

(Method of Flying in the Controlled Zones etc. with Permission under Proviso for Article 94 of the Act)

Article 198-4 Aircraft shall follow the standards listed in items below when it flies in the controlled zone (air space under special control is excluded) or the information zone with permission under proviso for Article 94 of the Act. However, if different standards are attached to the relevant permission, the foregoing provision does not apply.

- (i) Aircraft shall stay away from the cloud
- (ii) Aircraft shall maintain visibility of 1500 meters or more

- (iii) Aircraft shall maintain visual recognition of ground or water surface
- (iv) When aircraft flies in the information zone or flies in the controlled zone at the time specified by pronouncement per paragraph (6) in Article 96 of the Act, it shall constantly maintain contact with the facility that gives permission under proviso for Article 94 of the Act through the facility that provides the air traffic information for the relevant information zone or controlled zone.

(Specific Standards etc. for Air Space under Special Control)

Article 198-5 (1) When the Minister of Land, Infrastructure, Transport and Tourism assigns an air space under special control in accordance with the provision of paragraph (1) in Article 94 of the Act, he/she shall classify it as one of the air spaces listed below:

- (i) Air space A under special control: Among the controlled districts and controlled zones, it is the air space which is recognized to have the most need among the controlled districts and controlled zones to ban the visual flight mode for securing the safe air traffic.
 - (ii) Air space B under special control: Among the controlled districts and controlled zones, it is the air space which is congested and not recognized to be the one in item (i), and for which it is deemed necessary for the institute performing the control operations (issuance of directives in accordance with the provision of paragraphs (1) and (2) in Article 96 of the Act as well as the operations to be performed by the minister of land, infrastructure, transport and Tourism in accordance with the provision of paragraph (3) in the same Article -- applicable to the rest of this document) to issue a directive to maintain safe distance between all aircraft that fly in the relevant air space.
 - (iii) Air space C under special control: Among the controlled districts and controlled zones, it is the air space which is not recognized to be the one in the preceding two items, in which the air traffic by instrument flying aircraft is congested, and for which it is deemed necessary for the institute performing the control operations to issue a directive to maintain safe distance between all instrument flying aircraft that fly in the relevant air space.
- (2) The minister of land, infrastructure, transport and Tourism shall grant permission under proviso for paragraph (1) in Article 94-2 of the Act only under the circumstance given for each air space listed below:
- (i) The air space listed in item (i) of the preceding paragraph: Sudden unpredictable worsening of weather or other unavoidable reason.
 - (ii) The air space listed in item (ii) of the preceding paragraph: Sudden unpredictable worsening of weather, other unavoidable reason or the determination by the minister of land, infrastructure, transport and Tourism

that the relevant air space does not interfere with smooth navigation of instrument flying aircraft in the relevant air space and allows all aircraft to maintain safe distance with each other.

(iii) The air space listed in item (iii) of the preceding paragraph: Sudden unpredictable worsening of weather, other unavoidable reason or the determination by the minister of land, infrastructure, transport and Tourism that the relevant air space does not interfere with smooth navigation of instrument flying aircraft in the relevant air space and allows all aircraft to maintain safe distance with each other.

(Altitude Prescribed by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in Paragraph (1) in Article 94-2 of the Act)

Article 198-6 The altitude prescribed by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in paragraph (1) of Article 94-2 of the Act in shall be 29,000 feet.

(The standard for Permission for Air Space above the Altitude Prescribed by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in Paragraph (1) in Article 94-2 of the Act (hereafter referred to as the Act) under Proviso for the Act)

Article 198-7 The Minister of Land, Infrastructure, Transport and Tourism shall grant permission under proviso to the aircraft used by the Self-Defense Forces for the air space above the altitude prescribed by the preceding Article under proviso for paragraph (1) in Article 94-2 of the Act only if it is flown for the execution of its mission or there is a sudden worsening of weather or other unavoidable reason.

(The Method of Flight upon Receipt of Permission under Proviso for Paragraph (1) in Article 94-2 of the Act)

Article 198-8 When aircraft is granted permission under proviso for paragraph (1) in Article 94-2 of the Act, it shall be flown in accordance with the standards listed below:

- (i) It shall fly while maintaining the visible weather condition.
- (ii) It shall constantly maintain contact with the facility that performs control operations in the relevant air space. However, when the aircraft used by the Self-Defense Forces operates the flight which is flown for the execution of its mission prescribed by the Minister of Land, Infrastructure, Transport and Tourism, this shall not apply to.

(Air Transportation Business Prescribed by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in Paragraph (1) in Article 95-2

of the Act)

Article 198-9 The air transportation business prescribed by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in paragraph (1) in Article 95-2 of the Act shall be the domestic regular air transportation business and international air transportation business.

(Information which May Affect the Safe Aircraft Navigation)

Article 198-10 The information defined by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism paragraph (3) in Article 95-2 of the Act shall be the flight plans, positions, altitudes and flight paths of other aircraft.

(Aircraft Defined by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in Article 95-3 of the Act)

Article 198-11 The aircraft defined by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism in Article 95-3 of the Act shall be other than the ones used by the self defense force.

(Flight that Requires Approval of the Plan for Training, Test etc.)

Article 198-12 The flights which are defined by the Ordinance of Ministry of Land, Infrastructure, Transport and Tourism in Article 95-3 of the Act shall be the acrobatic flight, pilot training flight, and other flights for aircraft pilot training.

(Plan for Training, Test etc.)

Article 198-13 (1) The plan for training with the provision of paragraph (3) in Article 95 of the Act, test etc. shall clarify the following items:

(i) Radio call code of aircraft

(ii) Type of aircraft

(iii) Name of the pilot

(iv) Description of flight and date and time of the relevant flight (Flight altitude in the civil training and testing area as well as the planned time to enter the civilian training and test air space and the planned time to leave the relevant air space shall be clarified.)

(v) Name of the civil training and testing area to be flown in

(vi) Other matters for reference

(2) If the plan of the training and test that has been approved per Article 95-3 of the Act is to be changed, it shall be sufficient to report only the radio call code of aircraft, date and time of flight and the items to be changed.

Article 199 (1) Type of air traffic control services are as follows;

(i) Airways control services: Air traffic control services for aircraft on flight

under instrument flight rules and towards aircraft within positive control airspace or flying at or above the altitude specified in Article 198-6, other than those listed in the next item to item (v).

- (ii) Aerodrome Control Services: The air traffic control services for aircraft taking off or landing at airports etc specified by the Minister of Land, Infrastructure, Transport and Tourism, for aircraft flying in the vicinity of the applicable airports etc, or for those involved in services of applicable airports etc, other than those listed in the next item to item (v).
 - (iii) Approach control services: Air traffic control services for aircraft flying under the instrument flight rules and aircraft flying within positive control airspace that are on climb after taking off or on descent for the purpose of landing, or aircraft flying under the instrument flight rules and crossing the paths of the said aircraft or in close proximity thereof, other than those listed in the next item or item (v).
 - (iv) Terminal radar control services: Air traffic control services carried out with radar for aircraft flying under the instrument flight rules and aircraft flying within positive control airspace that are on climb after taking off or on descent for the purpose of landing, or aircraft flying under the instrument flight rules and crossing the paths of the said aircraft or in close proximity thereof, other than those listed in the next item.
 - (v) Ground controlled approach services: Air traffic control services whereby radar control for approach is provided to aircraft flying under the instrument flight rules.
- (2) Air traffic control service providers conducting services listed in items of the preceding paragraph (other than the Air Traffic Control Center) shall issue a public notice of the name of the airport or the positive control airspace where they provide air traffic control services, along with other details of their air traffic control services.

Article 200 (1) The aircraft intending to conduct a flight that is listed in item (i) to item (iii) of Article 96 (3) of the Act (other than the aircraft listed in paragraph (6)) shall contact the aerodrome control service provider pertaining to the applicable control zone, other than in the cases where it should contact the approach control service provider or terminal radar control service provider pursuant to the provisions of the next paragraph or paragraph (3).

- (2) Aircraft intending to climb pursuant to item (i) of Article 96 (3) of the Act, to descend pursuant to item (ii) of the same paragraph, or to conduct air navigation listed in item (iii) of the same paragraph, under the instrument flight rules, or aircraft intending to conduct a flight listed in item (iv) of the same paragraph, shall contact the approach control service provider for the applicable control zone or approach control area, other than in the cases where

it should contact the terminal radar control service provider pursuant to the provisions of the next paragraph.

- (3) Aircraft intending to climb pursuant to item (i) of Article 96 (3) of the Act, to descend pursuant to item (ii) of the same paragraph or to engage in a flight pursuant to item (iii) of the same paragraph, under the instrument flight rules, or aircraft intending to conduct a flight listed in item (iv) of the same paragraph, shall contact the applicable terminal radar control service provider.
- (4) Notwithstanding the provisions of the previous three paragraphs, aircraft flying under the instrument flight rules shall contact the applicable ground controlled approach service provider via the approach control service provider for the applicable control zone or approach control area (or if the applicable approach control services are provided by the airways control service provider, then the aerodrome control service provider) or terminal radar control service provider, when intending to descend pursuant to item (ii) of Article 96 (3) of the Act or descend pursuant to item (iv) of the same paragraph under radar control.
- (5) Aircraft intending to conduct a flight listed in item (v) or item (vi) of Article 96 (3) of the Act shall contact the airways control service provider, except for when it should contact the air traffic control service provider for the applicable positive control airspace under the provisions of the next paragraph.
- (6) Aircraft intending to conduct a flight listed in item (vi) of Article 96 (3) of the Act and aircraft intending to conduct a flight listed in item (i) to item (iii) of Article 96 (3) of the Act in a positive control airspace within the control zone and not under the instrument flight rules shall contact the air traffic control service provider for the applicable positive control airspace.
- (7) If the aircraft receives an instruction from the air traffic control service provider from whom it is currently receiving instructions that it should contact an air traffic control service provider other than the provider that it should contact under the provisions of the previous 6 paragraphs, then notwithstanding those provisions, the aircraft shall contact the air traffic control service provider that it was instructed to contact.

Article 201 The aircraft shall contact without delay the air traffic control provider that issued the instruction if it flies against an instruction pursuant to Article 96 (1) of the Act due to an unavoidable reason such as change in weather conditions etc.

Article 201-2 The Minister of Land, Infrastructure, Transport and Tourism shall issue an instruction pursuant to Article 96 (1) of the Act when aircraft conducts a flight listed in item (i) to (v) of Article 96 (3) of the Act under the instrument flight rules or when it conducts a flight listed in item (i) to item

(iii) of the same paragraph under the visual flight rules or a flight listed in item (vi) of the same paragraph (other than the flight specified in Article 202-3).

Article 202 The abbreviations, signals and other communication methods between aircraft and air traffic control service provider shall be specified through public notices.

(Works at airports etc)

Article 202-2 The works at airport etc specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism are construction, repair or maintenance works on landing strips, taxiways, apron and other facilities within the airport etc.

(Flights specified under Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Item (vi) of Article 96 (3) of the Act)

Article 202-3 A flight specified under Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to item (vi) of Article 96 (3) of the Act is a flight by aircraft used by the self defence force in an airspace at an altitude above that specified in Article 198-6, that is deemed by the Minister of Land, Infrastructure, Transport and Tourism to be unavoidable in the course of performing their duties.

(Communication for obtaining air traffic information)

Article 202-4 Pursuant to the provisions of Article 96-2 (1) of the Act (including the cases where it is applied mutatis mutandis pursuant to the provisions of Article 96 (6) of the Act), when conducting a flight in a control zone, information zone or civil training and testing area, the aircraft shall contact the air traffic information provider specified by the Minister of Land, Infrastructure, Transport and Tourism in public notices for each of the airspace.

(When communication or listening to the information is difficult)

Article 202-5 (1) The cases where it is deemed to be difficult to communicate pursuant to Article 96-2 (1) of the Act as specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism are as follows.

(i) When aircraft that is deemed by the Minister of Land, Infrastructure, Transport and Tourism to be structurally difficult to equip with radiotelephone equipment flies within a civil training and testing area

(ii) When aircraft flies in a civil training and testing area where it is difficult for the aircraft to contact the provider specified in the preceding Article due

- to reasons such as geographical features
- (iii) Other than those listed in the two preceding items, when conducting a flight that the Minister of Land, Infrastructure, Transport and Tourism deems to be difficult to contact the provider specified in the preceding Article due to the necessity to make constant contact with other aircraft or for other special circumstances
- (2) The cases where it is specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism as being difficult to listen pursuant to Article 96 (2) of the Act are as follows.
 - (i) When aircraft that is deemed by the Minister of Land, Infrastructure, Transport and Tourism to be structurally difficult to equip with radiotelephone equipment flies within a civil training and testing area
 - (ii) When aircraft flies in a civil training and testing area where it is difficult for the aircraft to contact the provider specified in the preceding Article and to listen to air traffic information due to reasons such as geographical features
 - (iii) Other than those listed in two preceding items, when conducting a flight that the Minister of Land, Infrastructure, Transport and Tourism deems to be difficult to contact the provider specified in preceding Article and to listen to air traffic information due to the necessity to make constant contact with other aircraft or for other special circumstances

(Flight plans etc)

Article 203 (1) A flight plan pursuant to the provisions of Article 97 (1) and (2) of the Act shall clearly state the following (other than the matters listed in item (x) in the case of a flight under the instrument flight rules for which an alternate airport etc is not specified or in the case of a flight under the visual flight rules).

- (i) Nationality mark, registration mark and radio call sign of the aircraft
- (ii) Model and number of aircraft
- (iii) Full name of the pilot in command (in the case of a formation flight, the formation leader's full name)
- (iv) Instrument flight rules or visual flight rules
- (v) Place of departure and time of commencing movement
- (vi) Cruising altitude and route
- (vii) First place of landing and time required from take-off to arriving overhead the applicable place of landing
- (viii) True airspeed at cruising altitude
- (ix) Radio equipment to be used
- (x) Alternate airport etc
- (xi) Fuel on board expressed in number of hours of endurance

- (xii) Total number of persons on board
- (xiii) Any other matters which may be useful for air traffic control and search and rescue
- (2) Notification shall be made verbally (including by radiotelephone) or in writing.
- (3) If changing the flight plan that has already been approved pursuant to the provisions of Article 97 (1) of the Act or notified pursuant to the provisions of paragraph (2) of the same Article, it is sufficient to notify the radio call sign (if there is no radio equipment, nationality mark and registration mark) and the matters to be changed.
- (4) Notwithstanding the provisions of the preceding 3 paragraphs, if aircraft used by the self defence force engages in a special task specified by the Minister of Land, Infrastructure, Transport and Tourism, the matters to be stated in the applicable flight plan and the method of notification of the applicable flight plan shall be specified by the Minister of Land, Infrastructure, Transport and Tourism.
- (5) If a flight plan is to be notified after the flight has commenced under the provisions of the proviso of Article 97 (2) of the Act, it shall be notified without delay from the airspace above the area within 9 kilometer radius of the point of departure.
- (6) The hours of dealing with administrative matters at airport offices or airport branch offices (including airport / airways surveillance radar offices) pertaining to notification of flight plans pursuant to the provisions of Article 97 (1) and (2) of the Act and notification pursuant to the provisions of Article 98 of the Act shall be specified in public notices.

Article 204 In the case of specifying a flight plan pursuant to the provisions of Article 97 (1) or (2) of the Act, the alternate airport etc stated in item (x) of paragraph (1) of the preceding Article shall be an airport where the weather conditions on arrival of the applicable aircraft is expected to be at or above the weather conditions specified by the Minister of Land, Infrastructure, Transport and Tourism.

- Article 205 (1) The cases specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to the main text of Article 97 (2) of the Act shall be cases where the aircraft flies above the area within 9 kilometer radius from the place of departure and lands at a location within the said area.
- (2) The cases set out in the Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to the proviso of Article 97 (2) of the Act are as follows.
 - (i) When there is no time for the aircraft set out in Article 176 to notify the

flight plan prior to commencing flight

- (ii) When there is no means for the aircraft set out in Article 79 of the Act that is departing from the location pertaining to the permission by the proviso of Article 79 of the Act to notify the flight plan

(Air navigation in the case of communication equipment failure)

Article 206 Aircraft shall follow the following methods when there is a failure in communication equipment and intends to navigate in a control area, control zone or information zone.

- (i) If in visual meteorological conditions (except where set out in the next item to item (iv)), it shall maintain visual meteorological conditions and continue flight, and shall land at the nearest airport etc where is deemed to be possible to land safely, and shall immediately notify an air traffic control provider of its landing.
- (ii) If in visual meteorological conditions but it is difficult to land at the nearest airport etc while maintaining visual meteorological conditions (only in the case of flight under the instrument flight rules) or if in instrument meteorological conditions, it shall navigate under the following methods.
 - (a) It shall fly to overhead the first place of landing (hereinafter referred to as "destination") (in the case where an air navigation radio facility or a point is specified as an approach point to the destination, it shall be overhead that point, also applicable to Articles hereafter) in accordance with the applicable flight plan, following the routes in the flight plan that was approved pursuant to the provisions of Article 97 (1) of the Act (hereinafter referred to as "approved route"). However, if there is temporary deviation from the approved route based on the instruction received from air traffic control provider prior to the communication equipment failure (hereinafter referred to as "instruction prior to failure"), return to the approved route at the nearest reporting point (if the instruction prior to failure made clear the point where it returns to the approved route, then the applicable point), and fly according to the applicable approved route.
 - (b) Maintain the altitude according to the instruction prior to failure or minimum altitude determined by the Minister of Land, Infrastructure, Transport and Tourism taking account the distance with land surface, water surface or obstacles for each route determined by the Minister of Land, Infrastructure, Transport and Tourism, whichever is higher, and the speed according to the instruction prior to failure (hereinafter referred to as "altitude etc according to the instruction prior to failure") and fly until the time specified by the Minister of Land, Infrastructure, Transport and Tourism, and then maintain the altitude and speed of the flight plan

notified. However, if the instruction prior to failure has instructed to descend for the purpose of landing, then maintain altitude etc according to the instruction prior to failure.

- (iii) Upon arriving overhead the destination pursuant to the provisions of the preceding item, if an approach clearance for the purpose of landing has been given in the instruction prior to failure (hereinafter referred to as "approach clearance"), then promptly, and in other cases after waiting overhead the applicable point until the time listed below, commence descent (if it has not been possible to commence descent at the applicable time, commence descent as soon as possible).
 - (a) If the instruction prior to failure made it clear the expected time when approach clearance would be given (hereinafter referred to as "expected time of approach"), at the applicable expected time of approach
 - (b) If there was no instruction prior to failure that made the expected time of approach clear, and if the aircraft has notified the air traffic control service provider of the expected time of arrival overhead the destination prior to failure of the communication equipment, at the applicable expected time of arrival
 - (c) In the cases other than A and B, at the time when the required period of time has elapsed from the time of take off pursuant to the provisions of item (vii) of Article 203 (1).
- (iv) If in visual meteorological conditions and if it is difficult to land at the nearest airport etc while maintaining visual meteorological conditions (only in the cases where the flight is conducted under instrument flight rules), or when it is in instrument meteorological conditions and it has arrived overhead the destination prior to failure of the communication equipment, and if it has been instructed to wait at the applicable point by an instruction prior to failure, wait overhead the applicable point until the time listed as follows, and then commence descent (if it has not been possible to commence descent at the applicable time, commence descent as soon as possible).
 - (a) If the instruction prior to failure made clear the expected time of approach, the applicable time of approach
 - (b) If the expected time of approach was not made clear by the instruction prior to failure, and if the time that the next instruction was to be given was made clear, the applicable time
 - (c) In the cases other than A and B, at the time when the period of time has elapsed from the time of take off pursuant to the provisions of item (vii) of Article 203 (1).

(Method of flying for the aircraft approved pursuant to Article 97 (1) of the Act)
Article 207 Aircraft flying under the instrument flight rules shall, when flying

on an airway within control area or control zone, fly at the centerline of the applicable airway except for when there are unavoidable circumstances.

Article 208 Deleted

(Position reporting)

Article 209 The aircraft that should report its position to the Minister of Land, Infrastructure, Transport and Tourism pursuant to the provisions of Article 97 (1) of the Act shall report the following matters to air traffic control service provider or air traffic information provider, in the case of aircraft flying under the instrument flight rules at the point notified to be a reporting point by the Minister of Land, Infrastructure, Transport and Tourism through public notices and in the case of other aircraft at the point instructed by air traffic control service provider or air traffic information provider.

- (i) Registration mark or the radio call sign of the applicable aircraft
- (ii) Time and altitude at the applicable point
- (iii) The expected arrival time at the next reporting point (only applicable to aircraft that has been granted an approval pursuant to Article 97 (1) of the Act)
- (iv) Unforecast, special weather conditions
- (v) Other matters that affect the safe navigation of aircraft

(Aeronautical information)

Article 209-2 (1) Contents of aeronautical information shall be the matters listed below.

- (i) Matters pertaining to commencement, suspension, re-commencement or termination of provision of airport etc and air navigation facility, important changes to these facilities and matters pertaining to operation of these facilities
- (ii) Matters pertaining to problems for aircraft operations at airport etc
- (iii) Matters pertaining to prohibited areas for flight and restricted areas for flight pursuant to Article 173
- (iv) Method of flight pursuant to item (i) of Article 189 (1), weather conditions pursuant to item (ii) and item (iii) of the same paragraph, minimum altitude, specific point at an altitude above the minimum altitude and visually identifiable object pursuant to the provisions of item (iii) of the same paragraph, and matters pertaining to weather conditions pursuant to the provisions of Article 204.
- (v) Matters pertaining to air traffic control
- (vi) Matters that may affect the flight of aircraft such as launching of rocket or firework, flying aircraft in a group and others

- (vii) Information pertaining to weather and other information required for aircraft operation
- (2) Provision of aeronautical information shall be in writing or verbal (including via the radiotelephone), and matters required in relation to location of provision of aeronautical information and other matters pertaining to provision of aeronautical information shall be set out in public notices.

(Actions Likely to Affect Flight)

Article 209-3 (1) The acts that may affect a flight of aircraft pursuant to paragraph (1) of the Article 99-2 of the Act that are set out by specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism are as per the following items.

- (i) Launching of rocket, firework, rockoon or other items into an airspace specified in paragraph (1) of the Article 99-2 of the Act (if the applicable airspace is a control zone or information zone, it shall be limited to the airspace 150 meters or more above the land or water surface and airspace above the approach surface, transition surface or horizontal surface, or extended approach surface, conical surface or outer external horizontal surface specified by the Minister of Land, Infrastructure, Transport and Tourism pursuant to the provisions of paragraph (1) of the Article 56 of the Act).
- (ii) Release or floatation of a balloon (except for a toy balloon and those with structure of a toy) into the airspace set out in the preceding item.
- (iii) Flying a model aircraft within the airspace in item (i).
- (iv) Flying as a group within the airspace in item (i).
- (v) Flying a hang glider or paraglider within the airspace in item (i).
- (2) A person intending to obtain a permission under the proviso of paragraph (1) of the Article 99-2 of the Act shall submit a written application to the Minister of Land, Infrastructure, Transport and Tourism stating the following matters.
 - (i) Full name, address and contact
 - (ii) Purpose of the act
 - (iii) Details of the act and the time and location of the applicable act
 - (iv) Other matters for reference

Article 209-4 (1) The acts that may affect aircraft flight pursuant to paragraph (1) of the Article 99-2 that are set out by specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism are as per the following items.

- (i) Launching of rocket, firework, rockoon or other items into the following airspace among the airspaces specified in paragraph (2) of the Article 99-2 of the Act

- (a) Airspace above the approach surface, transition surface or horizontal surface, or extended approach surface, conical surface or outer horizontal surface specified by the Minister of Land, Infrastructure, Transport and Tourism pursuant to the provisions of paragraph (1) of the Article 56 of the Act
 - (b) Airspace 150 meters or more above the land or water surface within airways
 - (c) Airspace 250 meters or more above the land or water surface
 - (ii) Release or floatation of a balloon (except for a toy balloon and those with structure of a toy) into the airspace set out in the preceding item.
 - (iii) Flying a model aircraft within the airspace in item (i).
 - (iv) Flying as a group within the airspace in item (i).
 - (v) Flying a hang glider or paraglider within the airspace in item (i) (A).
- (2) A person intending to conduct the act of the preceding paragraph shall notify the Minister of Land, Infrastructure, Transport and Tourism the matters listed in items (i), (iii) and (iv) of paragraph (2) of the preceding Article.

Chapter VII Air Transport Services

Section 1 Air Transportation Services

(Approval for Business License)

Article 210 (1) Matters described in the operation plan under Article 100 paragraph (2) item (ii) of the Act shall be following matters.

- (i) Principal area of operation
- (ii) Nationality, type, and registration mark of each aircraft to be used
- (iii) Outline of facilities for operation control and maintenance of aircraft
- (iv) Type of each aircraft used to be performed operation control or maintenance in the facilities in the preceding item
- (v) Whether or not intending to engage in international air transport services
- (vi) Whether or not intending to engage in domestic scheduled air transport services
- (vii) Contents of countermeasures against acts of unlawful seizure of aircraft

(2) Matters related to the international air transport service specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 100 paragraph (3) of the Act shall be following matters.

- (i) In case intending to operate international air transport services with aircrafts operated for the scheduled service with fixed time and route, airports to be used for each route, frequency of flights, departure and arrival time, and type of each aircraft to be used.
- (ii) In case intending to operate joint transportation (which shall mean transportation operated jointly by any domestic air carrier with another air

carrier, and using the transportation service provided by such another air carrier) following the conclusion of agreement under the provision of Article 110 item (ii) with approval set forth in Article 111 paragraph (1), following matters:

- (a) Segment for joint transportation and name and address of the counterparty (in case the counterparty is a foreign air carrier, address and the location of principal office or agency's office in Japan).
 - (b) Procedure to provide information related to the contents of the joint transportation to passenger or shipper.
- (3) The documents describing the matters specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 100 paragraph (4) of the Act shall be as follows:
- (i) Documents describing following matters:
 - (a) Statement that the application concerned complies the criteria listed in the provisions of each item of Article 101 paragraph (1) of the Act.
 - (b) Financial plan describing total sum, breakdown and method of raising the capital necessary for the management of the service.
 - (c) In case where managing the domestic scheduled air transport service, the proposed commencement date of operation, proposed route and frequency of flights.
 - (d) Estimated volume of passenger and cargo.
 - (ii) In case of a corporation, the articles of incorporation, the certificate of the registry and the recent profit and loss statement, balance sheet and business report.

Article 210-2 The company specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 101 paragraph (1) item (v) (e) of the Act shall be the following company.

- (i) Holding company specified by the provision of Article 9 paragraph (5) item (i) of the Act on Prohibition of Private Monopolization and Maintenance of Fair Trade (Act No. 54 of 1947).
- (ii) The company which the ratio of total sum of acquisition value (or other value if it is so listed in the latest balance sheet) in order to obtain its subsidiary company's (meaning subsidiary companies prescribed in Article 2 paragraph (10) of the Act on Prohibition of Private Monopolization and Maintenance of Fair Trade and including those that shall be deemed to be subsidiary companies under Article 9 paragraph (4) of said Act; hereinafter the same shall apply in this item) share to the remaining value which total sum of said company's loan to said subsidiary company is deducted from value of total asset of said company is more than fifty to one hundred.

Article 210-3 (1) The Minister of Land, Infrastructure, Transport and Tourism shall issue the license (henceforth "a business license") describing following matters to a domestic air carrier, when he/she licenses in accordance with the provisions of Article 100 paragraph (1) of the Act.

(i) Name and address

(ii) Date of license

(iii) Matters listed in the provisions of Article 210 paragraph (1) item (i), (ii), (v) and (vi) (for the matters in item (ii), only for the type of aircraft to be used).

(2) Any domestic air carrier shall, when intending to make an application for issuing a renewal license in order to change any item mentioned, submit to the Minister of Land, Infrastructure, Transport and Tourism an application for issuing renewal business license describing following matters with the current license.

(i) Name and address

(ii) Date of license

(iii) Matter to be changed (indicating comparison of the current and the proposed).

(iv) Date of change

(3) Any domestic air carrier shall, when intending to make an application for reissuing a license because of lost, broken, or soiled, submit to the Minister of Land, Infrastructure, Transport and Tourism an application for reissuing business license describing following matters with the current license (except for lost).

(i) Name and address

(ii) Date of license

(4) Any domestic air carrier shall, when it has been disposed of revocation of business license under the provision of Article 119 of the Act, when it has closed its business, or when it has found its business license lost after receiving reissued, return the business license to the Minister of Land, Infrastructure, Transport and Tourism without delay.

(Inspection of Operating Facility etc.)

Article 211 Any person who will undergo an inspection of operating facility etc. in accordance with the provisions of Article 102 paragraph (1) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application for inspection of facilities, describing the following matters, ten days prior to the proposed date of inspection:

(i) Name and address

(ii) Proposed date for inspection

(iii) Location of facilities to be inspected.

(iv) Scheduled date for the commencement of operation.

Article 212 (1) Facilities required for safety of flight operation specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 102 paragraph (1) of the Act shall be as listed below.

(i) Facility for operation control of aircraft

(ii) Facility for maintenance of aircraft

(iii) Facility for training for those who are engaged in flight operation and maintenance of aircraft.

(iv) In addition to what is listed in item (i) through (iii) above, facilities specified as necessary for any domestic air carrier to carry out its business safely and precisely by the Minister of Land, Infrastructure, Transport and Tourism.

(2) Significant changes specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 102 paragraph (1) of the Act shall be as follows:

(i) Newly establishment or expansion of workplace included in the facilities listed in item (ii) in the preceding paragraph.

(ii) Change of facilities listed in item (i) through (iii) in the preceding paragraph because of addition of new type of aircraft to be used.

(iii) In addition to what is listed in item (i) and (ii) above, change of facilities specified as necessary for any domestic air carrier to carry out its business safely and precisely by the Minister of Land, Infrastructure, Transport and Tourism.

(Management Scale of any Domestic Air Carrier that establish the Safety Management Manual)

Article 212-2 Management scale specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 103-2 paragraph (1) of the Act shall be that the seating capacity of the aircraft used shall be 30 or more or maximum take-off weight of the aircraft shall be no less than 15 thousands kilograms.

(Notification of the Safety Management Manual)

Article 212-3 (1) Any person who will notify establishment of the safety management manual in accordance with the provision of the first sentence of Article 103-2 paragraph (1) shall submit the notification of establishment of the safety management manual describing following matters with the established safety management manual prior to the commencement day of operation.

(i) Name and address

- (ii) Proposed commencement date of operation
- (2) Any person who will notify change of the safety management manual in accordance with the provision of the second sentence of Article 103-2 paragraph (1) shall submit the notification of change of the safety management manual describing following matters with the safety management manual changed prior to the date of implement of the said manual.
 - (i) Name and address
 - (ii) The date of implement of the safety management manual changed.
 - (iii) The changed matter (indicating comparison of the current and the proposed)
 - (iv) Reasons which need change

(The Contents of the Safety Management Manual)

Article 212-4 As for the contents of the safety management manual specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 103-2 paragraph (2) of the Act, the matters listed in the upper column of the following table shall be specified in the lower column of the table.

Matters concerning policies for operations of services for ensuring transportation safety	<ul style="list-style-type: none"> (i) Matters related to basic policy (ii) Matters related to compliance with relevant laws, safety management manual and other rules and regulations for ensuring transportation safety (iii) Matters related to management
Matters concerning implementation of operations and its management system for ensuring transportation safety	<ul style="list-style-type: none"> (i) Matters related to organization (ii) Matters related to responsibility of the person in charge of management for ensuring transportation safety (iii) Matters related to authority and responsibility of a safety manager
Matters concerning implementation of operations and its management method for ensuring transportation safety	<ul style="list-style-type: none"> (i) Matters related to communication and co-ownership of information (ii) Matters related to consideration and implementation of preventive measures against accident etc. (iii) Matters related to correspondence in case of accident, disaster etc.

	(iv) Matters related to implementation of internal audit and other operation and confirmation of its management situation. (v) Matters related to education and training (vi) Matters related to preparation and management of documents for transportation safety (vii) Matters related to improvement of implementation and management of operation
Matters concerning appointment of a safety manager	Matters concerning method of appointment of a safety manager

(Requirements for a Safety Manager)

Article 212-5 The requirements specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 103-2 paragraph (2) item (iv) of the Act, shall be applicable to any of following items.

- (i) A person who has an experience of the enforcement or management of air transport service over three years, or the Minister of Land, Infrastructure, Transport and Tourism admitted as more than equivalent.
- (ii) A person except who is dismissed by the order by provision of Article 103-2 paragraph (7) of the Act, and has not passed two years yet since the day of a dismissal.

(Notification of an Appointment and a Dismissal of a Safety Manager)

Article 212-6 (1) Any person who intends to notify an appointment or dismissal of a safety manager under the provision of Article 103-2 paragraph (5) of the Act shall submit the notification of the appointment (dismissal) of the safety manager describing the following matters to the Minister of Land, Infrastructure, Transport and Tourism.

- (i) Name and address
 - (ii) Name and the date of birth of the safety manager appointed or dismissed.
 - (iii) Date of appointment or dismissal
 - (iv) In case of dismissal, the reason thereof.
- (2) The notification of the appointment of the safety manager set forth in the preceding paragraph shall be accompanied by the document which proves the appointed safety manager having the requirements specified in the preceding Article and being at the managing post with taking part in the important decision-making process on business operation.

(Application for Approval for Operation Manual and Maintenance Manual)

Article 213 Any person who will make an application for approval for

establishment or change of the operation manual or maintenance manual under the provisions of Article 104 paragraph (1) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application for approval for establishment (change) of operation manual or an application for approval for establishment (change) of maintenance manual, describing the following matters:

- (i) Name and address
- (ii) Operation manual or maintenance manual to be established or changed (in case of change, indicating comparison of the current and the proposed)
- (iii) Reason for needing change in case of the application for approval for change.

(An Operation Manual and a Maintenance Manual)

Article 214 Matters related to flight operation and maintenance of an aircraft which are specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 104 paragraph (1) of the Act shall be described in the left column of the following table, and the technical standard defined by Ordinances pursuant to the same Article paragraph (2) of the Act shall be in the right column of the same table for matters listed in the left column of the table respectively.

(i) Operation Manual	
(a) Procedures for performing operation control	Scope and content of duties performed by flight dispatcher including the determinations for whether departure of aircraft is appropriate or not, selection of route, determination of take-off and landing weight and others, shall be specified approximately according to the type of aircraft, characteristics of aerodrome, flight rules and route of flight, as well as weather conditions.
(b) Duties of flight crew and cabin crew (for duties of cabin crew, limited to the cases which cabin crew are on board the aircraft to perform operation)	Scope and content of duties performed by flight crew and cabin crew in each phase of pre-flight, in-flight and post-flight shall be clearly specified.
(c) Formation of flight crew and cabin crew (for formation of cabin crew, limited to the cases which cabin crew are on board the aircraft to perform operation)	Formation of flight crew shall be specified according to the type of aircraft, flight rules and route of flight, while formation of cabin crew shall be specified according to the type of aircraft, seating capacity or number of passengers on board.

<p>(d) Limits for flight crew and cabin crew assignment schedules and duty hours of flight dispatcher (for limits for cabin crew assignment schedules, limited to the cases which cabin crew are on board the aircraft to perform operation)</p>	<p>Flight crew assignment shall be made in accordance with the standards under Article 157-3, cabin crew assignment shall be specified, so as not to impede the competent performance of duties, and the duty hours of flight dispatcher shall be limited, taking frequency of operations into account, so as not to impede the competent performance of duties.</p>
<p>(e) Procedures for competence checks and training for flight crew, cabin crew and flight dispatcher (for procedures for competence checks and training for cabin crew, limited to the cases which cabin crew are on board the aircraft to perform operation)</p>	<p>Subjects, procedures for implementation and period (in case of training only), and qualifications required of persons who conduct competence checks or training shall be properly specified.</p>
<p>(f) Procedures to give experience and knowledge necessary for flight operation to flight crew</p>	<p>Corresponding to the route and flight segment, procedures to give flight crew experience and knowledge such as characteristics of aerodrome, procedures for flight operation, weather conditions and anything else necessary for operation of said route/segment shall be specified.</p>
<p>(g) Minimum weather conditions in which an aircraft may take-off or land</p>	<p>Minimum weather conditions for all aerodromes intended for use shall be specified corresponding to the type of aircraft, characteristics of aerodrome, state of air navigation facilities and pilot's knowledge and experience.</p>
<p>(h) Minimum flight altitude</p>	<p>Minimum flight altitude shall be specified such that an aircraft is able to maintain continuous radio contact with the ATC unit, taking into account the effects of navigational error and air turbulence, and in the case of a multi-engined aircraft, that it is able to land at any suitable aerodrome in case of the failure of one engine.</p>
<p>(i) Emergency procedures</p>	<p>Emergency procedures performed by flight crew, flight dispatcher, cabin crew and other staff in order to secure the safety of aircraft and passengers corresponding to each case of emergency such as engine failure, radio failure, interception, or emergency landing, and the location of emergency equipment on board aircraft, shall be clearly specified.</p>

(j) Operational procedures and performance limitations of aircraft	Operational procedures and performance limitations of aircraft shall be specified according to the degree of the pilot's familiarity with the aircraft, characteristics of aerodromes and meteorological conditions.
(k) Procedures for operation and inspection of aircraft	Procedures shall be specified in order that proper operation and inspection can be carried out in accordance with the type of aircraft.
(l) Standards for aircraft performance limitations in cases where components, parts, emergency equipments (hereinafter referred to as "components,etc.") are not used under normal circumstances.	Operational allowances shall be specified within the range of non-impedance of the safe operation of aircraft in cases where other components,etc. exist which can function in place of the said components, etc. or where the said components,etc. are not necessary for said operation of aircraft.
(m) Information concerning status of aerodromes, air navigation facilities, radio communication facilities and procedures for reporting of position	Information prepared shall be in conformity with the contents of Aeronautical Information Publications and shall be readily available to flight crew and flight dispatcher.
(n) Procedures for entrustment of service relating to the operation of aircraft (to be limited to the entrustment of service relating to the operation of aircraft)	Scope and description of works to be entrusted, method for managing to control the works performed by an entrustee and other procedures for entrustment shall be specified appropriately.
(ii) Maintenance manual	
(a) Duties of staff engaged in maintenance of aircraft	Status of assignments, scope and contents of duties, and shift changes including procedures for duty relief for staff having the qualifications of first-class aircraft maintenance technician, second-class aircraft maintenance technician, first-class aircraft line maintenance technician, second-class aircraft line maintenance technician, aircraft overhaul technician and other staff who engaged in the maintenance of aircraft, shall be clearly specified.
(b) Disposition of maintenance station and facilities and equipments at maintenance station	Selection of maintenance stations, classification of maintenance work carried out at said maintenance station and facilities and equipments necessary for maintenance work at said maintenance stations, shall be appropriate for the quality and quantity of aircraft maintenance work.

(c) Procedures for maintenance of airframes and equipments, etc.	Intervals and principal items of maintenance work shall be clearly specified within each of the categories of daily maintenance, scheduled maintenance and overhaul.
(d) Procedures for performing maintenance of airframes and equipments, etc.	Procedures shall be specified in order to perform the appropriate maintenance, in accordance with the technical guidelines for maintenance prepared by the manufacturers of airframes and equipments, etc.
(e) Maximum hours of use for equipments, etc.	Procedures for the establishment or alteration of limit operation hours for equipments, etc. shall be specified, based on the limit operation hours prescribed by the manufacturers of equipments, etc. and corresponding to the past record of their actual use.
(f) Procedures for preparation and custody of maintenance records.	Procedures shall be specified in order that the results of maintenance work are recorded accurately, corresponding to category classifications and the principal items of maintenance, and it shall be specified where the responsibility for the preparation and custody of said records lies.
(g) Standards for aircraft operational limitations in cases where equipments, etc. are not used under normal circumstances.	Operational allowances shall be specified within the range of non-impedance of the safe operation of aircraft in cases where other equipments, etc. exist which can function in place of the said equipments, etc. or where the said equipment, etc. are not necessary for said operation of aircraft.
(h) Procedure for training of staff engaged in maintenance work	Subjects, procedures and hours of training maintenance, and the qualifications for maintenance instructors, shall be properly specified.
(i) Procedures for entrustment of service relating to the maintenance of aircraft (to be limited to the entrustment of service relating to the maintenance of aircraft)	Scope and description of works to be entrusted, method for managing to control the works performed by an trustee and other procedures for entrustment shall be specified appropriately.

(Notification of Tariffs and Charges)

Article 215 Any person who will notify establishment or change of tariffs and charges under the provision of Article 105 paragraph (1) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an notification of establishment (change) of tariffs and charges describing the following matters:

(i) Name and address

- (ii) Classification, monetary value, period, segments and other applicable conditions of tariffs and charges proposed to be established or changed (in case of change, indicating a comparison between the current and the proposed.)

(An Application for Approval for Tariffs and Charges for International Air Transport Services)

Article 216 Any person who will make an application for approval for establishment or change of tariffs and charges for international air transport services under the provision of Article 105 paragraph (3) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application for approval for establishment (change) of tariffs and charges describing the following matters:

- (i) Name and address
- (ii) Classification, monetary value, period, segments and other applicable conditions of tariffs and charges which is going to be established (in case of the application for change, indicating a comparison between the current and the proposed.)
- (iii) Statement that tariffs and charges applied shall be conformed to the provisions of Article 105 paragraph (4) of the Act.
- (iv) Reason for needing change in case of the application for approval for change.

(Application for Approval for Conditions of Carriage)

Article 217 Any person who will make an application for approval for establishment or change of conditions of carriage in accordance with the provisions of Article 106 paragraph (1) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application for approval for establishment (change) of conditions of carriage, describing the following matters:

- (i) Name and address
- (ii) Conditions of carriage to be established or changed (in case of change, clearly indicating a comparison between the current and proposed conditions of carriage.)
- (iii) Reason for needing change in case of the application for approval for change.

(Description of Conditions of Carriage)

Article 218 Matters prescribed in the conditions of carriage under the provisions of Article 106 paragraph (1) of the Act shall be as follow:

- (i) Matters related to the receipt and refund of fares and charges.

- (ii) Matters related to ticketing
- (iii) Classifications and scope of cargo carried.
- (iv) Matters related to the receipt, delivery and custody of cargo.
- (v) Matters related to compensation for damage and other responsibilities.
- (vi) Other matters necessary for inclusion in the conditions of carriage.

(Flight Plan etc.)

Article 219 (1) Matters included in the Flight Plan under Article 107 paragraph (2) of the Act shall be following matters.

- (i) Airports to be used, operational frequency, departure/arrival times and type of aircraft used for each route respectively.
 - (ii) In case where flight operation is limited to specific season, season of operation.
 - (iii) In case where joint transportation is intended, following matters:
 - (a) Segment for joint operation and name and address of counterparty.
 - (b) Procedures to provide information related to the contents of the joint transportation to passenger or shipper.
- (2) Any person who will notify the flight plan in accordance with the provisions of Article 107 paragraph (2) of the Act shall submit a notification of establishment of the flight plan to the Minister of Land, Infrastructure, Transport and Tourism.
- (i) Name and address
 - (ii) Flight Plan
 - (iii) Proposed commencement date of operation.
- (3) Any person who will notify change of the flight plan in accordance with the provisions of Article 107-2 paragraph (2) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism the notification of change of the flight plan describing the following matters:
- (i) Name and address
 - (ii) Matters to be changed (indicating difference between the current and the proposed).
 - (iii) Proposed date of change.
- (4) The case where such change would not impede convenience of users as may be specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 107-2 paragraph (3) of the Act, shall be as follows:
- (i) The case where other domestic air carriers are expected to manage domestic scheduled air transport service for the route to be abolished.
 - (ii) The case where the Minister of Land, Infrastructure, Transport and Tourism admits that convenience of users would be secured with any transport services other than aviation.
- (5) Any person who will notify change of the flight plan related to abolishment of

the route in accordance with the provisions of Article 107-2 paragraph (3) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism the notification of change of the flight plan for abolishment of the route describing the following matters:

- (i) Name and address
 - (ii) Route to be abolished
 - (iii) Proposed date of abolishment.
 - (iv) Statement that the abolition concerned would not impede the convenience of users (only in case when the notification will not be submitted 6months prior to the proposed date of the abolishment)
- (6) The cases where such abolishment would not impede convenience of users as may be specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 107-2 paragraph (4) of the Act, shall be as listed (4) of this Article above.
- (7) Any person who will abolish domestic scheduled air transport services in accordance with the provisions of Article 107-2 paragraph (4) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism the notification of abolishment of the domestic scheduled air transport service describing following matters:
- (i) Name and address
 - (ii) Proposed date of abolishment
 - (iii) Statement that such abolishment would not impede any convenience of users (only in case for not to be notified 6 months prior to the proposed date of abolishment.)

(Special Exceptions pertaining to Congested Airport)

Article 219-2 (1) Airports specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 107-3 paragraph (1) of the Act are as stated in the upper column of the next table, as well as years defined by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to same Article as stated in the lower column of the same table for each airport listed in the upper column of the same table respectively.

Narita-New Tokyo International Airport	Five years
Kansai International Airport	Five years
Tokyo International Airport	Five years
Osaka International Airport	Five years

- (2) Any person who intends to obtain approval defined by Article 103-3 paragraph (1) of the Act in accordance with the provisions of the same Article paragraph (2) of the Act shall submit the Ministry of Land, Infrastructure, Transport and Tourism an application for the approval for flight operation

- using congested airports describing following matters:
- (i) Name and address
 - (ii) Flight plan for the route using the congested airports concerned
 - (iii) Proposed commencement date of the flight plan.
- (3) Any person who will make an application for approval for change of the flight plan defined by Article 103-3 paragraph (2) of the Act in accordance with the same Article paragraph (6) shall submit the Ministry of Land, Infrastructure, Transport and Tourism an application for approval for change of the flight plan using congested airports describing following matters.
- (i) Name and address
 - (ii) Matters to be changed (indicating difference between the current and the proposed).
 - (iii) Proposed commencement date of change of the flight plan.
- (4) The cases which would not impede convenience of users as may be specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 107-3 paragraph (8) of the Act shall be same as listed paragraph (4) of the preceding Article.
- (5) Any person who will abolish domestic scheduled air transport services using congested airports in accordance with the provisions of Article 107-3 paragraph (8) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism the notification of abolishment of the domestic scheduled air transport service using congested airports describing following matters:
- (i) Name and address
 - (ii) Proposed date of abolishment
 - (iii) Statement that such abolishment would not impede any convenience of users (only in case for not to be notified 6 months prior to the proposed date of abolishment).
- (6) In case of the provision of Article 107-3 paragraph (10) of the Act, the part of the flight plan of which the domestic air carrier specified in the same article above notifies in accordance with the provisions of Article 107-2 paragraph (1) (referred as "old flight plan" in this paragraph hereinafter), which is related to the route using the congested airport concerned, shall be regarded as the flight plan notified in accordance with the provisions of Article 103-3 paragraph (2) of the Act, then the domestic air carrier concerned shall be regarded to submit the notification stated that old flight plan should be changed to the flight plan without including the route using the congested airports concerned.
- (7) In case of the provision of Article 107-3 paragraph (11) of the Act, the domestic air carrier specified by the same paragraph above shall be regarded, when submitted the notification of the flight plan for Article 107-2 paragraph (1), to submit the notification stated that the flight plan concerned should be changed to the flight plan including the route using the congested airports

concerned in accordance with the provisions of Article 107-2 paragraph (2) of the Act, while not submitted the notification it shall be regarded to submit the notification of the flight plan for the route using the airports concerned in accordance with the same provisions as above.

(Change of an Operation Plan)

Article 220 Any person who will make an application for approval for change of operation plan in accordance with the provisions of Article 109 paragraph (1) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application for approval for the change of operation plan describing following matters:

- (i) Name and address
- (ii) Matters to be changed (indicating difference between the current and the proposed).
- (iii) Proposed commencement date of change of operation plan.
- (iv) Reasons which need change

Article 220-2 (1) Change of an operation plan by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 109 paragraph (3) of the Act shall be change as listed in the provisions of Article 210 paragraph (1) item (i), (iii) (only in case for abolishment of the usage of the specified airports), (iv) and (vi).

(2) Any person who intends to notify change of the operation plan shall submit the notification to the Minister of Land, Infrastructure, Transport and Tourism describing following matters:

- (i) Name and address
- (ii) Matters to be changed (indicating difference between the current and the proposed).
- (iii) Proposed commencement date of change of the operation plan.

(3) Change of an operation plan specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 109 paragraph (4) shall be change of matters as listed in Article 210 paragraph (1) item (ii) (except for addition of the type of aircraft to be used) and matters listed in item (vii) of the same paragraph, which the Minister of Land, Infrastructure, Transport and Tourism finds that there is no risk to affect the effect of countermeasures against acts of unlawful seizure of aircraft.

(4) Any person who intends to notify change of the operation plan under the preceding paragraph shall submit the ex post facto notification of change of the operation plan to the Minister of Land, Infrastructure, Transport and Tourism describing following matters:

- (i) Name and address

- (ii) Matters have been changed (indicating difference between the past and the current).
- (iii) The date of change

(Agreement about a Transportation)

Article 221 (1) Any person who will make an application for approval to conclude or change the agreement with another air carrier under the provision of Article 111 paragraph (1) shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application for approval for conclusion (change) of agreement describing following matters (except for the matters for item (ii) and (iii) in case of application for approval for change).

- (i) Name and address
 - (ii) Name and address of the counterparty of the agreement (in case the counterparty is a foreign air carrier, address and the location of principal office or agency's office in Japan).
 - (iii) In case there is an office to supervise the affairs concerned to the agreement, its name and location.
 - (iv) Outline of business being currently managed by the person concerned.
 - (v) Draft of the agreement to be concluded (in case of change, matters to be changed, the same shall apply hereinafter)
 - (vi) Effective date of the agreement to be concluded and duration
 - (vii) Reason to need conclusion or change of the agreement
- (2) An application set forth in the preceding paragraph shall, in case the agreement to be concluded is under the provision of Article 110 paragraph (1), be accompanied by the document showing the decrease of demand for air transportation service for the route to be jointly operated and financial statement for revenue and expenditure.
- (3) An application under the provision of paragraph (1) shall, in case written in any language other than Japanese, be accompanied by its translation.

(Report of Events which Affect Safety)

Article 221-2 The event defined by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 111-4 of the Act shall be the events as follows:

- (i) The accident listed under the each item of Article 76 paragraph (1) of the Act.
- (ii) Any danger defined under the provisions of Article 76-2 of the Act.
- (iii) Any following event which occurs during the flight.
 - (a) Any damage to the structure of the aircraft (except for the cases not to applicable to heavy repairing or light repairing listed in the table of Article 5-6)

- (b) Any event which any important system for safety installed in the aircraft does not function normally.
- (c) Any event which emergency equipments or first aid kits do not function normally.
- (d) Any events which an aircraft exceeds operating limitation or significantly deviates from the designated airway or altitude.
- (e) In addition to what are listed from (a) to (d) above, any other events which needs emergency operation or any urgent action to maintain safety of the flight.
- (iv) In addition to what are listed in the preceding three items, any damage to the structure of the aircraft, any trouble with emergency equipments, any wrong installation of the equipments or parts in the aircraft or any other event which affects normal flight operations of any aircraft.

Article 221-3 In accordance with the provisions of Article 111-4 of the Act, any domestic air carrier shall, when any event which is listed in the preceding Article occurs, report to the Minister of Land, Infrastructure, Transport and Tourism following matters without delay.

- (i) Name
- (ii) Nationality, registration mark, and type of the aircraft.
- (iii) Date, time and place where event to be reported occurs.
- (iv) Outline of the event to be reported and action taken against the event.
- (v) Any other matters to be referred.

(Release of Information on Transportation Safety by the Minister of Land, Infrastructure, Transport and Tourism)

Article 221-4 (1) The information on transportation safety defined by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 111-5 of the Act shall be following matters.

- (i) Matters related to the event reported in accordance with the provision of Article 111-4 of the Act.
 - (ii) Matters related to the disposition under the provisions of Article 112, Article 113-2 paragraph (3) or Article 119 of the Act (disposed only for the transportation safety) and any other action taken by the Minister of Land, Infrastructure, Transport and Tourism against any air carrier to maintain the transportation safety.
 - (iii) Matters related to national policy for air transport services to ensure transportation safety.
 - (iv) In addition to what are listed in the preceding three items, any matter related significantly to transportation safety.
- (2) Release under the provision of Article 111-5 of the Act shall be performed

through the appropriate means such as internet.

(Release of Safety Report by Domestic Air Carrier)

Article 221-5 (1) Release of safety report shall be performed within 6 months after the end of every business year.

(2) Release under the provision of Article 111-6 of the Act shall be performed through the appropriate means such as internet.

Article 221-6 Information on transportation safety specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 111-6 of the Act shall be as follows:

(i) Matters concerning basic policies for operations of services for ensuring transportation safety

(ii) Matters concerning implementation of operations and its management system for ensuring transportation safety.

(iii) Matters concerning report under the provision of Article 111-4.

(iv) Matters concerning measures taken or will be taken for ensuring transportation safety.

(Entrusted/Entrusting Operational Control)

Article 222 (1) Any person who will obtain approval for entrusted/entrusting operational control with regard to flight operations or maintenance of aircraft under the provisions of Article 113-2 paragraph (1) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application for approval for entrusted/entrusting operational control countersigned by both parties concerned, describing the following matters.

(i) Name and address (address and locations of domestic principal offices or agency's office for the person listed in Article 4 paragraph (1) item (i) to (iii) of the Act) of the entruster and the entrustee.

(ii) The description of operations to be entrusted and the method of implementation.

(iii) Statement that the application complies the criteria listed in the provision of each item of Article 113-2 paragraph (2).

(2) Application under the preceding paragraph shall be accompanied by the following documents.

(i) Copy of the contract of entrusted/entrusting operational control.

(ii) In case where the entrustee is a corporation, the articles of incorporation, the certificate of the registry and the recent profit and loss statement, balance sheet and business report (for foreign corporation, Articles of the incorporation or the equivalent documents and the recent profit and loss statement, balance sheet and business report or the equivalent documents)

- (iii) In case where the entrustee is a person as listed in Article 4 paragraph (1) item (i) through (iii) and also manages air transport service, the document that proves having permission of air transport service concerned from the foreign state where applicant has nationality.

(Transfer of Business and Application for Approval of Transfer of Business)

Article 223 (1) Any person who will make an application for approval for the transfer of a scheduled air transportation service in accordance with the provisions of Article 114 paragraph (1) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application for approval for transfer of scheduled air transport service, countersigned by both parties concerned, describing the following matters:

- (i) Name and address of transferor and transferee
- (ii) Remuneration arising from the said transference.
- (iii) Proposed date of transfer.
- (iv) Reasons which need the transfer
- (v) Statement that transferee complies the criteria listed in the provision of Article 101 paragraph (1) item (iii) and (v) of the Act.

(2) An application set forth in the preceding paragraph shall be accompanied by the following documents.

- (i) Copy of the contract of transfer.
- (ii) In case where the transferee is a corporation, the articles of incorporation, the certificate of the registry and the recent profit and loss statement, balance sheet and business report.
- (iii) In case where the transferor or transferee is a corporation, minutes of the resolution in shareholders meeting or general meeting of members related to the transfer, or agreement of members with unlimited liability or all members.

(Application for Approval for Corporate Merger and Demerger)

Article 224 (1) Any person who will apply for approval for corporate merger or demerger of a juridical person of who is a domestic air carrier in accordance with the provisions of Article 115 paragraph (1) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application for approval for merger of air carriers or approval for demerger of air carriers, countersigned by both parties (in case incorporation-type company split, signed by party) concerned, describing the following matters:

- (i) Names and addresses of both parties concerned and names of his/her representatives and officers.
- (ii) Method and conditions of merger or demerger
- (iii) Proposed date of merger or demerger

- (iv) Reasons which need merger or demerger
 - (v) Statement that the juridical person who continues to exist after the merger or is established by the merger, or the juridical person succeeds to air transport services upon demerger, complies with the criteria listed in the provisions of Article 101 paragraph (1) item (iii) and (v) of the Act.
- (2) An application set forth in the preceding paragraph shall be accompanied by the following documents.
- (i) Copy of the contract of merger and statement of the ratio of merger or copy of the contract of demerger (in case of incorporation-type company split, split plan) and statement of the ratio of demerger.
 - (ii) In case where a juridical person is established by the merger or the split, the articles of incorporation, statement of financial plan describing total sum, breakdown and method of raising the capital necessary for the management of the service.
 - (iii) In case where the juridical person who continues to exist after the merger or succeeds to air transport services upon demerger does not manage air transport service yet, the articles of incorporation, the certificate of the registry of the juridical person concerned and the recent profit and loss statement, balance sheet and business report.
 - (iv) Minutes of the resolution in shareholders meeting or general meeting of members related to the merger or demerger, or agreement of members with unlimited liability or all members.

(Application for Approval for Succession of Business by Heir)

- Article 225 (1) Any heir who will make an application for approval for the succession of air transportation service in accordance with the provisions of Article 116 paragraph (2) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application for approval for succession of air transportation service, describing the following matters:
- (i) Name and address
 - (ii) Relation to the ancestor
 - (iii) In case where there are other heirs in addition to the applicant, their names and addresses
 - (iv) Day of ancestor's death
 - (v) Statement that the applicant complies with the criteria listed in the provisions of Article 101 paragraph (1) item (iii) and (v) of the Act.
- (2) An application set forth in the preceding paragraph shall be accompanied by the following documents.
- (i) Copy of heir's family register
 - (ii) Agreement of all heirs other than the applicant for succession of the air transportation service by the applicant.

(Notification of Closure of Business)

Article 226 Any person who will notify closure of an air transportation service in accordance with the provisions of Article 118 of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism a notification of closure of air transportation service, describing the following matters:

- (i) Name and address
- (ii) Date of the closure

(Shares and Public Notice)

Article 226-2 (1) Shares specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 120-2 paragraph (1) of the Act shall be shares registered as which shall publish the price of buying or selling for over-the-counter transaction in accordance with the regulation of the Securities Dealers Association (that is the Securities Dealers Association defined by the provisions of Article 67 paragraph (1) of the Securities Exchange Act (Act No. 25 of 1948)).

(2) Public notice under Article 120-2 paragraph (2) shall be conducted after every shareholders meeting by means of the public notice defined by the article of incorporation.

(3) The rate defined by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 120-2 paragraph (2) proviso of the Act shall be 1/4.

Section 2 Aerial Work Services

(Application for Business License)

Article 227 (1) Matters described in the operation plan under the provisions of Article 100 paragraph (2) item (ii), as applied mutatis mutandis pursuant to Article 123 paragraph (2) shall be as follows:

- (i) Principal area of operation
- (ii) Nationality, type, and registration mark of each aircraft to be used.
- (iii) Outline of facilities for operation control and maintenance of aircraft.
- (iv) Type of each aircraft used to be performed operation control or maintenance in the facilities in the preceding item.
- (v) Contents of countermeasures against acts of unlawful seizure of aircraft.

(2) Documents describing matters specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 100 paragraph (4) as applied mutatis mutandis pursuant to Article 123 paragraph (2) shall be as follows:

- (i) Document describing following matters:

- (a) Statement that the application concerned complies the criterion listed in each item (except item (iv)) of Article 101 paragraph (1), as applied mutatis mutandis pursuant to Article 123 paragraph (2).
- (b) Financial plan describing total sum, breakdown and method of raising the capital necessary for the management of the service.
- (c) Estimated volume of handling classified by the types of contracts.
- (ii) In case of a corporation, the articles of incorporation, the certificate of the registry and the recent profit and loss statement, balance sheet and business report.

(Change of an Operation Plan)

Article 228 (1) Change of an operation plan specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 109 paragraph (3) as applied mutatis mutandis pursuant to Article 124, shall be the change of matters as listed in the preceding Article paragraph (1) item (i) and (iv).

(2) Change of an operation plan specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to Article 109 paragraph (4) as applied mutatis mutandis pursuant to Article 124, shall be the change of matters as listed in the preceding Article paragraph (1) item (ii) (except for addition of type of aircraft to be used) and matters listed in item (v) of the same paragraph, of which the Minister of Land, Infrastructure, Transport and Tourism finds that there is no risk to affect the effect of countermeasures against acts of unlawful seizure of aircraft.

(Application of Provisions for Air Transport Services)

Article 229 The provisions of Article 211, Article 212, Article 220, Article 220-2 paragraph (2) and (4), Article 221-2, Article 221-3 and the provisions of Article 223 to 226 shall apply accordingly to aerial work services. In this case, "the preceding paragraph" in Article 220-2 paragraph (2) shall be deemed to be replaced with "Article 228 paragraph (1)" as well as "the preceding paragraph" in the same Article paragraph (4) with "Article 228 paragraph (3)".

Chapter VIII Foreign Aircraft

(Application for Permission for Entry, Exit, etc. of Foreign Aircraft)

Article 230 Any person who intends to obtain permission set forth in Article 126 paragraph (1) or (2) of the Act shall submit an application to the Minister of Land, Infrastructure, Transport and Tourism describing following matters ten days prior to the scheduled date of the flight.

- (i) Name, address and nationality

- (ii) Nationality, type and registration mark of aircraft, and call sign of aircraft radio station
- (iii) Route of flight (indicating points of intermediate stops) and the date and the time of flight
- (iv) Purpose of flight
- (v) Names and qualifications of the pilot in command and flight crew.
- (vi) Names and nationalities of passengers, and purpose of trip
- (vii) Description of cargo loaded

Article 230-2 Any person who intends to obtain permission set forth in Article 126 paragraph (5) proviso of the Act shall submit an application to the Minister of Land, Infrastructure, Transport and Tourism describing following matters ten days (three days in case when transporting only individual(s) or officer(s) of any corporation to/from Japan with business purpose (including attending person(s))) prior to the scheduled date of landing or taking off.

- (i) Name, address and nationality
- (ii) Nationality, type and registration mark of aircraft, and call sign of aircraft radio station
- (iii) Name and the date and the time of an airport where intending to land or take off
- (iv) Reason to land at or take off from the concerned airport etc.
- (v) Route of flight
- (vi) Names and qualifications of the pilot in command and flight crew.
- (vii) Other matters that The Minister of Land, Infrastructure, Transport and Tourism deems necessary.

(Application for Permission for Use of Foreign Aircraft in Japan)

Article 231 Any person who intends to obtain permission set forth in Article 127 proviso of the Act shall submit an application to the Minister of Land, Infrastructure, Transport and Tourism describing following matters three days prior to the proposed commencement date of use of aircraft,

- (i) Name, address and nationality
- (ii) Nationality, type and registration mark of aircraft, and call sign of aircraft radio station
- (iii) Names and qualifications of the pilot in command and flight crew.
- (iv) Purpose of use
- (v) Details of operation program
- (vi) Area of operation (indicating airport etc. at which taking off or landing will be performed, and air routes when the flight is made along specified routes.)
- (vii) Proposed commencement date of operation and period of operation

(Munitions)

Article 231-2 Munitions specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to the Article 128 of the Act shall be weapons and ammunitions used for military.

Article 231-3 Any person who intends to obtain permission set forth in Article 128 of the Act shall submit an application to the Minister of Land, Infrastructure, Transport and Tourism describing following matters three days prior to the proposed date of operation.

- (i) Name, address and nationality
- (ii) Nationality, type and registration mark of aircraft, and call sign of aircraft radio station
- (iii) Description of names and quantities of munitions which will be transported
- (iv) Reason for the concerned transportation
- (v) Flight section for transport of the concerned munitions and the date and the time of flight

(Application for Approval for International Air Transport Services by Foreign Nationals)

Article 232 (1) Any person who intends to obtain permission set forth in Article 129 paragraph (1) of the Act shall submit an application to the Minister of Land, Infrastructure, Transport and Tourism describing following matters three months prior to the proposed commencement date of operation.

- (i) Name, address and nationality
- (ii) In case of a corporation, the names and nationalities of its representatives and officers.
- (iii) Names and locations of the principal office and other places of business premises in Japan.
- (iv) Amount of capital and ratio of amount of investment as classified by nationality of investors, and by state, public entity or private individuals.
- (v) Purpose of operating said international air transport services and the proposed commencement date of operation.
- (vi) Outline of air transport services, if any, being managed by the applicant at the time of application.
- (vii) Operation plan
 - (a) Origin, intermediate stops, destination and airports to be used along the routes, and distances between each point (indicating them on an air route map).
 - (b) Total number of aircrafts to be used, nationality, type, loading capacity of passengers and cargo, and registration marks of each aircraft, and call sign

- of each aircraft radio station.
 - (c) Frequency of service and schedule thereof (indicating them by a diagram).
 - (d) Outline of facilities for maintenance of aircraft and facilities for operation control
 - (e) Contents of countermeasures against acts of unlawful seizure of aircraft.
- (2) An application under the preceding paragraph shall be accompanied by following documents.
- (i) Document that proves having permission of air transport service on the concerned route from the foreign state where applicant has nationality.
 - (ii) In case of a corporation, the articles of incorporation or an equivalent document.
 - (iii) The recent profit and loss statement and a balance sheet
 - (iv) Conditions of Carriage

(Application for Approval for Tariffs and Charges)

Article 233 Any person who intends to obtain approval to establish or change tariffs and charges set forth in Article 129 paragraph (2) of the Act shall submit an application for approval to establish (or change) tariffs and charges to the Minister of Land, Infrastructure, Transport and Tourism thirty days prior to the proposed date of implementation.

- (i) Name, address and nationality
- (ii) Amount of fares or charges to be established or changed and basis of calculation (in case of change, indicating comparison of the current and the proposed).
- (iii) Effective Date
- (iv) In case of change of tariffs and charges, reasons thereof.

(Application for Approval for Change of Operation Plan)

Article 233-2 Any person who intends to obtain approval for change of operation plan under Article 129-3 paragraph (2) of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application describing the following matters forty-five days prior to the proposed date of operation in case of change in frequency of operation and when any type of aircraft in use is to be changed to the one considerably different in its loading capacity, thirty days prior to the proposed date of operation in case of change of airport etc. to be used and change of flight schedule (except temporary change), ten days prior to the proposed date of operation in case of change other than above.

- (i) Name, address and nationality
- (ii) Matters to be changed (indicating difference between the current and the proposed).
- (iii) Proposed effective date

(iv) Reason for change

(Notification of Change of Operation Plan)

Article 233-3 (1) Change for minor matters under Article 129-3 paragraph (2) proviso shall be as follows:

- (i) Temporary change (except for the case where it continues 10 days or more) of points of origin, points of intermediate stops or points of destination, and airport etc. to be used, which do not involve addition of new point, airport to be used and change of schedule time at the points in Japan
 - (ii) Change relating merely to total number of aircraft to be used, registration mark of each aircraft, and call sign of each aircraft, among the matters listed under Article 232 paragraph (1) item (vii) (b).
 - (iii) Matters listed in the Article 232 paragraph (1) item (vii) (e), of which the Minister of Land, Infrastructure, Transport and Tourism finds that there is no risk to affect the effect of countermeasures against acts of unlawful seizure of aircraft.
- (2) The provision of the Article 220-2 paragraph (2) shall apply accordingly to the notification of change of the operation plan in accordance with the provision of Article 129-3 paragraph (3) of the Act. In this case, the term "name and address" in Article 220-2 paragraph (2) item (i) shall be deemed to be replaced with "name, address and nationality".

(Application for Approval for Cabotage by Foreign Nationals)

Article 234 Any person who intends to obtain permission under Article 130 proviso of the Act shall submit to the Minister of Land, Infrastructure, Transport and Tourism an application describing following matters 10 days prior to the proposed date of transportation concerned.

- (i) Name, address and nationality
- (ii) Nationality, type and registration mark of aircraft, and call sign of aircraft radio station
- (iii) Name and nationality of passengers transported for remuneration.
- (iv) Description of names and quantity of cargo to be transported for remuneration.
- (v) Reason to transport passengers or cargo for remuneration.
- (vi) Flight section and flight schedule intended for the transportation of passengers or cargo for remuneration.

(Application for Permission for Transportation of Passengers, etc. Departing from or Arriving in Japan)

Article 234-2 Any person who intends to obtain permission under Article 130-2 of the Act shall submit to the Minister of Land, Infrastructure, Transport and

Tourism an application describing following matters at least ten days in case its office or agent is located in Japan (three days in case of transporting only individual(s) or officer(s) of any corporation to/ from Japan with business purpose (including attending person(s))), and at least thirty days in other cases, prior to the proposed date of flight.

(i) Name, address and nationality

(ii) Nationality, type and registration mark of aircraft, and call sign of aircraft radio station

(iii) Name and qualifications of pilot-in-command and flight crew (excluding the case where the person who wishes to obtain the permission is a foreign international air carrier, intending to operate an aircraft with its own flight crew).

(iv) Reason for the necessity of transportation concerned.

(v) Classification and amount of fares or charges for passengers or cargo

(vi) Route of flight (indicating points of intermediate stops), and flight section and schedule intended for transportation of passengers or cargo for remuneration

(vii) In case its office or agent is located in Japan, name and address thereof.

(viii) Other matters which the Minister of Land, Infrastructure, Transport and Tourism finds necessary.

(Approval for a Certificate etc.)

Article 235 (1) Any certification, licensing or other action, and qualification certificates and other documents thereof, made or issued by a foreign state, which are regarded, in accordance with the provisions under Article 131 of the Act, as an aircraft registration certificate under Article 6 of the Act, competence certification under Article 22 of the Act, competence certificate under Article 23 of the Act, aviation medical certification under Article 31 paragraph (1) of the Act, aviation medical certificate under paragraph (2) of the same Article, aviation English proficiency certification under Article 33 paragraph (1), or instrument flight certification under Article 34 paragraph (1) of the Act, shall be those made or issued by the foreign state (in case where an agreement under Article 83-2 of the Convention on International Civil Aviation exists between any foreign state of which the aircraft concerned has nationality and any other foreign state in which the user of the aircraft concerned has its address, limited to the foreign state designated to issue certification for the aircraft concerned, license and take any other action) which is a Contracting State adopting the standards, practices and procedures provided for in the annexes of the Convention on International Civil Aviation or those recognized as appropriate by the Minister of Land, Infrastructure, Transport and Tourism.

(2) In accordance with the provisions under Article 131 of the Act, any

certification, other actions and certificate concerned and other documents thereof (hereinafter "certification, etc." in this paragraph) of airworthiness, noise and engine emission of an aircraft, made or issued by a foreign state, which are regarded as airworthiness certification under Article 10 paragraph (1) of the Act or an airworthiness certificate under paragraph (7) of the same Article, shall be certification, etc. (in case of certification, etc. for noise level of the aircraft which has installed with turbo-jet engine or turbo-fan engine and its maximum takeoff weight is more than 34,000kgs, to be limited to certification, etc. in compliance with the standards and procedures specified by annex 16 volume I chapter III and Chapter IV to the Convention on International Aviation) made or issued by the foreign state (in case where an agreement under Article 83-2 of the Convention on International Civil Aviation exists between any foreign state of which the aircraft concerned has nationality and any other foreign state in which the user of the aircraft concerned has its address, limited to the foreign state designated to issue certification for the aircraft concerned, license and take any other action) which is a Contracting State adopting the standards, practices and procedures provided for in the annexes of the Convention on International Civil Aviation or those recognized as appropriate by the Minister of Land, Infrastructure, Transport and Tourism.

Article 235-2 Deleted

Article 235-3 Deleted

(Exception for Application Period)

Article 235-4 Application under the provisions of Articles 230, Article 230-2, Article 231, Article 231-3, Article 233-2 and Article 234-2 shall be deemed acceptable and valid even when it has been received after the expiration of the application period, if the Minister of Land, Infrastructure, Transport and Tourism in consideration of the circumstances involved, recognizes the reasons for the delay as being unavoidable due to urgent or other causes.

Chapter IX Miscellaneous Provisions

(Notification of an Air Transport Agent)

Article 236 (1) Pursuant to the provisions of Article 133 paragraph (1) of the Act, a person who intends to file a notification of operation of an air transport agent shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written notification of operation of an air transport agent stating the following matters, together with their agency contract.

(i) Full name and address

- (ii) If the person who is filing the notification is a cooperation, the full name of the representative and officers
 - (iii) The full name and address of the other party to the applicable agency contract
 - (iv) Name and address of the office or business site
 - (v) Summary of the applicable agency contract
 - (vi) If the person filing the notification is already running a business, outline of the business
 - (vii) The scheduled date of starting the operation
- (2) Pursuant to the provisions of the second sentence of Article 133 paragraph (1) of the Act, the person who intends to file a notification of change to the operation listed in each item of the preceding paragraph shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written notification of change of operation of an air transport agent stating the following matters.
- (i) Full name and address
 - (ii) The address and full name of the other party to the applicable agency contract
 - (iii) The matter that he/she intends to change and the reasons thereof
 - (iv) The scheduled date of change
- (3) Pursuant to the provisions of Article 133 paragraph (2) of the Act, the person who intends to file a notification of cessation of operation of an air transport agent shall submit to the Minister of Land, Infrastructure, Transport and Tourism a written notification of cessation of operation of an air transport agent stating the following matters.
- (i) Full name and address
 - (ii) The address and full name of the other party to the applicable agency contract
 - (iii) The reason why cessation was required
 - (iv) Date of cessation

Article 237 Deleted

(Notification)

Article 238 The person who is listed in the first column of the following table shall, when any of the case in the second column of the same table becomes applicable to him/her, report the matter to the Minister of Land, Infrastructure, Transport and Tourism without delay (within 10 days in the case of an airworthiness inspector who has lost the certificate of airworthiness inspector, within 10 days, within 30 days in the case of an airman or student pilot who has lost his/her competence certificate or aviation medical certificate or student pilot permit, within 10 days beforehand in the case of a provider of air

navigation radio facility or aeronautical lights intends to change the hours of operation of applicable facility), stating the matters listed below, full name, address and other required matters.

Person with Notification Obligation	The case where a notification is required	Notes
(i) Airworthiness inspector	If he/she loses his/her certificate of airworthiness inspector (except for when a reissue is applied for within 10 days pursuant to the provisions of Article 16-9)	The reason and time and date of loss
	When the fees are set or changed	(i) Accreditation number (ii) The type and amount of fees being set or changed
(ii) Provider of designated airman training school or a provider of flight dispatcher training school pursuant to the provisions of Article 29 paragraph (4) of the Act applied mutatis mutandis to Article 78 paragraph (4)	When the training manual is changed	
(ii)-2 Provider of aviation medical examination facility	When part of a medical examination is to be carried out by another medical facility etc, or when the applicable other medical facility etc is changed	(i) The date when it is to commence being carried out or the date when the applicable other medical facility is changed (ii) The full name of the applicable other medical facility etc and address
(ii)-3 Designated air carrier for assessment of aviation English proficiency	When the assessment manual is changed	

(iii) Airman or student pilot	If he/she loses his/her competence certificate or aviation medical certificate or student pilot permit (except for when a reissue is applied for within 30 days pursuant to the provisions of Article 71)	The reason and time and date of loss
(iv) Relatives living with an airman or student pilot	If an aircrew or student pilot has died or declared missing, and when there was a loss of his/her competence certificate or student pilot permit	
(v) Provider of airport etc	When management of an airport etc is contracted out or contracted in	(i) The date of contracting out or contracting in (ii) Full name of the other party
	When there is a change other than the changes listed in Article 85 in connection with an airport etc	The date of change
	When there is a change of name or address	The date of change
	In the case of a corporation or a firm, when there is a change of name, address of the main office, officers or employees or article of association or by law	The date of change
	When there is a change to the airport manual	The date of change
(vi) Provider of air navigation radio facility	When the management of air navigation radio facility is contracted out or contracted in	(i) The date of contracting out or contracting in (ii) Full name of the other party
	When there is a change to air navigation radio facility other than changes listed in Article 102 (other than the change of operating hours)	The date of change
	When intending to change the operating hours of air navigation radio facility	(i) Operating hours after change (ii) Scheduled date of change

	When there is a change of name or address	The date of change
	In the case of a corporation or a firm, when there is a change of name, address of the main office, officers or employees or article of association or bylaw	The date of change
(vii) Provider of Obstacle Lights	When an obstacle light is installed pursuant to the provisions of Article 51 paragraph (1) or (2) of the Act	(i) The date of installation (ii) Address and latitude and longitude of the installed object (iii) Type, height and altitude and height above sea level of installed object (iv) Diagram showing the position, type and quantity of installation
(viii) Provider of aeronautical lights	When the management of aeronautical lights is contracted out or contracted in	(i) The date of contracting out or contracting in (ii) Full name of the other party
	When there is a change to aeronautical lights other than changes listed in Article 120 (other than the change of operating hours)	The date of change
	When intending to change the operating hours of aeronautical lights	(i) Operating hours after change (ii) Scheduled date of change
	When there is a change of name or address	The date of change

	In the case of a corporation or a firm, when there is a change of name, address of the main office, officers or employees or article of association or bylaw	The date of change
	When there is a change to the aerodrome aeronautical light manual	The date of change
(ix) Provider of daytime obstacle markings	When a daytime obstacle marking is installed pursuant to the provisions of Article 51-2 paragraph (1) of the Act	(i) The date of installation (ii) Address and latitude and longitude of the installed object (iii) Type, height and altitude and height above sea level of installed object (iv) Diagram showing the method of installation
(x) Designated Japanese air carrier	When the training and assessment manual pursuant to Article 164-4 paragraph (2) is changed	The date of change
Domestic Air Carrier, Aerial Work Service Operator	When its name or address is changed.	The date of change

(Approval of Flight Simulator Device etc)

Article 238-2 A flight simulator device pursuant to the provisions of paragraph (3) of Article 158 and a flight simulator device and flight training device pursuant to paragraph (2) of Article 159, paragraph (2) of Article 160, paragraph (2) of Article 161, paragraph (3) of Article 164 (including the cases where it is applied mutatis mutandis to paragraph (2) of Article 164-2, Article 164-3 and paragraph (2) of Article 164-6), paragraph (4) of Article 164-10 (including the cases where it is applied mutatis mutandis to paragraph (2) of Article 164-11 and paragraph (2) of Article 164-12) and Appended Table 2 shall be the device that has been granted an accreditation from the Minister of Land, Infrastructure, Transport and Tourism.

(Identification Card of Inspector)

Article 239 The format of the identification card pursuant to Article 134 paragraph (3) of the Act shall be in accordance with Format 30.

(Written Application etc used for OCR)

Article 239-2 (1) A written application and written request pursuant to the provisions of the Ordinances that is to be subject to OCR (called "OCR written application etc" hereafter) shall conform to the standards of type of paper and printing as specified the Minister of Land, Infrastructure, Transport and Tourism.

(2) OCR written application etc shall not have suffered from folding damage or defaced.

(3) The method of completion of OCR written application etc shall be set out by public notices.

(Method of Payment of Fees Pertaining to Application through OCR Written Application etc)

Article 239-3 The payment of fees pertaining to an application or request through OCR written application etc shall be made by attaching fiscal stamps corresponding to the amount of applicable fees to a payment form (Format 31). However, pursuant to the provisions of Article 3 paragraph (1) of the Act on the Use of Information and Communications Technologies for Administrative Procedures (Act No. 151 of 2002), when making the applicable application or request using an electronic data processing system pursuant to the provisions of the same Article, payment may be made in cash when making a payment using the payment information obtained through making the applicable application or request.

(Delegation of Authority)

Article 240 (1) The following authorities of the Minister of Land, Infrastructure, Transport and Tourism pursuant to the provisions of the Act and the Ordinances shall be executed by the director of the Regional Civil Aviation Bureau.

(i) Airworthiness certification pursuant to the provisions of Article 10 paragraph (1) of the Act (except for first certification of the aircraft type that has not been granted type certification pursuant to the provisions of Article 12 paragraph (1) of the Act)

(ii) Approval pursuant to the provisions of the proviso of Article 11 paragraph (1) (including the cases where it is applied mutatis mutandis to paragraph (3) of the Article) (in the case of aircraft registered in Japan, limited to cases pertaining to the aircraft other than the aircraft that is used by a Japanese

- air carrier that operates air carrier business that is conducted using aircraft which exceeds 100 passenger seats or maximum take off weight of 50,000 kg (called "specified Japanese air carrier" hereafter and in Article 243 paragraph (1) Table 5 paragraphs), and in the case of aircraft registered in a foreign country, limited to cases pertaining to the aircraft which takes off and lands at the same airport etc)
- (iii) Approval pursuant to the provisions of Article 13-2 paragraph (1) and (3) of the Act
 - (iii)-2 Acceptance of notification pursuant to the provisions of Article 13 paragraph (5) of the Act as applied mutatis mutandis to Article 13-2 paragraph (5)
 - (iii)-3 The authority pursuant to the provisions of paragraph (1) and paragraph (2) of Article 13-3 (limited to cases pertaining to supplemental type design)
 - (iv) Approval pursuant to the provisions of the proviso of Article 11 paragraph (1) of the Act which is applied mutatis mutandis to Article 16 paragraph (3) and Article 19 paragraph (3) of the Act
 - (v) Inspection pursuant to the provisions of Article 16 paragraph (1) of the Act
 - (vi) Certification of spare parts pursuant to the provisions of Article 17 paragraph (1) of the Act
 - (vi)-2 Accreditation pursuant to the provisions of Article 20 paragraph (1) of the Act (except for the cases pertaining to a place of business that is applying for approval for the first time)
 - (vi)-3 Approval pursuant to the provisions of Article 20 paragraph (2) of the Act (except for the cases pertaining to an accredited place of business that is applying for approval for the first time)
 - (vii) Approval pursuant to the provisions of Article 28 paragraph (3) of the Act (in the case of a person who is on board as crew, limited to the cases pertaining to those that takes off and lands at the same airport etc)
 - (viii) Approval pursuant to the provisions of Article 35 paragraph (1) item (i) of the Act
 - (viii)-2 Designation pursuant to the provisions of Article 35 paragraph (1) item (iii) of the Act
 - (viii)-3 Designation pursuant to the provisions of Article 35-2 paragraph (1) item (iii) of the Act
 - (ix) Approval pursuant to the provisions of Article 38 paragraph (1) of the Act (limited to cases pertaining to heliport provided for public use (called "public heliport" hereafter), non-public aerodrome, air navigation facilities required to ensure safe take-offs and landings of aircraft at public heliport (called "air navigation facilities at public heliport") and air navigation facilities other than the air navigation facilities provided for public use (called "non-public air navigation facilities" hereafter))

- (x) Authority pursuant to the provisions of Article 39 paragraph (2) of the Act (including the cases where it is applied mutatis mutandis pursuant to Article 43 paragraph (2) of the Act and Article 55-2 paragraph (2) of the Act) (limited to cases pertaining to public heliport and non-public aerodrome)
- (xi) Approval pursuant to the provisions of the main clause of Article 41 paragraph (2) (limited to cases pertaining to public heliport and non-public aerodrome) and acceptance of notification pursuant to the provisions of the paragraph (3) of the Article
- (xii) Inspection pursuant to the provisions of Article 42 paragraph (1) of the Act (including the cases where it is applied mutatis mutandis pursuant to Article 43 paragraph (2))
- (xiii) Acceptance of notification pursuant to the provisions of Article 42 paragraph (3) of the Act (including the cases where it is applied mutatis mutandis pursuant to Article 43 paragraph (2) of the Act) (limited to cases pertaining to public heliport, non-public aerodrome, air navigation facilities of public heliport and non-public air navigation facilities)
- (xiii)-2 Acceptance of notification pursuant to the provisions of Article 42 paragraph (3) of the Act, as applied mutatis mutandis pursuant to Article 44 paragraph (5) of the Act (limited to cases pertaining to public heliport)
- (xiii)-3 Acceptance of notification pursuant to the provisions of Article 42 paragraph (3) of the Act, as applied mutatis mutandis pursuant to Article 44 paragraph (5) of the Act, as applied mutatis mutandis pursuant to Article 45 paragraph (2) of the Act
- (xiv) Approval pursuant to the provisions of paragraph (1) of Article 43 of the Act (limited to cases pertaining to public heliport, non-public aerodrome, air navigation facilities of public heliport and non-public air navigation facilities)
- (xiv)-2 Approval pursuant to the provisions of paragraph (1) of Article 44 of the Act (limited to cases pertaining to public heliport)
- (xv) Inspection pursuant to the provisions of Article 44 paragraph (4) of the Act (including the cases where it is applied mutatis mutandis pursuant to Article 45 paragraph (2))
- (xvi) Acceptance of notification pursuant to the provisions of paragraph (1) of Article 45 of the Act
- (xvii) Inspection pursuant to the provisions of Article 47 paragraph (2) of the Act
- (xviii) Authority pursuant to the provisions of Article 48 of the Act (limited to cases pertaining to public heliport, non-public aerodrome, air navigation facilities of public heliport and non-public air navigation facilities)
- (xix) Approval pursuant to the provisions of Article 49 paragraph (1) of the Act, as applied mutatis mutandis pursuant to Article 55-2 paragraph (2) and

- Article 56-3 paragraph (2) of the Act
- (xx) Authority pursuant to the provisions of Article 49 paragraph (2) of the Act, as applied mutatis mutandis pursuant to Article 55-2 paragraph (2) and Article 56-3 paragraph (3) of the Act
- (xxi) Authority pursuant to the provisions of Article 49 paragraph (3) of the Act, as applied mutatis mutandis pursuant to Article 55-2 paragraph (2) and Article 56-3 paragraph (3) of the Act
- (xxii) Approval pursuant to the provisions of the proviso of Article 51 paragraph (1) of the Act
- (xxii)-2 Acceptance of notification pursuant to the provisions of Article 54 paragraph (1) of the Act (limited to cases pertaining to public heliport and air navigation facilities for public heliport)
- (xxii)-3 Authority pursuant to the provisions of Article 54 paragraph (2) of the Act (limited to cases pertaining to public heliport and air navigation facilities for public heliport)
- (xxii)-4 Approval pursuant to the provisions of Article 54-2 paragraph (2) of the Act (limited to cases pertaining to public heliport)
- (xxiii) Approval pursuant to the provisions of Article 55 paragraph (1) of the Act (limited to cases pertaining to public heliport, non-public aerodrome, air navigation facilities of public heliport and non-public air navigation facilities)
- (xxiv) Acceptance of notification pursuant to the provisions of Article 55 paragraph (4) of the Act (limited to cases pertaining to public heliport, non-public aerodrome, air navigation facilities of public heliport and non-public air navigation facilities)
- (xxiv)-2 Approval pursuant to the proviso of Article 60 of the Act (in the case of equipment (excluding wireless telephone) pursuant to the provisions of Article 145 paragraph (1) and Article 147, limited to cases pertaining to the aircraft other than the aircraft used by specified Japanese air carrier (except for foreign aircraft))
- (xxiv)-3 Approval pursuant to the proviso of Article 61 paragraph (1) of the Act (limited to cases pertaining to the aircraft other than the aircraft used by specified Japanese air carrier (except for foreign aircraft))
- (xxiv)-4 The following authorities pertaining to persons other than persons belonging to specified Japanese air carrier
- (a) Accreditation pursuant to the provisions of Article 72 paragraph (1) of the Act
- (b) Assessment pursuant to the provisions of Article 72 paragraph (2), (3) and (8) of the Act
- (xxiv)-5 Designation pursuant to the provisions of Article 72 paragraph (5) of the Act (limited to cases pertaining to Japanese air carrier other than the

- specified Japanese air carrier)
- (xxiv)-6 Designation pursuant to the provisions of Article 72 paragraph (5) of the Act (limited to cases pertaining to Japanese air carrier other than the specified Japanese air carrier)
- (xxv) Approval pursuant to the provisions of the proviso of Article 79 of the Act
- (xxvi) Approval pursuant to the provisions of the proviso of Article 80 of the Act
- (xxvii) Approval pursuant to the provisions of the proviso of Article 81 of the Act
- (xxvii)-2 Approval pursuant to the provisions of the proviso of Article 82-2 of the Act
- (xxvii)-3 Approval pursuant to the proviso of Article 61 paragraph (1) of the Act (limited to cases pertaining to the aircraft other than the aircraft used by specified Japanese air carrier (except for foreign aircraft))
- (xxviii) Approval pursuant to the provisions of Article 84 paragraph (1) of the Act
- (xxix) Acceptance of notification pursuant to the provisions of the proviso of Article 89 of the Act
- (xxx) Approval pursuant to the provisions of Article 90 of the Act
- (xxxi) Approval pursuant to the provisions of the proviso of Article 91 paragraph (1) of the Act (limited to the case pertaining to aerobatic flight and aircraft that is intended for flight test)
- (xxxii) Approval pursuant to the provisions of the proviso of Article 92 paragraph (1) of the Act
- (xxxii)-2 Approval pursuant to the provisions of the proviso of Article 95 of the Act
- (xxxiii) Services pertaining to instruction pursuant to the provisions of Article 96 paragraph (1) and (2) of the Act and communication pursuant to the provisions of paragraph (3) of the same Article, pertaining to services of aerodrome control services, terminal and radar control services and ground controlled approach services.
- (xxxiii)-2 Authority pursuant to the provisions of Article 96 paragraph (1) and (2) of the Act (except for those listed in Article 242-2 paragraph (1) item (vii))
- (xxxiv) Acceptance of notification of flight plan pursuant to the provisions of Article 97 paragraph (2) and of the Act
- (xxxv) Acceptance of notification pursuant to the provisions of Article 98 of the Act (limited to cases pertaining to flight plan that has been notified pursuant to the provisions of Article 97 paragraph (2) of the Act)
- (xxxvi) Approval pursuant to the provisions of the proviso of Article 99-2 paragraph (1) of the Act
- (xxxvi)-2 Acceptance of notification pursuant to the provisions of Article 99-2

- paragraph (2) of the Act
- (xxxvii) The following authorities pertaining to air carrier services conducted by Japanese air carrier other than specified Japanese air carrier
- (a) Approval pursuant to the provisions of Article 100 paragraph (1) of the Act
 - (b) Inspection pursuant to the provisions of Article 102 paragraph (1) of the Act
 - (c) Acceptance of notification pursuant to the provisions of Article 103-2 paragraph (1) of the Act
 - (d) Authority pursuant to the provisions of Article 103-2 paragraph (3) of the Act
 - (e) Acceptance of notification pursuant to the provisions of Article 103-2 paragraph (5) of the Act
 - (f) Authority pursuant to the provisions of Article 103-2 paragraph (7) of the Act
 - (g) Approval pursuant to the provisions of Article 104 paragraph (1) of the Act
 - (h) Acceptance of notification pursuant to the provisions of Article 105 paragraph (1) of the Act
 - (i) Authority pursuant to the provisions of Article 105 paragraph (2) of the Act
 - (j) Approval pursuant to the provisions of Article 105 paragraph (3) of the Act
 - (k) Approval pursuant to the provisions of Article 106 paragraph (1) of the Act
 - (l) Acceptance of notification pursuant to the provisions of Article 107-2 paragraph (1) of the Act
 - (m) Acceptance of notification pursuant to the provisions of Article 107-2 paragraph (2) of the Act
 - (n) Acceptance of notification pursuant to the provisions of Article 107-2 paragraph (3) of the Act
 - (o) Acceptance of notification pursuant to the provisions of Article 107-2 paragraph (4) of the Act
 - (p) Authority pursuant to the provisions of Article 108 paragraph (2) of the Act
 - (q) Approval pursuant to the provisions of Article 109 paragraph (1) of the Act
 - (r) Acceptance of notification pursuant to the provisions of Article 109 paragraph (3) of the Act
 - (s) Acceptance of notification pursuant to the provisions of Article 109 paragraph (4) of the Act
 - (t) Acceptance of report pursuant to the provisions of Article 111-4 of the Act

- (u) Authority pursuant to the provisions of Article 112 of the Act
- (v) Approval pursuant to the provisions of Article 113-2 paragraph (1) of the Act
- (w) Approval pursuant to the provisions of Article 114 paragraph (1) of the Act
- (x) Approval pursuant to the provisions of Article 115 paragraph (1) of the Act
- (y) Approval pursuant to the provisions of Article 116 paragraph (2) of the Act
- (z) Acceptance of notification pursuant to the provisions of Article 118 of the Act
- (aa) Authority pursuant to the provisions of Article 119 of the Act
- (bb) Authority pursuant to the provisions of Article 125 paragraph (1) of the Act
- (xxxvii)-2 Approval pursuant to the provisions of Article 123 paragraph (1) of the Act
- (xxxvii)-3 Inspection pursuant to the provisions of Article 102 paragraph (1) of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act
- (xxxvii)-4 Authority pursuant to the provisions of Article 108 paragraph (2) of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act
- (xxxvii)-5 Approval pursuant to the provisions of Article 109 paragraph (1) of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act
- (xxxvii)-6 Acceptance of notification pursuant to the provisions of Article 109 paragraph (3) of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act
- (xxxvii)-6-2 Acceptance of notification pursuant to the provisions of Article 109 paragraph (4) of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act
- (xxxvii)-6-3 Acceptance of report pursuant to the provisions of Article 109 paragraph (4) of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act
- (xxxvii)-7 Authority pursuant to the provisions of Article 112 of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act
- (xxxvii)-8 Approval pursuant to the provisions of Article 114 paragraph (1) of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act
- (xxxvii)-9 Approval pursuant to the provisions of Article 115 paragraph (1) of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act
- (xxxvii)-10 Approval pursuant to the provisions of Article 116 paragraph (2) of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act
- (xxxvii)-11 Acceptance of notification pursuant to the provisions of Article 118 of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act

- (xxxviii) Authority pursuant to the provisions of Article 119 of the Act, as applied mutatis mutandis pursuant to Article 124 of the Act
- (xxxix) Authority pursuant to the provisions of Article 125 paragraph (1) of the Act, pertaining to aerial work services
- (xl) Approval pursuant to the provisions of the proviso of Article 127 (limited to cases pertaining to aircraft that takes off and lands at the same airport etc.)
- (xli) Acceptance of notification pursuant to the provisions of Article 133 paragraph (1) or (2), pertaining to domestic air transport services
- (xlii) Deleted
- (xliii) Deleted
- (xliv) Accreditation pursuant to the provisions of Article 14 paragraph (1)
- (xlv) Authority pursuant to the provisions of Article 35 item (iv) (except for the cases pertaining to a place of business that is applying for accreditation for the first time)
- (xlvi) Approval pursuant to the provisions of Article 38 paragraph (1)
- (xlvii) Deleted
- (xlviii) Deleted
- (xlix) Acceptance of application pursuant to the provisions of Article 42
- (l) Notification pursuant to the provisions of Article 45 paragraph (2)
- (li) Notification pursuant to the provisions of Article 47
- (lii) Acceptance of application pursuant to the provisions of Article 57
- (lii)-2 Acceptance of application pursuant to the provisions of Article 63
- (lii)-3 Acceptance of application pursuant to the provisions of Article 64
- (liii) Authority pursuant to the provisions of Article 127 paragraph (1) item (i) to (iv), item (vi), item (vii) and item (ix) to (xii) and paragraph (2) (including the cases where it is applied mutatis mutandis pursuant to Article 132-3 paragraph (2))
- (liv) Authority pursuant to the provisions of Article 128 item (vi)
- (lv) Deleted
- (lvi) Authority pursuant to the provisions of Article 132-2 paragraph (1)
- (lvii) Deleted
- (lviii) Deleted
- (lix) Authority pursuant to the provisions of Article 140
- (lx) Inspection pursuant to the provisions of the main paragraph of Article 152 paragraph (1)
- (lx)-2 Designation pursuant to the provisions of the proviso of Article 164-2 paragraph (1) of the Act (including the case where it is applied mutatis mutandis pursuant to Article 164-6 paragraph (3)) (limited to cases pertaining to Japanese air carrier other than the specified Japanese air carrier)
- (lxi) Acceptance of application pursuant to the provisions of Article 168

- (lxii) Notification pursuant to the provisions of Article 169 paragraph (2)
- (lxiii) Notification pursuant to the provisions of Article 170-2
- (lxiv) Approval pursuant to the provisions of Article 195 item (vii)
- (lxiv)-2 The following authorities pertaining to air carrier services conducted by Japanese air carrier other than specified Japanese air carrier
 - (a) Issuance of operating approval certificate pursuant to the provisions of Article 210-3 paragraph (1)
 - (b) Issuance of replacement of operating approval certificate pursuant to the provisions of Article 210-3 paragraph (2)
 - (c) Re-issuance of operating approval certificate pursuant to the provisions of Article 210-3 paragraph (3)
 - (d) Acceptance of return of operating approval certificate pursuant to the provisions of Article 210-3 paragraph (4)
- (lxv) Acceptance of notification pursuant to the provisions of Article 238 (limited to acceptance of notification pertaining to the paragraph on Table 5 in the same Article (limited to cases pertaining to public heliport and non-public aerodrome), acceptance of notification pertaining to paragraph of the Table 6 (limited to cases pertaining to air navigation facilities for public heliport and non-public air navigation facilities), acceptance of notification pertaining to paragraph of the Table 7, acceptance of notification pertaining to paragraph of the Table 8 (limited to cases pertaining to air navigation facilities for public heliport and non-public air navigation facilities), acceptance of notification pertaining to paragraph of the Table 9, acceptance of notification pertaining to paragraph of the Table 10 (limited to cases pertaining to Japanese air carrier other than a specified Japanese air carrier) and acceptance of notification pertaining to paragraph of the Table 11 (excluding cases pertaining to specified Japanese air carrier))
- (2) The following authorities of the Minister of Land, Infrastructure, Transport and Tourism pursuant to the provisions of the Act and the Ordinances may also be executed by the director of the Regional Civil Aviation Bureau.
 - (i) Authority pursuant to the provisions of Article 14-2 paragraph (1) and (2) of the Act
 - (ii) Authority pursuant to the provisions of Article 20 paragraph (5) of the Act
 - (iii) Authority pursuant to the provisions of Article 51 paragraph (6) of the Act (including the cases where it is applied mutatis mutandis pursuant to Article 51-2 paragraph (3))
 - (iv) Authority pursuant to the provisions of Article 52 paragraph (2) of the Act
 - (v) Authority pursuant to the provisions of Article 86-2 paragraph (2) of the Act
 - (vi) Authority pursuant to the provisions of Article 99 (except for those listed in Article 242-2 paragraph (1) item (xi))
 - (vii) Authority pursuant to the provisions of Article 134 paragraph (1) or (2) of

the Act

Article 240-2 (1) The director of the Regional Civil Aviation Bureau shall have the director of airport administrative office exercise the authority pursuant to paragraph (1) item (viii) and (xx) of the preceding Article, authority pursuant to item (xxiv)-2 of the same paragraph (limited to cases pertaining to wireless telephone and air traffic control transponder), authority pursuant to item (xxv) of the same paragraph (excluding cases pertaining to aircraft provided for use in air transport service and rotorcraft that intends to take off from or land on a ship or building), authority pursuant to item (xxvii) of the same paragraph (excluding cases pertaining to aircraft provided for the purpose of air transport service, aircraft intending to fly under instrument flight rules or at night and rotorcraft intending to transport an object by attaching it to the exterior of the aircraft, suspending it or towing it), authority pursuant to item (xxvii)-2 and item (xxix) of the same paragraph, authority pursuant to item (xxxii) of the same paragraph (limited to cases pertaining to aircraft intending on conducting an aircraft test flight under visual flight rules within the air traffic control zone during daytime), authority pursuant to item (xxxii) of the same paragraph (limited to cases pertaining to aircraft intending on conducting a pilot training flight under visual flight rules within the air traffic control zone during daytime), authority pursuant to item (xxxvi) of the same paragraph (limited to cases pertaining to persons who intend to engage in an action pertaining to air traffic control zone and positive control airspace within the connected approach control area and air traffic information zone), and authority pursuant to items (xxxvi)-2, (xxxvii)-U, (xxxvii)-11, (xli) and (lxiv)-2-D of the same paragraph.

(2) The director of the Regional Civil Aviation Bureau shall have the director of airport administrative office and the director of airport branch office (including director of airport / airway surveillance radar administrative office, also applicable below) exercise the authority pursuant to paragraph (1) item (xxxii)-2 to (iiiv) of the preceding Article and the authority pursuant to paragraph (2) item (vi) of the preceding Article.

(3) The authority pursuant to paragraph (2) item (v) and (vii) of the preceding Article may also be exercised by the director of airport administrative office.

Article 241 In the Ordinances, the term "the Minister of Land, Infrastructure, Transport and Tourism" shall be deemed to be replaced with the words in the second column of the Table when being listed in the first column of the Table.

(i) In the case where the authority pertaining to the applicable matter is exercised by the director of the Regional Civil Aviation Bureau pursuant to the provisions of Article 240 paragraph (1)	The director of the Regional Civil Aviation Bureau
(ii) In the case where the authority pertaining to the applicable matter can also be exercised by the director of the Regional Civil Aviation Bureau pursuant to the provisions of Article 240 paragraph (2)	The Minister of Land, Infrastructure, Transport and Tourism or director of the Regional Civil Aviation Bureau
(iii) In the case where the authority pertaining to the applicable matter is exercised by the director of director of airport administrative office pursuant to the provisions of paragraph (1) or (2) of the preceding Article	The director of airport administrative office
(iv) In the case where the authority pertaining to the applicable matter can also be exercised by the director of airport administrative office pursuant to the provisions of paragraph (3) of the preceding Article	The Minister of Land, Infrastructure, Transport and Tourism, director of the Regional Civil Aviation Bureau, or director of airport administrative office
(v) In the case where the authority pertaining to the applicable matter is exercised by the director of airport branch office pursuant to the provisions of paragraph (2) of the preceding Article	The director of airport branch office

Article 242 The authority listed in the first column of the following table is exercised by the director of the Regional Civil Aviation Bureau, director of airport administrative office, or director of airport branch office, as listed in the first column of the same table.

(i) The authority pursuant to Article 240 paragraph (1) item (i), (iii), (iii)-2, (v) to (vi)-3, (ix) to (xix), (xxi) to (xxiv), (xliv) to (xlvi), (liii), (liv), (lvi) and (lx), and authority pursuant to item (lxv) of the same paragraph (excluding the acceptance of notification pertaining to Article 238 paragraphs in Table 10 and 11)	The director of the Regional Civil Aviation Bureau with jurisdiction over the location of the applicable place of business, airport etc, air navigation facility or property
---	--

<p>(ii) The authority pursuant to paragraph (1) item (ii), (iv) and (vii), authority pursuant to item (xxiv)-2 of the same paragraph (excluding the cases pertaining to wireless telephone and air traffic control transponder), authority pursuant to item (xxiv)-3 of the same paragraph, authority pursuant to item (xxv) of the same paragraph (limited to cases pertaining to aircraft provided for use in air transport service and rotorcraft that intends to take off from or land on a ship or building), authority pursuant to item (xxvi) of the same paragraph, authority pursuant to item (xxvii) of the same paragraph (limited to cases pertaining to aircraft provided for the purpose of air transport service, aircraft intending to fly under instrument flight rules or at night and rotorcraft intending to transport an object by attaching it to the exterior of the aircraft, suspending it or towing it), authority pursuant to item (xxviii) and (xxx) of the same paragraph, authority pursuant to item (xxxii) of the same paragraph (excluding cases pertaining to aircraft intending on conducting a pilot training flight under visual flight rules within the air traffic control zone during daytime), authority pursuant to item (xxxvi) of the same paragraph (excluding cases pertaining to persons who intend to engage in an action pertaining to air traffic control zone and positive control airspace within the connected approach control area and air traffic information zone), and authority pursuant to items (xl) and (lxiv) of the same paragraph</p>	<p>The director of the Regional Civil Aviation Bureau with jurisdiction over the location where the action requiring an applicable approval is required is intended to take place</p>
<p>(iii) Authority pursuant to Article 240 paragraph (1) item (xxiv)-4 to (xxiv)-6, authority pursuant to item (xxxvii) of the same paragraph (excluding cases pertaining to Z in the same item), authority pursuant to item (xxxvii)-2 to (xxxvii)-10 of the same paragraph, item (xxxviii), item (xxxix) and item (lx)-2, authority pursuant to item (lxiv)-2 of the same paragraph (excluding cases pertaining to D in the same item), and authority pursuant to item (lxv) of the same paragraph (limited to cases pertaining to acceptance of notification pertaining to paragraph in Table 10 of Article 238 and 11)</p>	<p>The director of the Regional Civil Aviation Bureau with jurisdiction over the address of the person who intends to operate the applicable service or the person who operates the service</p>

<p>(iv) Authority pursuant to Article 240 paragraph (1) item (iii)-3, (viii)-2, (viii)-3, (xxvii)-3, (xlix) to (lii)-3, (lix) and (lxi) to (lxiii)</p>	<p>The director of the Regional Civil Aviation Bureau with jurisdiction over the address of the person who intends to be granted the applicable designation, applicable approval, applicable certification or change of rating on applicable certification, the person who has been granted the applicable type certification, or the owner of the applicable aircraft</p>
<p>(v) Authority pursuant to Article 240 paragraph (1) item (viii)</p>	<p>The director of airport administrative office with jurisdiction over the address of the person intending to be granted the applicable approval</p>
<p>(vi) Authority pursuant to Article 240 paragraph (1) item (xx)</p>	<p>The director of airport administrative office with jurisdiction over the location of the applicable airport etc</p>
<p>(vii) Authority pursuant to Article 240 paragraph (2) item (iv)</p>	<p>The director of the Regional Civil Aviation Bureau or the director of airport administrative office with jurisdiction over the location of the intended take-off</p>

<p>(viii) Authority pursuant to Article 240 paragraph (1) item (xxiv)-2 (limited to cases pertaining to wireless telephone and air traffic control transponder), authority pursuant to item (xxv) of the same paragraph (excluding cases pertaining to aircraft provided for use in air transport service and rotorcraft that intends to take off from or land on a ship or building), authority pursuant to item (xxvii) of the same paragraph (excluding cases pertaining to aircraft provided for the purpose of air transport service, aircraft intending to fly under instrument flight rules or at night and rotorcraft intending to transport an object by attaching it to the exterior of the aircraft, suspending it or towing it), authority pursuant to item (xxvii)-2 and item (xxix) of the same paragraph, authority pursuant to item (xxxii) of the same paragraph (limited to cases pertaining to aircraft intending on conducting an aircraft test flight under visual flight rules within the air traffic control zone during daytime), authority pursuant to item (xxxii) of the same paragraph (limited to cases pertaining to aircraft intending on conducting a pilot training flight under visual flight rules within the air traffic control zone during daytime), authority pursuant to item (xxxvi) of the same paragraph (limited to cases pertaining to persons who intend to engage in an action pertaining to air traffic control zone and positive control airspace within the connected approach control area and air traffic information zone), and authority pursuant to item (xxxvi)-2</p>	<p>The director of airport administrative office with jurisdiction over the location where the action requiring an applicable approval, notification or reporting is required is intended to take place</p>
<p>(ix) Authority pursuant to Article 240 paragraph (1) item (xxxii)-2</p>	<p>The director of airport administrative office with jurisdiction over the air traffic control zone where the action requiring an applicable approval (if there is a director of airport branch office at the airport to which the applicable control zone is designated, the applicable director if airport branch office)</p>
<p>(x) Authority pursuant to Article 240 paragraph (1) item (xxxiv) and (xxxv)</p>	<p>One of the director of airport administrative office or director of airport branch office</p>

(xi) Authority pursuant to Article 240 paragraph (1) item (xxxvii)Z, item (xxxvii)-11, (xli) and (lxiv)-2D	The director of airport administrative office who has the jurisdiction over the address of the person who intends to operate the applicable service or the person who operates the service
--	--

- Article 242-2 (1) The following authorities of the Minister of Land, Infrastructure, Transport and Tourism pursuant to the provisions of the Act and the Ordinances shall be executed by the director of the Air Traffic Control Center.
- (i) Approval pursuant to the provisions of the proviso of Article 94 of the Act
 - (ii) Approval pursuant to the provisions of the proviso of Article 94-2 paragraph (1) of the Act
 - (iii) Authority pursuant to the provisions of Article 95-2 paragraph (1) and (4) of the Act
 - (iv) Approval pursuant to the provisions of Article 95-3 of the Act
 - (v) Services in connection with instruction pursuant to the provisions of Article 96 paragraph (1) of the Act and communication pursuant to the provisions of paragraph (3) of the same Act pertaining to airways control services
 - (vi) Services in connection with instruction pursuant to the provisions of Article 96 paragraph (1) of the Act and communication pursuant to the provisions of paragraph (3) of the same Act pertaining to approach control services
 - (vii) The authority pursuant to the provisions of Article 96-2 paragraph (1) and (2) of the Act (limited to cases in connection with provision of air traffic information conducted in connection with airways control service or approach control service)
 - (viii) Approval pursuant to the provisions of Article 97 paragraph (1) of the Act
 - (ix) Acceptance of report pursuant to the provisions of Article 97 paragraph (4) of the Act
 - (x) Acceptance of notification pursuant to the provisions of Article 98 of the Act (limited to cases pertaining to flight plan that has been approved pursuant to the provisions of Article 97 paragraph (1) of the Act)
 - (xi) Authority pursuant to the provisions of Article 99 (limited to cases in connection with provision of air traffic information by wireless telephone conducted in connection with airways control service or approach control service)
- (2) The director of the Air Traffic Control Center may delegate the authority

listed in item (i) to (vi) and item (viii) to (x) of the preceding paragraph to the director of airport administrative office.

(3) The director of the Air Traffic Control Center may delegate the authority listed in item (vii) and (xi) of paragraph (1) to the director of airport administrative office or the director of airport branch office.

(Application Route etc)

Article 243 (1) A person who intends to apply, notify, report or register (called 'apply etc' hereafter) to the Minister of Land, Infrastructure, Transport and Tourism under the provisions of the Act of the Ordinances may do so via the director of airport administrative office or the director of airport branch office as specified below.

Application etc	The director of airport administrative office or the director of airport branch office
(i) Application etc pursuant to the provisions of Chapter V of the Act and pursuant to the provisions of the Ordinances pertaining to the provisions of the same Chapter of the Act	The director of airport administrative office with jurisdiction over the location of the applicable airport etc or air navigation facility
(ii) Application etc pursuant to the provisions of Article 76 and Article 76-2 of the Act and the ordinances pertaining to the provisions thereof	The director of nearest airport administrative office or director of the nearest airport branch office
(iii) Application etc pursuant to the provisions of Article 79, 81, 82-2, 89, 90, 91 paragraph (1), 92 paragraph (1) and 99-2 paragraph (1) of the Act and the Ordinances pertaining to the provisions thereof	The director of the airport administrative office with jurisdiction over the location where the action requiring the applicable application etc is required is intended to take place or the director of the nearest airport branch office
(iv) Report pursuant to the provisions of Article 97 paragraph (1)	The director of airport administrative office or director of the airport branch office (if reporting during flight, the director of nearest airport administrative office or director of nearest airport branch office)

(v) Application etc pursuant to the provisions of Article 100 paragraph (2) of the Act, Article 102 paragraph (1) of the Act, Article 103-2 paragraph (1) and (5) of the Act, Article 104 paragraph (1) of the Act, Article 105 paragraph (1) and (3) of the Act, Article 106 paragraph (1) of the Act, Article 107-2 of the Act, Article 109 paragraph (1), (3) and (4) of the Act, Article 111-4 of the Act, Article 113-2 paragraph (1) of the Act, Article 114 paragraph (1) of the Act, Article 115 paragraph (1) and (3) of the Act and Article 116 paragraph (2) of the Act, and Ordinances pertaining to the provisions thereof (excluding those pertaining to specified Japanese air carrier) and Article 123 paragraph (2) of the Act and Article 124 paragraph of the Act and Ordinances pertaining to the provisions thereof and Article 238 Table 11 paragraph.	The director of airport administrative office with jurisdiction over the address of the person who intends to operate the applicable service or the person who operates the service
--	---

(2) A person who intends to apply etc to the director of airport administrative office pursuant to the provisions of the Act may do so via the director of airport administrative office or the director of airport branch office as specified below.

Application etc	The director of airport administrative office or the director of airport branch office
(i) Application etc pursuant to the provisions of Article 79, 81, 82-2, 89, 91 paragraph (1), 92 paragraph (1) of the Act and the Ordinances pertaining to the provisions thereof	The director of airport administrative office with jurisdiction over the location of the intended take-off or the director of airport branch office which is located at the place of intended take-off
(ii) Application pursuant to the provisions of Article 99-2 paragraph (2) of the Act	The director of the nearest airport administrative office or the director of the nearest airport branch office

(3) A person who intends to apply etc to the director of the Air Traffic Control Center pursuant to the provisions of the Act may do so via the director of airport administrative office or the director of airport branch office as specified below.

Application etc	The director of airport administrative office or the director of airport branch office
(i) Application pursuant to the provisions of the proviso of Article 94 and 94-2 paragraph (1) of the Act	The director of airport administrative office with jurisdiction over the location of the intended take-off or the director of airport branch office which is located at the place of intended take-off

(ii) Report pursuant to the provisions of Article 97 paragraph (1) of the Act	The director of airport administrative office or director of the airport branch office (if reporting during flight, the director of nearest airport administrative office or director of nearest airport branch office)
(iii) Report pursuant to the provisions of Article 97 paragraph (4) of the Act	The director of nearest airport administrative office or director of the nearest airport branch office
(iv) Notification pursuant to the provisions of Article 98	The director of airport administrative office with jurisdiction over the location of landing or the director of airport branch office which is located at the place of islanding

(4) A person intending to file a report to the director of the Air Traffic Control Center pursuant to the provisions of Article 95-3 of the Act during flight shall be able to report via the head of the agency to which a reporting is mandated pursuant to the provisions of Article 202-4.

Supplementary Provisions

- (1) This ministerial ordinance shall be applied from the day of promulgation and shall be applied from the day of the Act enforcement. (July 15, 1952).
- (2) The matters defined by the ministry of transport in paragraph (10) of the items in the supplementary provision of the Act are as follows:
- (i) Purpose for the establishment of the airport
 - (ii) Types and classifications of the aerodrome
 - (iii) The scope of the aerodrome
 - (iv) A summary of the aerodrome facility
 - (v) The landing zone
 - (vi) The approach area
 - (vii) The slope of approach surface
 - (viii) Horizontal surface radius
 - (ix) The date to commence the airport service.
- (3) The item (xii) in paragraph (1) of Article 241 shall not be applied to the Nartita airport for the time being.

Appended form (Re: Paragraph (6) of the supplementary provision)

Appended table 1

Removed

Appended table 2 (Re: Art. 42 and 43)

Qualification or certification	Flying career or other careers
Airline transport pilot	<p>1 When applying for the skill certification for an aeroplane</p> <p>A person must have at least 1500 hours of flight hours (Time to navigate an aircraft as a pilot. The same shall apply herein after) including the following flights by aeroplane (If a person has time to have operated a simulated flight or flight training device according to the procedure specified by the minister of land, infrastructure and transportation ("simulated flight hours" herein after), such hours can be included in the flight hours (up to 100 hours, but 25 hours for the flight training system operation)) (If a person has a pilot qualification for an aeroplane, a half of the flight hours as other than pilot-in-command by airplane (up to 50 hours for a private pilot) can be included, and if a person has a pilot qualification for a glider, rotorcraft, or airship, one third of the flight hours or 200 hours (fewer one shall be applied) as a pilot-in-command can be included).</p> <p>(a) At least 250 hours of flight hours as a pilot-in-command including at least 100 hours of open air flight (If a person has flight hours as an apprentice under the supervision of a pilot-in-command, such hours can be included (Maximum of 150 hours))</p> <p>(b) At least 200 hours of open air flight (flight hours of rotorcraft or airship can be included up to 50 hours. However, flight hours of an airship can be included up to 25 hours only)</p> <p>(c) At least 100 hours of night flight (flight hours of a rotorcraft or an airship can be included up to 40 hours. However, flight hours of an airship can be included up to 20 hours only)</p> <p>(d) At least 75 hours of instrument flight (Simulated flight hours can be included up to 30 hours)</p> <p>2 When applying for the skill certification for a rotorcraft</p> <p>A person must have at least 1,000 hours of flight hours including the following flights by rotorcraft (If a person has simulated flight hours, such hours (up to 100 hours, but 25 hours for the flight training device) can be included) (If a person has a pilot qualification for rotorcraft, a half of the flight hours as other than pilot-in-command by rotorcraft can be included (up to 50 hours for a private pilot), and if a person has a pilot qualification for aeroplane, glider, or airship, the flight hours as a pilot by aeroplane (a half of the flight hours for the flight as other than pilot-in-command (up to 50 hours for a private pilot)) or 200 hours (fewer one shall be applied), or one third of the flight hours as a pilot-in-command by glider or airship or 200 hours (fewer one shall be applied) can be included).</p>

	<p>(a) At least 250 hours of flight as a pilot-in-command including at least 100 hours of open air flight (If a person has flight hours as an apprentice under the supervision of a pilot-in-command, such hours can be included (up to 150 hours))</p> <p>(b) At least 200 hours of open air flight (Up to 50 hours of an aeroplane or an airship flight can be included. However, flight of an airship can be included up to 25 hours only)</p> <p>(c) At least 50 hours of night flight (Up to 20 hours of an aeroplane or an airship flight can be included. However, flight of an airship can be included up to 10 hours only)</p> <p>(d) At least 30 hours of instrument flight (If a person has simulated flight hours, such hours can be included (up to 10 hours)) (Including simulated instrument flight. The same shall apply in this table.) (Up to 10 hours of aeroplane flight can be included)</p> <p>3 When applying for the skill certification for an airship A person must have at least 1,000 hours of flight hours including the following flights by airship (If a person has simulated flight hours, such hours (up to 100 hours, but 25 hours for the flight training system) can be included) (If a person has a pilot qualification for airship, a half of the flight hours as other than pilot-in-command by airship can be included (up to 50 hours for a private pilot), and if a person has a pilot qualification for aircraft, glider, or rotorcraft, the flight hours as a pilot by aeroplane (a half of the flight hours for the flight a sub-pilot (up to 50 hours for a private pilot)) or 200 hours (fewer one shall be applied), or one third of the flight hours as a pilot-in-command by glider or rotorcraft or 200 hours (fewer one shall be applied) can be included).</p> <p>(a) At least 200 hours of flight as a pilot-in-command including over 50 times of takeoff and landing (If a person has flight hours as an apprentice under the supervision of a pilot-in-command, such hours can be included (up to 150 hours))</p> <p>(b) At least 100 hours of open air flight (Up to 25 hours of aircraft or rotorcraft flight can be included)</p> <p>(c) At least 25 hours of night flight (Up to 10 hours of aircraft or rotorcraft flight can be included)</p> <p>(d) At least 30 hours of instrument flight (If a person has simulated flight hours, such hours can be included (up to 20 hours)) (Up to 10 hours of aircraft or rotorcraft flight can be included)</p>
Commercial pilot	1 When applying for the skill certification for an aircraft

A person must have at least 200 hours of flight hours including the following flights by aircraft (If a person has simulated flight hours, such hours can be included (up to 10 hours)) (If a person has a pilot qualification for aircraft, a half of the flight hours as other than pilot-in-command by aircraft or 50 hours (fewer one shall be applied) can be included, and if a person has a pilot qualification for glider, rotorcraft, or airship, one third of the flight hours as a pilot-in-command or 50 hours (fewer one shall be applied) can be included), or a person must complete at least 150 hours of flight training including the following flights at independent administrative institution Civil Aviation College, Ministry of Land, Infrastructure and Transportation Civil Aviation College, Ministry of Transport Civil Aviation College, or designated aviation business training facility (simulated flight hours (up to 10 hours) can be included).

(a) At least 100 hours of flight as a pilot-in-command (70 hours for a person who had a flight training at independent administrative institutions of Civil Aviation College, Ministry of Land, Infrastructure and Transportation Civil Aviation College, Ministry of Transport Civil Aviation College, or designated aviation business training facility)

(b) At least 20 hours of open air flight as a pilot-in-command including at least 540 km of flight distance from the point of departure and at least two times of full stop-and-go in between (Up to six hours of rotorcraft or airship flight can be included. However only up to three hours can be included for airship flight)

(c) At least five hours of night flight as a pilot-in-command including at least five times of landing and takeoff (Up to two hours of rotorcraft or airship flight can be included. However only up to one hours can be included for airship flight)

(d) At least 10 hours of instrument flight (If a person has simulated flight hours, such hours can be included (up to five hours))

2 When applying for the skill certification for a glider

(a) Powered glider without tow attachment

A person must complete the following flight by a glider.

However, if a person has a skill certificate for an aeroplane operation, at least 10 hours of glide and at least 10 times of landing with glide by a solo flight must be completed.

(1) At least 15 hours of glide by solo flight and at least 20 times of landing with glide, and at least 25 hours of powered flight (including by an aeroplane) by solo flight and more than 20 times of landing while an engine is on (including by an aeroplane)

(2) At least 240 km of open air flight from the point of departure including at least two times of landing and takeoff in between (including by an aeroplane)

(3) At least five times of implementation of recovery from stall (including by an aeroplane)

(b) Powered glider with tow attachment

A person must complete the following flight by a glider.

However, if a person has a skill certificate for an aircraft operation, at least 10 hours of glide and at least 10 times of landing with glide by a solo flight must be completed.

(1) At least 15 hours of glide by solo flight and at least 20 times of landing with glide, and at least 25 hours of powered flight (including by an aircraft) by solo flight and at least 20 times of landing while an engine is on (including by an aeroplane). However, landing while an engine is on can be excluded for any landings that are not suitable for a landing with operating engine.

(2) At least 75 times of glide with towing including at least 15 times of aircraft towing and at least 15 times of winch towing or vehicle towing.

(3) At least five times of the implementation of recovery for stall (including by an aeroplane)

(c) High class glider

A person must complete at least 15 hours of glide as a pilot-in-command including the following. However, if a person has a skill certificate for an aircraft pilot, at least 30 times of glide with towing as a pilot-in-command including glide with aircraft towing and winch or vehicle towing must be completed.

(1) At least 75 times of glide with towing including at least 15 times of gliding with aircraft towing and at least 15 times of gliding with winch or vehicle towing

(2) At least five times of the implementation of recovery from stall

3 When applying for the skill certification for a rotorcraft

A person must have at least 150 hours of flight hours including the following flights by rotorcraft (If a person has simulated flight hours, such hours can be included (up to 10 hours)) (If a person has a pilot qualification for rotorcraft, a half of the flight hours as other than pilot-in-command by rotorcraft or 50 hours (fewer one shall be applied) can be included, and if a person has a pilot qualification for aeroplane, glider, or airship, the flight hours as a pilot-in-command by aeroplane (a half of flight hours for the flight other than pilot-in-command (up to 50 hours for a private pilot) or 100 hours (fewer one shall be applied)), or one third of flight hours as a pilot-in-command by glider or airship or 50 hours (fewer one shall be applied) can be included), or a person must complete at least 100 hours of flight training including the following flights at independent administrative institution Civil Aviation College, Ministry of Land, Infrastructure and Transportation Civil Aviation College, Ministry of Transport Civil Aviation College, or designated aviation business training facility (Up to 50 hours of flight by aeroplane and simulated flight hours (up to 10 hours) can be included).

(a) At least 35 hours of flight as a pilot-in-command

(b) At least 10 hours of open air flight as a pilot-in-command for the distance of at least 300 km from the point of departure including at least two times of full stop-and-go in between (Up to three hours of aeroplane or airship flight can be included.

However only up to two hours of airship flight can be included)

(c) At least five hours of night flight as a pilot-in-command including at least five times of takeoff and landing (Up to two hours of aeroplane or airship flight can be included. However, only up to one hour of airship flight can be included)

(d) At least 10 hours of instrument flight (If a person has simulated flight hours, such hours can be included (up to five hours)) (Up to three hours of aeroplane flight can be included)

(e) Landing with autorotation

4 When applying for the skill certificate for an airship

A person must have at least 200 hours of flight hours (If a person has simulated flight hours, such hours can be included (up to 10 hours)) (If a person has a pilot qualification for airship, a half of the flight hours or 50 hours (fewer one shall be applied) can be included for the flight as other than pilot-in-command by airship, and if a person has a pilot qualification for aeroplane, glider, or rotorcraft, the flight hours as a pilot by aeroplane or 100 hours (fewer one shall be applied) can be included (a half of the flight hours for the flight other than pilot-in-command (up to 50 hours for a private pilot)), or one third of flight hours as a captain by glider or rotorcraft or 50 hours (fewer one shall be applied) can be included).

	<p>(a) At least 50 hours of flight as a pilot-in-command including at least 20 times of takeoff and landing</p> <p>(b) At least 10 hours of open air flight for the distance of at least 180 km from the point of departure including at least two times of full stop-and-go in between (Up to three hours of aeroplane or rotorcraft flight can be included)</p> <p>(c) At least 10 hours of night flight (Up to four hours of aeroplane or rotorcraft flight can be included)</p> <p>(d) At least 10 hours of instrument flight (If a person has simulated flight hours, such hours can be included (up to five hours)) (Up to three hours of aeroplane or rotorcraft flight can be included)</p>
Private pilot	<p>1 When applying for the skill certification for an aeroplane A person must have at least 40 hours of flight hours (If a person has simulated flight hours, such hours can be included (up to five hours)) (If a person has a pilot qualification for glider, rotorcraft or airship, one third of the flight hours as a pilot-in-command or 10 hours (fewer one shall be applied) can be included for a person with a private pilot qualification, and a half of the flight hours as a pilot-in-command or 20 hours (fewer one shall be applied) can be included for a person with a airline transport pilot or commercial pilot qualification).</p> <p>(a) At least 10 hours of solo flight</p> <p>(b) At least five hours of solo open air flight for the distance of at least 270 km from the point of departure including at least two times of full stop-and-go in between.</p> <p>(c) At least 20 hours of dual flight including takeoff, landing, and navigation at night.</p> <p>2 When applying for the skill certificate for a glider</p> <p>(a) Powered glider without tow attachment A person must complete the following flight by a glider. However, if a person has the skill certificate for an aeroplane pilot, at least two hours of glide and at least five times of landing with glide must be completed.</p> <p>(1) At least three hours of solo glide (Up to one hour of dual glide with an instructor can be included) and at least 10 times of landing with glide and at least 15 hours of powered flight by solo flight (including by an aeroplane) (Up to five hours of dual flight with an instructor can be included) and at least 10 times of landing while an engine is on (including by an aeroplane)</p> <p>(2) Open air flight for the distance of at least 120 km from the point of departure including at least once of full stop-and-go in between (including by an aeroplane)</p> <p>(3) Implementation of recovery from stall (including by an aeroplane)</p> <p>(b) Powered glider with tow attachment A person must complete the following flight by a glider. However, if a person has the skill certificate for an aeroplane pilot, at least two hours of glide and at least five times of landing with glide must be completed.</p>

(1) At least three hours of solo glide (Up to one hour of dual glide with an instructor can be included) and at least 10 times of landing with glide and at least 15 hours of powered flight by solo flight (including by an aeroplane) (Up to five hours of dual flight with an instructor can be included) and at least 10 times of landing while an engine is on (including by an aeroplane)

(2) At least 30 times of gliding with towing

(3) Implementation of recovery from stall (including by an aeroplane)

(c) High class glider

A person must complete at least three hours of solo glide including the following glide. However, if a person has the skill certificate for an aeroplane pilot, at least 15 times of solo glide with towing must be completed.

(1) At least 30 times of glide with towing

(2) Implementation of recovery from stall

3 When applying for the skill certification for a rotorcraft

A person must have at least 40 hours of flight hours including the following flight by a rotorcraft (If a person has simulated flight hours, such hours can be included (up to five hours))

(Flight careers for the application for the private pilot skill certificate by an aeroplane can be included in the flight hours (up to 15 hours))

(a) At least 10 hours of solo flight

(b) At least five hours of solo open air flight for the distance of at least 180 km from the point of departure including at least two times of full stop-and-go in between.

(c) At least 20 hours of dual flight including takeoff, landing, and navigation at night

(d) Landing with autorotation

4 When applying for the skill certification for an airship

A person must have at least 50 hours of flight hours including the following flight by an airship (If a person has simulated flight hours, such hours can be included (up to five hours))

(Flight careers for the application for the private pilot skill certificate by an aeroplane can be included in the flight hours (up to 10 hours))

(a) At least five hours of solo flight including at least 10 times of takeoff

(b) At least five hours of open air flight for the distance of at least 90 km from the point of departure including at least once of full stop-and-go in between.

<p>First class flight navigator</p>	<p>1 A person must complete at least 200 hours of navigation including at least 30 hours of night open air flight (If a person has flight hours of an aeroplane as a pilot for flight transport business, such hours can be included (up to 100 hours)). However, at least 100 hours of navigation must be completed for a person who has a qualification of first class ship officer (sailing) or second class ship officer (sailing) stated in Article 5, paragraph (1), item (v) of the Maritime Officer and Small Craft Operator Act (Act No. 149 of 1951).</p> <p>2 A person must complete all the position judgments during a night flight with night astronomical observation at least 25 times, all the position judgments during a flight with radio position line, observation position line or other navigation data at least 25 times, and conduct field triaging utilizing them for navigation.</p>
<p>Second class flight navigator</p>	<p>A person must complete at least 50 hours of field training of navigation by an aircraft including geonavigation, dead reckoning navigation, and radio navigation. However, a person who has a qualification of commercial pilot or private pilot, or certificate of instrument flight, or qualification of airline transport pilot or high class commercial pilot complete at least five hours of field training of dead navigation by an aircraft.</p>
<p>Flight engineer</p>	<p>A person must compete at least 100 hours of flight engineer operation by an aircraft requiring a flight engineer (If a person has time to operate simulated flight system with the method specified by the minister of land, infrastructure and transportation, such hours can be included (up to five hours)). However, at least 50 hours of field training of flight engineer work by an aircraft requiring a flight engineer must be completed for a person who has at least one year of aircraft maintenance work experience (including six months or more of an experience with equivalent or above class aircraft applying for the skill certification).</p>
<p>First class aircraft maintenance technician</p>	<p>1 A person applying for the skill certification for an aeroplane must have any of the following experiences.</p> <p>(a) At least four years of aircraft maintenance experience including at least six months of maintenance for an aeroplane classified as aeroplane transport C or T specified in the appended document no. 1.</p> <p>(b) At least two years of aeroplane maintenance experience including at least six months of maintenance of an aircraft classified as aeroplane transport C or T for airworthy specified in the appended document no. 1 if a person has completed the training course of maintenance specified by the minister of land, infrastructure and transportation.</p> <p>2 A person applying for the skill certification for a rotorcraft must have any of the following experiences.</p>

	<p>(a) At least four years of aircraft maintenance experience including at least six months of maintenance of a rotorcraft classified as rotorcraft transport TA or TB class for airworthy specified in the appended document no. 1.</p> <p>(b) At least two years of aircraft maintenance experience including at least six months of maintenance of a rotorcraft classified as rotorcraft transport TA or TB class for airworthy specified in the appended document no. 1 if a person has completed the training course of maintenance specified by the minister of land, infrastructure and transportation.</p>
Second class aircraft maintenance technician	<p>A person must have any of the following experiences.</p> <p>(a) At least three years of aircraft maintenance experience including at least six months of maintenance of the same time aircraft for which the skill certification is applied.</p> <p>(b) At least one year of aircraft maintenance including at least six months of maintenance of the same type aircraft for which the skill certification is applied if a person has completed the training course of maintenance specified by the minister of land, infrastructure and transportation.</p>
First class aircraft line maintenance technician	<p>(1) A person applying for the skill certification for an aeroplane must have any of the following experiences.</p> <p>(a) At least two years of aeroplane maintenance including at least six months of maintenance for an aircraft classified as aeroplane transport C or T specified in the appended document no. 1.</p> <p>(b) At least one year of aircraft maintenance experience including at least six months of maintenance of an aircraft classified as aeroplane transport C or T for airworthy specified in the appended document no. 1 if a person has completed the training course of maintenance specified by the minister of land, infrastructure and transportation.</p> <p>(2) A person applying for the skill certification for a rotorcraft must have any of the following experiences.</p> <p>(a) At least two years of aircraft maintenance experiences including at least six months of maintenance of a rotorcraft classified as rotorcraft transport TA or TB class for airworthy specified in the appended document no. 1.</p> <p>(b) At least one year or aircraft maintenance experience including at least six months of maintenance of a rotorcraft classified as rotorcraft transport TA or TB class or for airworthy specified in the appended document no. 1 if a person has completed the training course of maintenance specified by the minister of land, infrastructure and transportation.</p>

Second class aircraft line maintenance technician	<p>A person must have any of the following experiences.</p> <p>(a) At least two years of aircraft maintenance experiences including at least six months of maintenance of the same time aircraft for which the skill certification is applied.</p> <p>(b) At least one year of aircraft maintenance including at least six months of maintenance of the same type aircraft for which the skill certification is applied if a person has completed the training course of maintenance specified by the minister of land, infrastructure and transportation.</p>
Aviation overhaul technician	<p>A person must have any of the following experiences.</p> <p>(a) At least two years of maintenance and remodeling of work type for which the skill certification is applied.</p> <p>(b) At least one year of maintenance and remodeling experience for work type for which the skill certification is applied.</p>
Instrument flight certification	<p>(1) A person must complete at least 50 hours of open air flight as a pilot-in-command including at least 10 hours of flight of the same type aircraft for which the skill certificate is applied.</p> <p>(2) A person must complete at least 40 hours of practice of instrument flight etc. (Simulated flight hours can be included (up to 30 hours). However, time to operate the flight training system by the method specified by the minister of land, infrastructure and transportation can be included up to 20 hours)</p>
Flight instructor certification	<p>A person must have the skill certificate for a pilot or career of commercial pilot.</p>

Appended table 3 (Re: Art. 46 and 46-2)

Subjects in the examination

Qualification or certification	Type or class of an aircraft or work for which the skill certification is applied	Subject
Airline transport pilot	Aeroplane, rotorcraft or airship	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of flight theory</p> <p>(b) General knowledge of the structure and function of aeroplane, rotorcraft, or airship</p>

		<p>(c) General knowledge of engine of aeroplane, rotorcraft, or airship, or of propellers or blades</p> <p>(d) General knowledge of measuring equipment of aeroplane, rotorcraft, or airship, or other accessories</p> <p>(e) Basic rule of loading and weight distribution and impact that they may cause</p> <p>2 Aviation weather</p> <p>(a) Knowledge required for description and analysis of a weather map (including upper layer weather map for an aeroplane)</p> <p>(b) Overview of weather observation law and aviation weather report (including airborne report)</p> <p>(c) General knowledge of front and cloud and knowledge of turbulent, icing, static, fog, and other visibility hindrance phenomenon that may affect aircraft flight</p> <p>(d) General knowledge of upper layer weather (limited for rotorcraft or airship)</p> <p>3 Aerial navigation</p> <p>(a) Geonavigation, dead reckoning navigation, radio navigation, and self-contained navigation</p> <p>(b) General knowledge of astronomy</p> <p>(c) Knowledge required for flight planning (limited to visual flight rules knowledge for rotorcraft or airship)</p> <p>(d) General knowledge of operation method</p> <p>(e) General knowledge of human ability and its limitation</p> <p>4 Aviation communication (summary)</p> <p>General knowledge of aviation communication (limited to visual flight rules knowledge for rotorcraft or airship)</p> <p>5 Aviation act</p> <p>(a) Domestic aviation act</p> <p>(b) International aviation act (summary)</p>
Commercial pilot	Aeroplane, rotorcraft or airship	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of flight theory</p> <p>(b) General knowledge of the structure and function of aeroplane, rotorcraft, or airship</p>

	<p>(c) General knowledge of engine of aeroplane, rotorcraft, or airship, or of propellers or blades</p> <p>(d) General knowledge of measuring equipment of aeroplane, rotorcraft, or airship, or other accessories</p> <p>(e) Basic rule of loading and weight distribution and impact that they may cause</p> <p>2 Aviation weather</p> <p>(a) Knowledge required for description of a weather map</p> <p>(b) Knowledge of classification of cloud and cloud shape</p> <p>(c) General knowledge of upper layer weather</p> <p>3 Aerial navigation</p> <p>(a) Geonavigation and dead reckoning navigation</p> <p>(b) General knowledge of radio navigation</p> <p>(c) Knowledge required for flight planning of visual flight rules operation</p> <p>(d) General knowledge of operation method</p> <p>(e) General knowledge of human ability and its limitation</p> <p>4 Aviation communication (summary)</p> <p>General knowledge of aviation communication regarding visual flight rules operation</p> <p>5 Aviation act</p> <p>(a) Domestic aviation act</p> <p>(b) International aviation act (summary)</p>
Glider	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of flight theory</p> <p>(b) Knowledge of handling of glider and operation limitation</p> <p>(c) General knowledge of glider engine and propeller (limited to powered glider)</p> <p>(d) Knowledge of glider measuring equipment</p> <p>(e) Basic rule of loading and weight distribution and impact that they may cause</p> <p>2 Weather regarding glider flight</p> <p>3 Aerial navigation</p> <p>(a) Utilization of flight chart</p> <p>(b) Geonavigation and dead reckoning navigation (limited to powered glider)</p>

		<p>(c) Knowledge required for flight planning by visual flight rules operation</p> <p>(d) General knowledge of operation method</p> <p>(e) General knowledge of human ability and its limitation</p> <p>4 Aviation communication (summary) (limited to powered glider)</p> <p>General knowledge of aviation communication for visual flight rules operation</p> <p>5 Domestic aviation act</p>
Private pilot	Aeroplane, rotorcraft or airship	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of flight theory</p> <p>(b) General knowledge of the structure and function of aeroplane, rotorcraft, or airship</p> <p>(c) Basic rule of loading and weight distribution and impact that they may cause</p> <p>2 Aviation weather (brief summary)</p> <p>3 Aerial navigation</p> <p>(a) Geonavigation and dead reckoning navigation (summary)</p> <p>(b) Knowledge required for flight planning by visual flight rules operation</p> <p>(c) Summary of operation method</p> <p>(d) General knowledge of human ability and its limitation</p> <p>4 Aviation communication (summary)</p> <p>Knowledge of aviation communication for visual flight rules operation</p> <p>5 Aviation act</p> <p>(a) Domestic aviation act</p> <p>(b) International aviation act (summary)</p>
	Glider	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of flight theory</p> <p>(b) Knowledge of handling of glider and operation limitation</p> <p>(c) Basic rule of loading and weight distribution and impact that they may cause</p> <p>2 Weather regarding glider flight (summary)</p> <p>3 Aerial navigation</p> <p>(a) Geonavigation and dead reckoning navigation (summary) (limited to powered glider)</p>

		<p>(b) Knowledge required for flight planning by visual flight rules operation</p> <p>(c) General knowledge of operation method</p> <p>(d) General knowledge of human ability and its limitation</p> <p>4 Aviation communication (summary) (limited to powered glider)</p> <p>General knowledge of aviation communication for visual flight rules operation</p> <p>5 Domestic aviation act (summary)</p>
First class flight navigator		<p>1 Aerial navigation</p> <p>(a) Geonavigation, dead reckoning navigation, radio navigation and self-contained navigation</p> <p>(b) General knowledge of astronomy and celestial navigation</p> <p>(c) Basis and handling method of navigation measuring equipment</p> <p>(d) Knowledge required for flight planning</p> <p>(e) Summary of operation method</p> <p>(f) General knowledge of human ability and its limitation</p> <p>2 Aviation weather</p> <p>(a) Knowledge required for description and analysis of upper layer weather map</p> <p>(b) Knowledge of observation and estimation of upper layer wind</p> <p>(c) Knowledge of weather observation low and aviation weather report (including airborne report)</p> <p>(d) General knowledge of front and cloud and knowledge of turbulent, icing, static, fog, and other visibility hindrance phenomenon that may affect aeroplane flight</p> <p>3 Aviation communication (summary)</p> <p>4 Aerospace engineering</p> <p>(a) General knowledge of flight theory</p> <p>(b) Summary of aeroplane structure</p> <p>(c) Impact that loading and weight distribution may cause to flight</p> <p>5 Aviation act</p> <p>(a) Domestic aviation act</p> <p>(b) International aviation act (summary)</p>
Second class flight navigator		<p>1 Aerial navigation</p>

		<p>(a) Geonavigation, dead reckoning navigation, radio navigation, and self-contained navigation</p> <p>(b) Brief knowledge of celestial navigation</p> <p>(c) Basis and handling method of navigation measuring equipment</p> <p>(d) Knowledge required for flight planning</p> <p>(e) Summary of operation method</p> <p>(f) General knowledge of human ability and its limitation</p> <p>2 Aviation weather</p> <p>(a) Knowledge required for description of a weather map</p> <p>(b) Knowledge of classification of cloud and cloud shape</p> <p>(c) General knowledge of high altitude weather</p> <p>3 Aviation communication (summary)</p> <p>4 Aerospace engineering</p> <p>(a) General knowledge of flight theory</p> <p>(b) Summary of aeroplane structure</p> <p>(c) Impact that loading and weight distribution may cause to flight</p> <p>5 Aviation act</p> <p>(a) Domestic aviation act</p> <p>(b) International aviation act (summary)</p>
Flight engineer	Aeroplane or rotorcraft	<p>1 Flight and aerodynamics theory and knowledge of calculation of aircraft barycentric position</p> <p>2 Knowledge of strength, structure, performance, and maintenance of airframe (including blades for rotorcraft)</p> <p>3 Knowledge of structure, performance, and maintenance of aeroplane engine, engine accessories, propeller, and propeller regulator and knowledge of aviation fuel and lubricant</p> <p>4 Knowledge of structure, performance, and maintenance of aeroplane accessories</p> <p>5 Knowledge of control of engine, propeller, and accessories during flight</p> <p>6 Navigation</p> <p>(a) Navigation (brief summary)</p> <p>(b) General knowledge of human ability and its limitation</p> <p>7 Aviation weather (brief summary)</p> <p>8 Aviation communication (summary)</p> <p>9 Aviation act</p> <p>(a) Domestic aviation act</p> <p>(b) International aviation act (summary)</p>

<p>Flight communication operator</p>		<p>1 Aviation communication (summary)</p> <p>2 Structure of aeroplane (summary)</p> <p>3 Navigation (a) Navigation (brief summary) (b) General knowledge of human ability and its limitation</p> <p>4 Aviation weather (brief summary)</p> <p>5 Aviation act (a) Domestic aviation act (b) International aviation act (summary)</p>
<p>First class aircraft maintenance technician or second class aircraft maintenance technician</p>	<p>Aeroplane, rotorcraft, glider or airship</p>	<p>1 Airframe (a) Knowledge of hydrodynamics theory (b) Knowledge of aerodynamics theory (c) Knowledge of material mechanics theory (d) Knowledge of strength, structure, function, and maintenance of airframe (e) Knowledge of airframe performance (f) Knowledge of materials of airframe (g) Knowledge of strength, structure, function, and maintenance of airframe accessories</p> <p>2 Engine (except glider other than powered glider without tow attachment and glider with tow attachment) (a) Knowledge of thermodynamics theory (b) Knowledge of structure, function, performance, and maintenance of piston engine, piston engine accessories, and piston engine's indicating system (limited to an aircraft with piston engine) (c) Knowledge of structure, function, performance, and maintenance of turbine engine, turbine engine accessories, and turbine engine's indicating system (limited to an aircraft with turbine engine) (d) Knowledge of structure, function, performance, and maintenance of propeller, propeller accessories, and propeller's indicating system</p>

		<p>(e) Knowledge of aircraft fuel and lubricant</p> <p>3 Electronic accessory etc.</p> <p>(a) Knowledge of electrotechnics and electronics theories</p> <p>(b) Knowledge of structure, function, and maintenance of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p> <p>(c) Knowledge of structure, function, and maintenance of electronic accessory, electric accessory, and radio communication device</p> <p>4 Aviation act etc.</p> <p>(a) Domestic aviation act</p> <p>(b) General knowledge of human ability and its limitation</p>
<p>First class aircraft line maintenance technician or second class aircraft line maintenance technician</p>	<p>Aeroplane, rotorcraft, glider or airship</p>	<p>1 Airframe and electronic accessory etc.</p> <p>(a) General knowledge of hydrodynamics theory</p> <p>(b) General knowledge of aerodynamics theory</p> <p>(c) General knowledge of material mechanics theory</p> <p>(d) General knowledge of strength, structure, function, and maintenance of airframe</p> <p>(e) General knowledge of airframe performance</p> <p>(f) General knowledge of materials of airframe</p> <p>(g) General knowledge of strength, structure, function, and maintenance of airframe accessories</p> <p>(h) General knowledge of electrotechnics and electronics theories</p> <p>(i) General knowledge of structure, function, and maintenance of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p>

		<p>(j) General knowledge of structure, function, and maintenance of electronic accessory, electric accessory, and radio communication device</p> <p>2 Engine (except glider other than powered glider without tow attachment and glider with tow attachment)</p> <p>(a) General knowledge of thermodynamics theory</p> <p>(b) General knowledge of structure, function, performance, and maintenance of piston engine, piston engine accessories, and piston engine's indicating system (limited to an aircraft with piston engine)</p> <p>(c) General knowledge of structure, function, performance, and maintenance of turbine engine, turbine engine accessories, and turbine engine's indicating system (limited to an aircraft with turbine engine)</p> <p>(d) General knowledge of structure, function, performance, and maintenance of propeller, propeller accessories, and propeller's indicating system</p> <p>(e) General knowledge of aircraft fuel and lubricant</p> <p>3 Aviation act etc.</p> <p>(a) Domestic aviation act</p> <p>(b) General knowledge of human ability and its limitation</p>
Aviation overhaul technician	Air frame structure-related	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of hydrodynamics theory</p> <p>(b) General knowledge of aerodynamics theory</p> <p>(c) General knowledge of structure, function, and handling of airframe</p> <p>(d) General knowledge of structure, function, and handling of airframe accessory</p> <p>(e) General knowledge of structure, function, and handling of engine, engine accessories, and engine's indicating system</p> <p>(f) General knowledge of structure, function, and handling of propeller, propeller accessory, and propeller's indicating system</p>

	<p>(g) General knowledge of structure, function, and handling of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p> <p>(h) General knowledge of structure, function, and handling of electronic accessory, electric accessory, and radio communication device</p> <p>2 Airframe structure</p> <p>(a) Knowledge of material mechanics theory</p> <p>(b) Knowledge of strength, structure, maintenance, remodeling, and test of airframe</p> <p>(c) Knowledge of airframe performance</p> <p>(d) Knowledge of materials of airframe</p> <p>3 Aviation act etc.</p> <p>(a) Domestic aviation act</p> <p>(b) General knowledge of human ability and its limitation</p>
Air frame accessory-related	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of hydrodynamics theory</p> <p>(b) General knowledge of aerodynamics theory</p> <p>(c) General knowledge of structure, function, and handling of airframe</p> <p>(d) General knowledge of structure, function, and handling of airframe accessory</p> <p>(e) General knowledge of structure, function, and handling of engine, engine accessories, and engine's indicating system</p> <p>(f) General knowledge of structure, function, and handling of propeller, propeller accessory, and propeller's indicating system</p> <p>(g) General knowledge of structure, function, and handling of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p> <p>(h) General knowledge of structure, function, and handling of electronic accessory, electric accessory, and radio communication device</p>

	<p>2 Airframe accessories (a) Knowledge of structure, function, performance, maintenance, remodeling, and test of airframe accessory (b) knowledge of material of airframe accessory 3 Aviation act etc. (a) Domestic aviation act (b) General knowledge of human ability and its limitation</p>
<p>Piston engine-related</p>	<p>1 Aeronautical engineering (a) General knowledge of hydrodynamics theory (b) General knowledge of aerodynamics theory (c) General knowledge of structure, function, and handling of airframe (d) General knowledge of structure, function, and handling of airframe accessory (e) General knowledge of structure, function, and handling of engine, engine accessories, and engine's indicating system (f) General knowledge of structure, function, and handling of propeller, propeller accessory, and propeller's indicating system (g) General knowledge of structure, function, and handling of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument (h) General knowledge of structure, function, and handling of electronic accessory, electric accessory, and radio communication device 2 Piston engine (a) Knowledge of thermodynamics theory (b) Knowledge of structure, function, performance, maintenance, remodeling, and test of piston engine (c) Knowledge of structure, function, performance, maintenance, remodeling, and test of piston engine accessory (d) Knowledge of aircraft fuel and lubricant 3 Aviation act etc. (a) Domestic aviation act</p>

	(b) General knowledge of human ability and its limitation
Turbine engine-related	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of hydrodynamics theory</p> <p>(b) General knowledge of aerodynamics theory</p> <p>(c) General knowledge of structure, function, and handling of airframe</p> <p>(d) General knowledge of structure, function, and handling of airframe accessory</p> <p>(e) General knowledge of structure, function, and handling of engine, engine accessories, and engine's indicating system</p> <p>(f) General knowledge of structure, function, and handling of propeller, propeller accessory, and propeller's indicating system</p> <p>(g) General knowledge of structure, function, and handling of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p> <p>(h) General knowledge of structure, function, and handling of electronic accessory, electric accessory, and radio communication device</p> <p>2 Turbine engine</p> <p>(a) Knowledge of thermodynamics theory</p> <p>(b) Knowledge of structure, function, performance, maintenance, remodeling, and test of turbine engine</p> <p>(c) Knowledge of structure, function, performance, maintenance, remodeling, and test of turbine engine accessory</p> <p>(d) Knowledge of aircraft fuel and lubricant</p> <p>3 Aviation act etc.</p> <p>(a) Domestic aviation act</p> <p>(b) General knowledge of human ability and its limitation</p>
Propeller-related	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of hydrodynamics theory</p> <p>(b) General knowledge of aerodynamics theory</p>

	<p>(c) General knowledge of structure, function, and handling of airframe</p> <p>(d) General knowledge of structure, function, and handling of airframe accessory</p> <p>(e) General knowledge of structure, function, and handling of engine, engine accessories, and engine's indicating system</p> <p>(f) General knowledge of structure, function, and handling of propeller, propeller accessory, and propeller's indicating system</p> <p>(g) General knowledge of structure, function, and handling of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p> <p>(h) General knowledge of structure, function, and handling of electronic accessory, electric accessory, and radio communication device</p> <p>2 Propeller</p> <p>(a) Knowledge of structure, function, performance, maintenance, remodeling, and test of propeller</p> <p>(b) Knowledge of structure, function, performance, maintenance, remodeling, and test of propeller accessory</p> <p>3 Aviation act etc.</p> <p>(a) Domestic aviation act</p> <p>(b) General knowledge of human ability and its limitation</p>
Instrument-related	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of hydrodynamics theory</p> <p>(b) General knowledge of aerodynamics theory</p> <p>(c) General knowledge of structure, function, and handling of airframe</p> <p>(d) General knowledge of structure, function, and handling of airframe accessory</p> <p>(e) General knowledge of structure, function, and handling of engine, engine accessories, and engine's indicating system</p>

	<p>(f) General knowledge of structure, function, and handling of propeller, propeller accessory, and propeller's indicating system</p> <p>(g) General knowledge of structure, function, and handling of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p> <p>(h) General knowledge of structure, function, and handling of electronic accessory, electric accessory, and radio communication device</p> <p>2 Instrument</p> <p>(a) Knowledge of electrotechnics and electronics theories</p> <p>(b) Knowledge of structure, function, performance, maintenance, remodeling, and test of machine instrument</p> <p>(c) Knowledge of structure, function, performance, maintenance, remodeling, and test of electric instrument</p> <p>(d) Knowledge of structure, function, performance, maintenance, remodeling, and test of gyroscopic instrument</p> <p>(e) Knowledge of structure, function, performance, maintenance, remodeling, and test of electronic instrument</p> <p>3 Aviation act etc.</p> <p>(a) Domestic aviation act</p> <p>(b) General knowledge of human ability and its limitation</p>
Electronic accessory-related	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of hydrodynamics theory</p> <p>(b) General knowledge of aerodynamics theory</p> <p>(c) General knowledge of structure, function, and handling of airframe</p> <p>(d) General knowledge of structure, function, and handling of airframe accessory</p> <p>(e) General knowledge of structure, function, and handling of engine, engine accessories, and engine's indicating system</p>

	<p>(f) General knowledge of structure, function, and handling of propeller, propeller accessory, and propeller's indicating system</p> <p>(g) General knowledge of structure, function, and handling of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p> <p>(h) General knowledge of structure, function, and handling of electronic accessory, electric accessory, and radio communication device</p> <p>2 Electronic accessories</p> <p>(a) Knowledge of electrotechnics and electronics theories</p> <p>(b) Knowledge of structure, function, performance, maintenance, remodeling, and test of electronic accessory</p> <p>3 Aviation act etc.</p> <p>(a) Domestic aviation act</p> <p>(b) General knowledge of human ability and its limitation</p>
Electrical accessory-related	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of hydrodynamics theory</p> <p>(b) General knowledge of aerodynamics theory</p> <p>(c) General knowledge of structure, function, and handling of airframe</p> <p>(d) General knowledge of structure, function, and handling of airframe accessory</p> <p>(e) General knowledge of structure, function, and handling of engine, engine accessories, and engine's indicating system</p> <p>(f) General knowledge of structure, function, and handling of propeller, propeller accessory, and propeller's indicating system</p> <p>(g) General knowledge of structure, function, and handling of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p>

	<p>(h) General knowledge of structure, function, and handling of electronic accessory, electric accessory, and radio communication device</p> <p>2 Electric accessory</p> <p>(a) Knowledge of electrotechnics and electronics theories</p> <p>(b) knowledge of structure, function, performance, maintenance, remodeling, and test of electric accessory</p> <p>3 Aviation act etc.</p> <p>(a) Domestic aviation act</p> <p>(b) General knowledge of human ability and its limitation</p>
Wireless radio-related	<p>1 Aeronautical engineering</p> <p>(a) General knowledge of hydrodynamics theory</p> <p>(b) General knowledge of aerodynamics theory</p> <p>(c) General knowledge of structure, function, and handling of airframe</p> <p>(d) General knowledge of structure, function, and handling of airframe accessory</p> <p>(e) General knowledge of structure, function, and handling of engine, engine accessories, and engine's indicating system</p> <p>(f) General knowledge of structure, function, and handling of propeller, propeller accessory, and propeller's indicating system</p> <p>(g) General knowledge of structure, function, and handling of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p> <p>(h) General knowledge of structure, function, and handling of electronic accessory, electric accessory, and radio communication device</p> <p>2 Radio communication device</p> <p>(a) Knowledge of electrotechnics and electronics theories</p> <p>(b) knowledge of structure, function, performance, maintenance, remodeling, and test of radio communication device</p> <p>3 Aviation act etc.</p> <p>(a) Domestic aviation act</p>

		(b) General knowledge of human ability and its limitation
Aviation English proficiency certification		Listening to aviation English
Instrument flight certification		1 Dead reckoning navigation and radio navigation 2 aircraft measurement instrument (summary) 3 Aviation weather (summary) 4 Aviation weather report 5 Flight planning of instrument flight etc. 6 Aviation act of instrument flight etc. 7 General knowledge of aviation communication 8 General knowledge of human ability and limitation of instrument flight etc.
Flight instructor certification		1 Maneuvering education guideline 2 Hazard and accident prevention method 3 First aid

Subject in the field test

Qualification or certification	Type or class of an aircraft or work for which the skill certification is applied	Subject
Airline transport pilot	Aeroplane	1 Knowledge required for operation 2 Pre-flight work 3 Operation at an airport etc. and traffic pattern 4 Takeoff and landing and go-around and rejected takeoff 5 Flight with basic instrument 6 Air operation and flight based on the characteristics of model 7 Flight by instrument flight rules including the following (a) Transition to instrument flight at takeoff (b) Standard instrument departure and instrument arrival (c) Holding procedure (d) Instrument approach procedure

	<p>(e) Missed approach procedure (f) Landing from instrument approach 8 Open air flight with instrument flight rules 9 Normal operation for general flight 10 Operation at abnormal and emergency condition 11 Communication with the air traffic control etc. 12 Cooperation among air-crews 13 Total ability</p>
Rotorcraft	<p>1 Knowledge required for operation 2 Pre-flight work 3 Operation at the ground 4 Operation at an airport etc. and traffic pattern 5 Takeoff and landing and go-around and rejected takeoff 6 Flight with basic instrument 7 Air operation including the flight utilizing external visual target and flight in accordance with the characteristics of a model 8 Open air flight 9 Normal operation for general flight 10 Operation at abnormal and emergency condition 11 Communication with the air traffic control etc. 12 Cooperation among air-crews 13 Total ability</p>
Airship	<p>1 Knowledge required for operation 2 Pre-flight work 3 Operation at an airport etc. and traffic pattern 4 Takeoff and landing and go-around 5 Flight with basic instrument 6 Air operation including the flight utilizing external visual target 7 Open air flight</p>

		<ul style="list-style-type: none"> 8 Normal operation for general flight 9 Operation at abnormal and emergency condition 10 Communication with the air traffic control etc. 11 Cooperation among air-crews 12 Cooperation with ground operators 13 Total ability
Commercial pilot	Aeroplane	<ul style="list-style-type: none"> 1 Subject in aeroplane section in regular transport pilot (excluding from item 6 to 8 and 12) 2 Air operation including the flight utilizing external visual target and flight in accordance with the characteristics of a model 3 Open air flight
	Glider	<ul style="list-style-type: none"> Powered glider without tow attachment 1 Knowledge required for operation 2 Pre-flight work 3 Operation at an airport etc. and traffic pattern 4 Takeoff and landing and go-around 5 Air operation including the flight utilizing external visual target 6 Soaring 7 Open air flight 8 Operation at abnormal and emergency condition 9 Communication with the air traffic control etc. 10 Total ability
		<ul style="list-style-type: none"> Powered glider with tow attachment 1 Knowledge required for operation 2 Pre-flight work 3 Operation at an airport etc. and traffic pattern 4 Takeoff and landing and go-around 5 Flight with towing an aircraft

			6 Air operation including the flight utilizing external visual target 7 Soaring 8 Operation at abnormal and emergency condition 9 Communication with the air traffic control etc. 10 Total ability
		Upper grade glider	1 Knowledge required for operation 2 Pre-flight work 3 Operation at an airport etc. and traffic pattern 4 Takeoff and landing 5 Flight with towing an aeroplane 6 Air operation including the flight utilizing external visual target 7 Soaring 8 Operation at abnormal and emergency condition 9 Total ability
		Rotorcraft	Subjects in rotorcraft section in regular transport pilot section (excluding item 9 and 12)
		Airship	Subjects in airship section in regular transport pilot section (excluding item 8 and 11)
Private pilot	Aeroplane		Subjects for the provision of commercial pilot and aircraft
	Glider	Powered glider without tow attachment	Subjects for the provision of commercial pilot and powered glider without tow attachment
		Powered glider with tow attachment	Subjects for the provision of commercial pilot and powered glider with tow attachment
		Upper grade glider	1 Subjects in upper glider section in commercial pilot section (excluding item 5) 2 Flight with towing
	Rotorcraft		Subjects in rotorcraft section in commercial pilot section
	Airship		Subjects in airship section in commercial pilot section
First class flight navigator			1 Dead reckoning navigation 2 Radio navigation

		3 Celestial navigation
Second class flight navigator		1 Dead reckoning navigation 2 Radio navigation
Flight engineer	Aeroplane or rotorcraft	1 Handling and test methods of airframe, engine, propeller, and other accessories 2 Distribution of loading weight in an aircraft and calculation of barycentric position 3 Control of engine output and calculation of fuel consumption based on the weather condition or operation plan 4 Measures necessary to take at the failure in an aircraft or partial failure in at least one of engine
First class aircraft maintenance technician or second class aircraft maintenance technician	Aeroplane, rotorcraft, glider, or airship	1 Basic maintenance technique (a) Knowledge of flight rule, maintenance rule, and other rules necessary for maintenance (b) Basic technique of work and test necessary for maintenance 2 Knowledge necessary for maintenance (a) Knowledge of airframe structure and airframe performance (b) Knowledge of structure, function, and operation of airframe accessories (including towing line and attach/remove system for a glider)

(c) Knowledge of structure, function, performance, and operation of engine, engine accessory, and engine's command system (excluding an glider other than powered glider without tow attachment and powered glider with tow attachment)

(d) Knowledge of structure, function, performance, and operation of propeller, propeller accessory, and propeller's command system (excluding a glider other than powered glider without tow attachment and powered glider with tow attachment)

(e) Knowledge of structure, function, and operation of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument

(f) Knowledge of structure, function, and operation of electronic accessory, electric accessory, and radio communication device

3 Technique necessary for maintenance

(a) Methods of handling, maintenance, and test of airframe structure

(b) Methods of handling, maintenance, and test of airframe accessory (including towing line and attach/remove system for a glider)

(c) Methods of handling, maintenance, and test of engine, engine accessory, and engine's command system (excluding an glider other than powered glider without tow attachment and powered glider with tow attachment)

		<p>(d) Methods of handling, maintenance, and test of propeller, propeller accessory, and propeller's command system (excluding an glider other than powered glider without tow attachment and powered glider with tow attachment)</p> <p>(e) Methods of handling, maintenance, and test of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p> <p>(f) Methods of handling, maintenance, and test of electronic accessory, electric accessory, and radio communication device</p> <p>4 Inspection of an aircraft</p> <p>5 Operation of power unit (excluding an glider other than powered glider without tow attachment and powered glider with tow attachment)</p> <p>(a) Operation test of engine on the ground</p> <p>(b) Functional and operational test of each system</p> <p>(c) Operation and maintenance in case of the occurrence of failures</p>
<p>First class aircraft line maintenance technician or second class aircraft line maintenance technician</p>	<p>Aeroplane, rotorcraft, glider, or airship</p>	<p>1 Basic maintenance technique</p> <p>(a) Knowledge of flight rule, maintenance rule, and other rules necessary for maintenance</p> <p>(b) Basic technique of work and test necessary for maintenance</p> <p>2 Knowledge necessary for maintenance</p>

- (a) General knowledge of airframe structure and airframe performance
 - (b) General knowledge of structure, function, and operation of airframe accessories (including towing line and attach/remove system for an glider)
 - (c) General knowledge of structure, function, performance, and operation of engine, engine accessory, and engine's command system (excluding an glider other than powered glider without tow attachment and powered glider with tow attachment)
 - (d) General knowledge of structure, function, performance, and operation of propeller, propeller accessory, and propeller's command system (excluding an glider other than powered glider without tow attachment and powered glider with tow attachment)
 - (e) General knowledge of structure, function, and operation of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument
 - (f) General knowledge of structure, function, and operation of electronic accessory, electric accessory, and radio communication device
- 3 Technique necessary for maintenance
- (a) Basic methods of handling, maintenance, and test of airframe structure

		<p>(b) Basic methods of handling, maintenance, and test of airframe accessory (including towing line and attach/remove system for a glider)</p> <p>(c) Basic methods of handling, maintenance, and test of engine, engine accessory, and engine's command system (excluding an glider other than powered glider without tow attachment and powered glider with tow attachment)</p> <p>(d) Basic methods of handling, maintenance, and test of propeller, propeller accessory, and propeller's command system (excluding an glider other than powered glider without tow attachment and powered glider with tow attachment)</p> <p>(e) Basic methods of handling, maintenance, and test of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p> <p>(f) Basic methods of handling, maintenance, and test of electronic accessory, electric accessory, and radio communication device</p> <p>4 Daily inspection of an aircraft</p>
Flight overhaul technician	Air frame structure-related	<p>1 Basic maintenance technique</p> <p>(a) Knowledge of flight rule, maintenance rule, and other rules necessary for maintenance</p> <p>(b) Operation and test methods of basic technique necessary for maintenance</p> <p>2 Knowledge of quality control necessary for maintenance and remodeling</p> <p>3 Airframe structure</p>

	<p>(a) Knowledge necessary for structure, maintenance, remodeling, and test of airframe structure</p> <p>(b) Methods of handling, maintenance, remodeling, and test of airframe structure</p>
Air frame accessory-related	<p>1 Basic maintenance technique</p> <p>(a) Knowledge of flight rule, maintenance rule, and other rules necessary for maintenance</p> <p>(b) Operation and test methods of basic technique necessary for maintenance</p> <p>2 Knowledge of quality control necessary for maintenance and remodeling</p> <p>3 Airframe accessory</p> <p>(a) Knowledge necessary for structure, function, maintenance, remodeling, and test of airframe accessory</p> <p>(b) Methods of handling, maintenance, remodeling, and test of airframe accessory</p>
Piston engine-related	<p>1 Basic maintenance technique</p> <p>(a) Knowledge of flight rule, maintenance rule, and other rules necessary for maintenance</p> <p>(b) Operation and test methods of basic technique necessary for maintenance</p> <p>2 Knowledge of quality control necessary for maintenance and remodeling</p> <p>3 Piston engine</p> <p>(a) Knowledge necessary for structure, function, performance, maintenance, remodeling, and test of piston engine, piston engine accessory, and piston engine's command system</p> <p>(b) Methods of handling, maintenance, remodeling, and test of piston engine, piston engine accessory, and piston engine's command system</p>

Turbine engine-related	<p>1 Basic maintenance technique (a) Knowledge of flight rule, maintenance rule, and other rules necessary for maintenance (b) Operation and test methods of basic technique necessary for maintenance</p> <p>2 Operation and test methods of basic technique necessary for maintenance</p> <p>3 Turbine engine (a) Knowledge necessary for structure, function, performance, maintenance, remodeling, and test of turbine engine, turbine engine accessory, and turbine engine's command system (b) Methods of handling, maintenance, remodeling, and test of turbine engine, turbine engine accessory, and turbine engine's command system</p>
Propeller-related	<p>1 Basic maintenance technique (a) Knowledge of flight rule, maintenance rule, and other rules necessary for maintenance (b) Operation and test methods of basic technique necessary for maintenance</p> <p>2 Knowledge of quality control necessary for maintenance and remodeling</p> <p>3 Propeller (a) Knowledge necessary for structure, function, maintenance, remodeling, and test of propeller, propeller accessory, and propeller's command system (b) Methods of handling, maintenance, remodeling, and test of propeller, propeller accessory, and propeller command system</p>
Instrument-related	1 Basic maintenance technique

	<p>(a) Knowledge of flight rule, maintenance rule, and other rules necessary for maintenance</p> <p>(b) Operation and test methods of basic technique necessary for maintenance</p> <p>2 Knowledge of quality control necessary for maintenance and remodeling</p> <p>3 Instrument</p> <p>(a) Knowledge necessary for structure, function, maintenance, remodeling, and test of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p> <p>(b) Methods of handling, maintenance, remodeling, and test of machine instrument, electric instrument, gyroscopic instrument, and electronic instrument</p>
Electronic accessory-related	<p>1 Basic maintenance technique</p> <p>(a) Knowledge of flight rule, maintenance rule, and other rules necessary for maintenance</p> <p>(b) Operation and test methods of basic technique necessary for maintenance</p> <p>2 Knowledge of quality control necessary for maintenance and remodeling</p> <p>3 Electronic accessory</p> <p>(a) Knowledge necessary for structure, function, maintenance, remodeling, and test of electronic accessory</p> <p>(b) Methods of handling, maintenance, remodeling, and test of electronic accessory</p>
Electrical accessory-related	<p>1 Basic maintenance technique</p> <p>(a) Knowledge of flight rule, maintenance rule, and other rules necessary for maintenance</p>

		<p>(b) Operation and test methods of basic technique necessary for maintenance</p> <p>2 Knowledge of quality control necessary for maintenance and remodeling</p> <p>3 Electric accessory</p> <p>(a) Knowledge necessary for structure, function, maintenance, remodeling, and test of electric accessory</p> <p>(b) Methods of handling, maintenance, remodeling, and test of electric accessory</p>
	Wireless radio-related	<p>1 Basic maintenance technique</p> <p>(a) Knowledge of flight rule, maintenance rule, and other rules necessary for maintenance</p> <p>(b) Operation and test methods of basic technique necessary for maintenance</p> <p>2 Knowledge of quality control necessary for maintenance and remodeling</p> <p>3 Radio communication device</p> <p>(a) Knowledge necessary for structure, function, maintenance, remodeling, and test of radio communication device</p> <p>(b) Methods of handling, maintenance, remodeling, and test of radio communication device</p>
Aviation English proficiency certification		Conversation in aviation English
Instrument flight certification		<p>1 Knowledge required for operation</p> <p>2 Pre-flight work</p> <p>3 Flight with basic instrument</p> <p>4 Air operation and flight based on the characteristics of mode</p> <p>5 Flight by instrument flight rules including the following</p>

		(a) Transition to instrument flight at takeoff (b) Standard instrument departure procedure and instrument arrival procedure (c) Waiting procedure (d) Instrument approach procedure (e) Missed approach procedure (f) Landing from instrument approach 6 Open air flight with instrument flight rule 7 Operation at abnormal and emergency condition 8 Communication with the air traffic control etc. 9 Total ability
Flight instructor certification		Subjects for commercial pilot as well as educational guideline for maneuvering assuming an examiner as maneuvering trainee

Appended table 4 (Re: Art. 61-2)

Physical examination criteria

Examination item	Class 1	Class 2
1 General	(1) A person shall not have anomaly, deformity, or dysfunction in the head, face, neck, trunk, or extremities that may disrupt flight operation. (2) A person shall not have obesity that may disrupt flight operation. (3) A person shall not have malignancy or its previous history, or possibility of malignancy, or benign tumor that may disrupt flight operation. (4) A person shall not have any infectious diseases or their possibility.	(1) A person shall not have anomaly, deformity, or dysfunction in the head, face, neck, trunk, or extremities that may disrupt flight operation. (2) A person shall not have obesity that may disrupt flight operation. (3) A person shall not have malignancy or its previous history, or possibility of malignancy, or benign tumor that may disrupt flight operation. (4) A person shall not have any infectious diseases or their possibility.

	<p>(5) A person shall not have endocrine disorder or metabolic disorder, or organ damage or dysfunction due to these disorders that may disrupt flight disorders.</p> <p>(6) A person shall not have rheumatic disease, connective tissue disease, or immune deficiency disease that may disrupt flight operation.</p> <p>(7) A person shall not have any allergic diseases that may disrupt flight operation.</p> <p>(8) A person shall not have sleep disorder causing sleepiness that may disrupt flight operation.</p>	<p>(5) A person shall not have endocrine disorder or metabolic disorder, or organ damage or dysfunction due to these disorders that may disrupt flight disorders.</p> <p>(6) A person shall not have rheumatic disease, connective tissue disease, or immune deficiency disease that may disrupt flight operation.</p> <p>(7) A person shall not have any allergic diseases that may disrupt flight operation.</p> <p>(8) A person shall not have sleep disorder causing sleepiness that may disrupt flight operation.</p>
2 Respiratory system	<p>(1) A person shall not have any respiratory diseases or pleural or mediastinal disease that may disrupt flight operation.</p> <p>(2) A person shall not have spontaneous pneumothorax or its previous history.</p> <p>(3) A person shall not have any secondary diseases due to thoracic surgery that may disrupt flight operation.</p>	<p>(1) A person shall not have any respiratory diseases or pleural or mediastinal disease that may disrupt flight operation.</p> <p>(2) A person shall not have spontaneous pneumothorax or its previous history.</p> <p>(3) A person shall not have any secondary diseases due to thoracic surgery that may disrupt flight operation.</p>
3 Circulatory system and vascular system	<p>(1) A person shall have less than 160 mm mercury of systolic blood pressure and less than 95 mm mercury of diastolic blood pressure, and shall not have orthostatic hypotension accompanying subjective symptom.</p> <p>(2) A person shall not have myocardial dysfunction or its sign.</p> <p>(3) A person shall not have coronary artery disease or its sign.</p> <p>(4) A person shall not have congenital heart disease that may disrupt flight operation.</p>	<p>(1) A person shall have less than 160 mm mercury of systolic blood pressure and less than 95 mm mercury of diastolic blood pressure, and shall not have orthostatic hypotension accompanying subjective symptom.</p> <p>(2) A person shall not have myocardial dysfunction or its sign.</p> <p>(3) A person shall not have coronary artery disease or its sign.</p> <p>(4) A person shall not have congenital heart disease that may disrupt flight operation.</p>

	<p>(5) A person shall not have acquired valvular disease or its previous history that may disrupt flight operation.</p> <p>(6) A person shall not have any pericardial diseases that may disrupt flight operation.</p> <p>(7) A person shall not have heart failure or its previous history.</p> <p>(8) A person shall not have disorder of impulse formation or excitation-conduction that may disrupt flight operation.</p> <p>(9) A person shall not have arterial disease, venous disease, or lymphatic disease that may disrupt flight operation.</p>	<p>(5) A person shall not have acquired valvular disease or its previous history that may disrupt flight operation.</p> <p>(6) A person shall not have any pericardial diseases that may disrupt flight operation.</p> <p>(7) A person shall not have heart failure or its previous history.</p> <p>(8) A person shall not have disorder of impulse formation or excitation-conduction that may disrupt flight operation.</p> <p>(9) A person shall not have arterial disease, venous disease, or lymphatic disease that may disrupt flight operation.</p>
4 Digestive system (excluding oral cavity and teeth.)	<p>(1) A person shall not have a disease or dysfunction in digestive system and peritoneum that may disrupt flight operation.</p> <p>(2) A person shall not have any gastroenterological diseases or secondary diseases due to the surgery that may disrupt flight operation.</p>	<p>(1) A person shall not have a disease or dysfunction in digestive system and peritoneum that may disrupt flight operation.</p> <p>(2) A person shall not have any gastroenterological diseases or secondary diseases due to the surgery that may disrupt flight operation.</p>
5 Blood and hematopoietic system	<p>(1) A person shall not have anemia that may disrupt flight operation.</p> <p>(2) A person shall not have any systemic diseases of blood or hematopoietic organ that may disrupt flight operation.</p> <p>(3) A person shall not have any diseases with bleeding tendency that may disrupt flight operation.</p>	<p>(1) A person shall not have anemia that may disrupt flight operation.</p> <p>(2) A person shall not have any systemic diseases of blood or hematopoietic organ that may disrupt flight operation.</p> <p>(3) A person shall not have any diseases with bleeding tendency that may disrupt flight operation.</p>
6 Kidney, urinary system, and reproductive system	<p>(1) A person shall not have any diseases or secondary diseases in kidney that may disrupt flight operation.</p>	<p>(1) A person shall not have any diseases or secondary diseases in kidney that may disrupt flight operation.</p>

	<p>(2) A person shall not have any diseases or secondary diseases in urinary organs that may disrupt flight operation.</p> <p>(3) A person shall not have any diseases or secondary diseases in reproductive organ that may disrupt flight operation.</p> <p>(4) A person shall not be pregnant.</p>	<p>(2) A person shall not have any diseases or secondary diseases in urinary organs that may disrupt flight operation.</p> <p>(3) A person shall not have any diseases or secondary diseases in reproductive organ that may disrupt flight operation.</p> <p>(4) A person shall not disrupt flight operation due to pregnancy.</p>
7 Motor system	<p>(1) A person shall not have anomaly, deformity, defection, or dysfunction in motor organs that may disrupt flight operation.</p> <p>(2) A person shall not have any diseases or deformities in spine that may disrupt flight operation.</p>	<p>(1) A person shall not have anomaly, deformity, defection, or dysfunction in motor organs that may disrupt flight operation.</p> <p>(2) A person shall not have any diseases or deformities in spine that may disrupt flight operation.</p>
8 Mental and nerve system	<p>(1) A person shall not have serious mental disorder or its previous history.</p> <p>(2) A person shall not have personality disorder or behavioral disorder or their previous history that may disrupt flight operation.</p> <p>(3) A person shall not have drug dependence or alcohol dependence or their previous history.</p> <p>(4) A person shall not have epilepsy or its previous history.</p> <p>(5) A person shall not have impaired consciousness or convulsive seizure or their previous history.</p> <p>(6) A person shall not have previous history or aftereffects of head injury that may disrupt flight operation.</p> <p>(7) A person shall not have serious central nervous system disorders or their previous history.</p>	<p>(1) A person shall not have serious mental disorder or its previous history.</p> <p>(2) A person shall not have personality disorder or behavioral disorder or their previous history that may disrupt flight operation.</p> <p>(3) A person shall not have drug dependence or alcohol dependence or their previous history.</p> <p>(4) A person shall not have epilepsy or its previous history.</p> <p>(5) A person shall not have impaired consciousness or convulsive seizure or their previous history.</p> <p>(6) A person shall not have previous history or aftereffects of head injury that may disrupt flight operation.</p> <p>(7) A person shall not have serious central nervous system disorders or their previous history.</p>

	(8) A person shall not have disorder of peripheral nerve or automatic nerve that may disrupt flight operation.	(8) A person shall not have disorder of peripheral nerve or automatic nerve that may disrupt flight operation.
9 Eyes	(1) A person shall not have any diseases or dysfunction in external eye and eye adnexa that may disrupt flight operation. (2) A person shall not have glaucoma. (3) A person shall not have any diseases in optic media, eyeground, or optic pathway that may disrupt flight operation.	(1) A person shall not have any diseases or dysfunction in external eye and eye adnexa that may disrupt flight operation. (2) A person shall not have glaucoma. (3) A person shall not have any diseases in optic media, eyeground, or optic pathway that may disrupt flight operation.
10 Visual performance	(1) A person shall correspond to either following (a) or (b). However, criteria of (b) shall be applied only to a person who is indicated to regularly wear a pair of glasses (correcting glass that are used during flight operation) and carry secondary glasses for flight operation in the flight physical examination certificate. (a) A person shall have at least 0.7 of naked vision for each eye and 1.0 of distant vision for both eyes. (b) For each eye, a person shall be able to correct his/her eye to at least 0.7 and 1.0 for both eyes with a pair of glasses which do not have more than eight diopter (\pm) of lens refractivity. (2) A person shall be able to read at least 0.2 of the target of near vision chart (for 30 cm vision) from the distance of 80 cm with a naked eye or correcting glasses for each eye.	(1) A person shall correspond to either following (a) or (b). However, criteria of (b) shall be applied only to a person who is indicated to regularly wear a pair of glasses (correcting glass that are used during flight operation) and carry secondary glasses for flight operation in the flight physical examination certificate. (a) A person shall have at least 0.7 of distant vision for each naked eye. (b) For each eye, a person shall be able to correct his/her eye to at least 0.7 with a pair of glasses which do not have any more than eight diopter (\pm) of lens refractivity. (2) A person shall be able to read at least 0.5 of the target of near vision chart (for 30 cm vision) from the any distance between 30 cm and 50 cm with a naked eye or correcting glasses.

	<p>(3) A person shall be able to read at least 0.5 of the target of near vision chart (for 30 cm vision) from the any distance between 30 cm and 50 cm with a naked eye or correcting glasses for each eye.</p> <p>(4) A person shall not have binocular vision abnormality that may disrupt flight operation.</p> <p>(5) A person shall not have visual field abnormality that may disrupt flight operation.</p> <p>(6) A person shall not have ocular motion abnormality that may disrupt flight operation.</p> <p>(7) A person shall not have color vision abnormality that may disrupt flight operation.</p>	<p>(3) A person shall not have binocular vision abnormality that may disrupt flight operation.</p> <p>(4) A person shall not have visual field abnormality that may disrupt flight operation.</p> <p>(5) A person shall not have ocular motion abnormality that may disrupt flight operation.</p> <p>(6) A person shall not have color vision abnormality that may disrupt flight operation.</p>
<p>11 Ear, nose, and throat</p>	<p>(1) A person shall not have any diseases that may disrupt flight operation in the inner ear, middle ear (including mastoid), or external ear.</p> <p>(2) A person shall not have disorder of equilibrium.</p> <p>(3) A person shall not have eardrum abnormality that may disrupt flight operation.</p> <p>(4) A person shall not have eustachian tube dysfunction.</p> <p>(5) A person shall not have any diseases that may disrupt flight operation in nasal cavity, nasal sinus, or laryngopharynx.</p> <p>(6) A person shall not have deviation of nasal septum that significantly prevents air flow of nasal cavity.</p> <p>(7) A person shall not have dysphemia, phonation disorder, or speech dysfunction.</p>	<p>(1) A person shall not have any diseases that may disrupt flight operation in the inner ear, middle ear (including mastoid), or external ear.</p> <p>(2) A person shall not have disorder of equilibrium.</p> <p>(3) A person shall not have eardrum abnormality that may disrupt flight operation.</p> <p>(4) A person shall not have eustachian tube dysfunction.</p> <p>(5) A person shall not have any diseases that may disrupt flight operation in nasal cavity, nasal sinus, or laryngopharynx.</p> <p>(6) A person shall not have deviation of nasal septum that significantly prevents air flow of nasal cavity.</p> <p>(7) A person shall not have dysphemia, phonation disorder, or speech dysfunction.</p>

12 Hearing	In the room of less than 50 db (A) of background noise, a person shall not have more than 35 db of hearing loss in 500, 1000, and 2000 Hz, and more than 50 db of hearing loss in 3000 Hz for each ear.	(1) For a person with instrument flight certificate, in the room of less than 50 db (A) of background noise, a person shall not have more than 35 db of hearing loss in 500, 1000, and 2000 Hz, and more than 50 db of hearing loss in 3000 Hz for each ear. (2) A person other than included in (1) must correspond to any of the following. (a) A person shall not have more than 45 db of hearing loss in 500, 1000, and 2000 Hz in the room of less than 50 db (A) of background noise for each ear. A person who does not meet this criteria shall not have more than 30 db of hearing loss in 500, 1000, and 2000 Hz in the room of less than 50 db (A) of background noise for either ear. (b) A person shall be able to correctly hear the conversation spoken from 2 m behind in the room of less than 50 db (A) of background noise with both ears.
13 Oral cavity and tooth	A person shall not have any diseases or dysfunction in the oral cavity and tooth that may disrupt flight operation.	A person shall not have any diseases or dysfunction in the oral cavity and tooth that may disrupt flight operation.
14 Total	A person shall not have any physical and mental defects that may disrupt flight operation.	A person shall not have any physical and mental defects that may disrupt flight operation.

Appended table 5 (Re: Art. 79)

(omitted)

3-(viii)

Width of runway	Number of vertical stripes
60 m	16
45 m	12
30 m	8
25 m	6

15 m	4
------	---