FLIGHT SAFETY REGULATIONS

June 2002

Ministry of Construction & Transportation
Republic of Korea

[Reference Only]

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CHAPTER Ⅰ - GENERAL

1.1 GENERAL RULES

1.1.1.1 Objectives

In accordance with Korean Aviation Regulation, ICAO and Annex, the objective of these regulations is to ensure the aviation operational safety by means of prescribed a minimum safety standards which airmen and aircraft owners must comply with.

1.1.1.2 Applicability

A. These regulations shall apply to or persons who are aircraft owners or operators and shall conforms to each item.

1) Republic of Korea registered aircraft;
2) Aircraft registered in another Contracting State that are operated by a person licensed by Republic of Korea, and must be maintained in accordance with the standards of the aircraft State of Registry, wherever that maintenance is performed;
3) Aircraft of other Contracting States operating in Republic of Korea.

B. Those regulations addressing persons certificated under any Part of these regulations apply also to any person who engages in an operation governed by any Part of these regulations without the appropriate certificate, operations specification, or similar document required as part of the certification.

C. This regulation is applied to all the holders of certificate, letter of authorization, operation regulation and all of airmen.

1.1.1.3 Organization of Regulations

A. These regulations are subdivided into five hierarchical categories:

1) Part : One digit(1.1)
2) subchapter Two digits(1.1.1)
3) Section : Three digits(1.1.1)
4) Subsection : Four digits(1.1.1.1)
5) Section or Subsection which will be newly added : (1.1.1.A, 1.1.1.1.A)
6) each regulation : A. 1), a), ①, ⓐ

B. Definitions used throughout these regulations are organised as follows:

1) Definitions applicable to two or more Parts appear in Part 1, Subsection 1.1.1.4;
2) Definitions applicable only to one Part appears at the beginning of that Part; and
3) Definitions contained in The Korean Civil Aviation Regulations are presented therein, and not in these regulations.

C. Acronyms used within each Part are defined at the beginning of those Parts, and if a definition is supplied, a note will indicate the Part where the definition is located.

1.1.1.4 Definitions

For the purpose of these regulations, the following definitions shall apply:

1) **Airworthiness release**. A certification signed by a licensed mechanic authorized by the AOC holder indicating that work was performed in accordance with the AOC holder's maintenance manual, was inspected by a licensed mechanic, and the aircraft was found satisfactory for safe operation.
2) **Certifying staff**. Those personnel who are authorized by the Approved Maintenance organization in accordance with a procedure acceptable to the Authority to certify aircraft or aircraft components for release to service.
3) **Airworthiness data**. Any information necessary to ensure that anaircraft or aircraft component can be maintained in a condition such that airworthiness of the aircraft, or serviceability of operational and emergency equipment, as appropriate, is assured.
4) **Instrument time**. Time in which cockpit instruments are used as the sole means for navigation and control.
5) **Instrument approach**. An approach procedure prescribed by the Authority having jurisdiction over the aerodrome.
6) **Instrument training**. Training which is received from an authorized instructor under actual or simulated instrument meteorological conditions
7) **Balloon**. A non-power-driven lighter-than-air aircraft.
8) **Pilot in command**. The pilot responsible for the operation and safety of the aircraft during flight time.
9) **Airframe**. The fuselage, booms, nacelles, cowlings, fairings, airfoil surfaces (including rotors but excluding propellers and rotating airfoils of a powerplant), and landing gear of an aircraft and their accessories and controls.
10) **Solo flight**. Flight time during which a student pilot is the sole occupant of the aircraft, or that flight time during which the student acts as a PIC of a gas balloon or an airship requiring more than one flight crewmember
11) **Approved by the Authority**. Approved by the Authority directly or in accordance with a procedure approved by the Authority.
12) **Authority**. The civil aviation authority responsible for the oversight of civil aviation in [STATE].
13) **Large aeroplane**. An aeroplane having a maximum certified take-off mass of 5,700 kg. (12,500 lbs.), or more.
14) **Dual instruction time**. Flight time during which a person is receiving flight instruction from a properly authorized pilot on board the aircraft.
15) **State of Registry**. The Contracting State on whose registry an aircraft is entered.
16) **Flight simulator**. A device that

a) Is a full-size aircraft cockpit replica of a specific type of aircraft, or make, model, and series of aircraft;
b) Includes the hardware and software necessary to represent the aircraft in ground operations and flight operations;
c) Uses a force cueing system that provides cues at least equivalent to those cues provided by a 3 degree freedom of motion system;
d) Uses a visual system that provides at least a 45 degree horizontal field of view and a 30 degree vertical field of view simultaneously for each pilot; and

e) Has been evaluated, qualified, and approved by the Authority.

17) **Powerplant or engine**. An engine that is used or intended to be used for propelling aircraft. It includes turbo superchargers, appurtenances, and accessories necessary for its functioning, but does not include propellers.

18) **Co-pilot**. A licensed pilot serving in any piloting capacity other than as pilot-in-command but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction

19) **Aeronautical experience**. Pilot time obtained in an aircraft, approved flight simulator, or approved flight-training device for meeting the training and flight time requirements of these regulations.

20) **Aeroplane**. A power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.

21) **Pre-flight inspection**. The inspection carried out before flight to insure that the aircraft is fit for the intended flight.

22) **Flight training**. Training, other than ground training, received from an authorized instructor in flight in an aircraft.

23) **Flight training device**. A device that

a) Is a full size replica of the instruments, equipment, panels, and controls of an aircraft, or set of aircraft, open or in an enclosed cockpit, including the hardware and software for the systems installed, that is necessary to simulate the aircraft in ground and flight operations;

b) Need not have a force (motion) cueing or visual system; and

c) Has been evaluated, qualified, and approved by the Authority.

Note: A set of aircraft are those that share similar performance characteristics, such as similar airspeed and altitude operating envelops, similar handling characteristics, and the same number and type of propulsion systems.

24) **Small aeroplane**. An aeroplane having a maximum certified take-off mass of less than 5,700 kg. (12,500 lbs.).

25) **Repair**. The restoration of an aircraft/aeronautical product to a serviceable condition in conformity with an approved standard.

26) **Powered-lift**. A heavier-than-air aircraft capable of vertical takeoff, vertical landing, and low speed flight that depends principally on engine-driven lift devices or engine thrust for lift during these flight regimes and on nonrotating airfoil(s) for lift during horizontal flight.

27) **Flight time**. The total time from the moment an aircraft first moves under its own power for the purpose of taking off until the moment it comes to rest at the end of the flight.

Note: Flight time as here defined is synonymous with the term "block-to-block" time or "chock-to-chock" time in general usage, which is measured from the time an aircraft moves from the loading point until it stops at the unloading point.

28) **Crew Resource Management**. A program designed to improve the safety of flight operations by optimising the safe, efficient, and effective use of human resources, hardware, and information through

improved crew communication and co-ordination.

29) **Examiner**. Any person authorized by the Authority to conduct a pilot proficiency test, a practical test for an airman license or rating, or a knowledge test under these regulations.

30) **Practical test.** A competency test on the areas of operations for a license, certificate, rating, or authorization that is conducted by having the applicant respond to questions and demonstrate manoeuvres in flight, in an approved flight simulator, or in an approved flight training device, or in a combination of these.

31) **Night**. The hours between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise. Civil twilight ends in the evening when the centre of the sun's disc is 6 degrees below the horizon and begins in the morning when the centre of the sun's disc is 6 degrees below the horizon.

32) **Cross-country time**. That time a pilot spends in flight in an aircraft which includes a landing at a point other than the point of departure and, for the purpose of meeting the cross-country time requirements for a private pilot license (except with a rotorcraft rating), commercial pilot license, or an instrument rating, includes a landing at an aerodrome which must be a straight-line distance of more than 50 nautical miles from the original point of departure.

33) **Pressurised aircraft**. For airman-licensing purposes, means an aircraft that has a service ceiling or maximum operating altitude, whichever is lower, above 25,000 feet MSL.

34) **Flight crewmember**. A licensed crewmember charged with duties essential to the operation of an aircraft during flight time.

35) **Operational control**. The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.

36) **authorized instructor**. A person who

a) Holds a valid ground instructor certificate issued under Part 2 when conducting ground training

b) Holds a current flight instructor certificate issued under Part 2 when conducting ground training or flight training; or

c) Is authorized by the Authority to provide ground training or flight training under Part 2 and Part3.

37) **Approved standard**. A manufacturing, design, maintenance, or quality standard approved by the Authority.

38) **Approved training**. Training carried out under special curricula and supervision approved by the Authority.

39) **Appliance**. Any instrument, mechanism, equipment, part, apparatus, appurtenance, or accessory, including communications equipment, that is used or intended to be used in operating or controlling an aircraft in flight, is installed in or attached to the aircraft, and is not part of an airframe, powerplant, or propeller.

40) **Maintenance**. Tasks required to ensure the continued airworthiness of an aircraft or aeronautical product including any one or combination of overhaul, repair, inspection, replacement, modification, and defect rectification.

41) **Approved Maintenance organization (AMO).** An organization approved to perform specific aircraft maintenance activities by the Authority. These activities may include the inspection, overhaul,

maintenance, repair and/or modification and release to service of aircraft or aeronautical products.

42) **Maintenance release**. A document containing a certification that inspection and maintenance work has been performed satisfactorily in accordance with the methods prescribed by the Authority.

43) **Pilot time**. That time a person

a) Serves as a required pilot;

b) Receives training from an authorized instructor in an aircraft, approved flight simulator, or approved flight training device; or

c) Gives training as an authorized instructor in an aircraft, approved flight simulator, or approved flight-training device.

44) **Approved continuous maintenance program.** A maintenance program approved by the State of Registry.

45) **Knowledge test**. A test on the aeronautical knowledge areas required for an airman license or rating that can be administered in written form or by a computer.

46) **Accountable manager**. The manager who has corporate authority for ensuring that all prescribed actions are performed to the standard required by the Authority. When authorized by the Authority, the accountable manager may delegate all or part of his or her authority in writing to another person within the organization, who becomes the accountable manager for the matters delegated.

47) **Contracting States**. All States that are signatories to the Convention on International Civil Aviation

48) **Minimum Equipment List (MEL)**. A list approved by the Authority which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the Master Minimum Equipment List established for the aircraft type by the aircraft manufacturer, and approved by the State of Design.

49) **Category II (CAT II) operations**. With respect to the operation of aircraft, means a straight-in ILS approach to the runway of an airport under a Category II ILS instrument approach procedure issued by the Authority or other appropriate authority.

50) **CategoryIII (CAT III) operations**. With respect to the operation of aircraft, means an ILS approach to, and landing on, the runway of an airport using a Category III ILS instrument approach procedure issued by the Authority or other appropriate authority.

51) **Courseware**. Instructional material developed for each course or curriculum, including lesson plans, flight event descriptions, computer software programs, audio-visual programs, workbooks, and handouts.

52) **Evaluator**. A person employed by a certified Aviation Training organization who performs tests for licensing, added ratings, authorizations, and proficiency checks that are authorized by the certificate holder's training specification, and who is authorized by the Authority to administer such checks and tests.

53) **Propeller**. A device for propelling an aircraft that has blades on a powerplant driven shaft and that, when rotated, produces by its action on the air, a thrust approximately perpendicular toits plane of rotation. It includes control components normally supplied by its manufacturer, but does not include main and auxiliary rotors or rotating airfoils of powerplants.

54) **Rating**. An authorization entered on or associated with a license or certificate and forming part thereof, stating special conditions, privileges or limitations pertaining to such license or certificate.

55) **Air Traffic Control**. A service that promotes the safe, orderly, and expeditious flow of air traffic at aerodromes and during the approach, departure, and en route environments.
56) **Air Traffic Control (ATC) facility**. Abuilding holding the persons and equipment responsible for providing ATC services (e.g., airport tower, approach control, centre).
57) **Aircraft component**. Any component part of an aircraft up to and including a complete powerplant and/or any operational/emergency equipment.
58) **Aircraft type**. All aircraft of the same basic design.
59) **Technical log**. A document carried on an aircraft that contains information to meet ICAO requirements; a technical log contains two independent sections: a journey record section and an aircraft maintenance record section
60) **Aeronautical product**. Any aircraft, aircraft engine, propeller, or subassembly, appliance, material, part, or component to be installed thereon.
61) **Glider**. A non-power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces, which remain, fixed under given conditions of flight.
62) **Helicopter**. A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axis.
   a) **Class 1 helicopter**. A helicopter with performance such that, in case of critical engine failure, it is able to land on the rejected take-off area or safely continue the flight to an appropriate landing area, depending on when the failure occurs.
   b) **Class 2 helicopter**. A helicopter with performance such that, in case of critical engine failure, it is able to safely continue the flight, except when the failure occurs prior to a defined point after take-off or after a defined point before landing, in which case a forced landing may be required.
   c) **Class 3 helicopter**. A helicopter with performance such that, in case of engine failure at any point in the flight profile, a forced landing must be performed.
63) **Training time**. The time spent receiving from an authorized instructor flight training, ground training, or simulated flight training in an approved flight simulator or approved flight-training device.
64) **Training program**. Program that consists of courses, courseware, facilities, flight training equipment, and personnel necessary to accomplish a specific training objective. It may include a core curriculum and a specialty curriculum.

1.2 GENERAL ADMINISTRATIVE RULES GOVERNING TESTING, LICENSES, AND CERTIFICATES

1.2.1.1 Display and Inspection of Licenses and Certificates

A. Pilot license:

1) To act as a pilot of a civil aircraft of [STATE] registry, a pilot shall have in his or her physical possession or readily accessible in the aircraft a valid pilot license or special purpose authorization issued under these regulations.
2) To act as a pilot of a civil aircraft of foreign registry within [STATE], a pilot shall be the holder of a valid pilot license, and have the pilot license in his or her physical possession or readily accessible in the aircraft.

B. Flight instructor license: A person who holds a flight instructor license shall have that license, or other documentation acceptable to the Authority, in that person's physical possession or readily accessible in the aircraft when exercising the privileges of that license.

C. Other airman license: A person required by any part of these regulations to have an airman's license shall have it in their physical possession or readily accessible in the aircraft or at the work site when exercising the privileges of that license.

D. Medical certificate: A person required by any part of these regulations to have a current medical certificate shall have it in their physical possession or readily accessible in the aircraft or at the work site when exercising the privileges of that certificate.

E. Pilot School certificate and Aviation Maintenance Technician School certificate: Each holder of a Pilot School certificate or a provisional Pilot School certificate or Aviation Maintenance Technician School certificate shall display that certificate in a place in the school that is normally accessible to the public and that is not obscured.

F. Training Centre Certificate: Each holder of a Training Centre certificate shall prominently display that certificate in a place accessible to the public in the principal business office of the training centre.

G. Aircraft Airworthiness Certificate: Each owner or operator of an aircraft shall display that certificate in the cabin of the aircraft or at the entrance to the aircraft flight deck.

H. Approved Maintenance Organization (AMO) Certificate: Each holder of an AMO certificate shall prominently display that certificate in a place accessible to the public in the principal business office of the AMO.

1) Inspection of license: Each person who holds an airman or crewmember license, medical certificate, or authorization required by these regulations shall present it for inspection upon a request from:

a) The Authority; or

b) Any national or local law enforcement officer

1.2.1.2 Change of Name

A. A holder of a license or certificate issued under these regulations may apply to change the name on a license or certificate. The holder shall include with any such request

1) The current license or certificate; and

2) A copy of the marriage license, court order, or other document verifying the name change.

3) The Authority will return to the airman the documents specified in paragraph (a) of this subsection

1.2.1.3 Change of Address

The holder of an airman license or pilot school, training centre, or aviation maintenance school certificate who has made a change in permanent mailing address may not, after 30 days from that date, exercise the privileges of the license or certificate unless the holder has notified the Authority in writing of the new permanent mailing address, or current residential address if the permanent mailing address includes a post office box number.

1.2.1.4 Replacement of a Lost or Destroyed Airman or Medical Certificate or Knowledge Test Report

A. An applicant who has lost or destroyed one of the following documents issued under these regulations shall request a replacement in writing from the office designated by the Authority:

1) An airman license.
2) A medical certificate.
3) A knowledge test report.

B. The airman or applicant shall state in the request letter

1) The name of the airman or applicant;
2) The permanent mailing address, or if the permanent mailing address includes a post office box number, the person's current residential address;
3) The social security number or equivalent national identification number;
4) The date and place of birth of the airman or applicant; and
5) Any available information regarding the
   a) Grade, number, and date of issuance of the license, and the ratings, if applicable;
   b) Date of the medical examination, if applicable; and
   c) Date the knowledge test was taken, if applicable.

C. After receiving a facsimile from the Authority confirming that the lost or destroyed document was issued, an airman may carry the facsimile in lieu of the lost or destroyed document for up to 60 days pending the airman's receipt of a duplicate document.

1.2.1.5 Falsification, Reproduction, or Alteration of Applications, Certificates, Logbooks, Reports, or Records

A. No person may make or cause to be made concerning any license, certificate, rating, qualification, or authorization, application for or duplicate thereof, issued under these regulations:

1) Any fraudulent or intentionally false statement
2) Any fraudulent or intentionally false entry in any logbook, record, or report that these regulations require, or used to show compliance with any requirement of these regulations;
3) Any reproduction for fraudulent purpose; or
4) Any alteration.

B. Any person who commits any act prohibited under paragraph (a) of this section may have his or her airman license, rating, certificate, qualification, or authorization revoked or suspended.

1.2.1.6 Surrender, Suspension, or Revocation of License or Certificate

A. Any license or certificate issued under these regulations ceases to be effective if it is surrendered, suspended, or revoked.

B. The holder of any license or certificate issued under these regulations that has been suspended or revoked shall return that license or certificate to the Authority when requested to do so by the Authority.

1.2.1.7 Reapplication after Revocation

Unless otherwise authorized by the Authority, a person whose license, certificate, rating, or authorization has been revoked may not apply for any license, certificate, rating, or authorization for 1 year after the date of revocation.

1.2.1.8 Reapplication after Suspension

Unless otherwise authorized by the Authority, a person whose license has been suspended may not apply for any license, rating, or authorization during the period of suspension.

1.2.1.9 Voluntary Surrender or Exchange of License

A. The holder of a license or certificate issued under these regulations may voluntarily surrender it for:

1) Cancellation;
2) Issuance of a lower grade license; or
3) Another license with specific ratings deleted.

B. An applicant requesting voluntary surrender of a license shall include the following signed statement or its equivalent: "This request is made for my own reasons, with full knowledge that my (insert name of license or rating, as appropriate) may not be reissued to me unless I again pass the tests prescribed for its issuance."

1.2.1.10 Prohibition on Performance during Medical Deficiency

A person who holds a current medical certificate issued under these regulations shall not act in a capacity for which that medical certificate is required while that person:

1) Knows or has reason to know of any medical condition that would make the person unable to meet the requirements for the required medical certificate; or
2) Is taking medication or receiving other treatment for a medical condition that results in the person being unable to meet the requirements for the required medical certificate.

1.2.1.11 Drug and Alcohol Testing and Reporting

A. An employee who performs any function requiring a license, rating, qualification, or authorization prescribed by these regulations directly or by contract for a certificate holder under the provisions of these regulations may

1) Be denied any license, certificate, rating, qualification, or authorization for a period of up to 1 year after the date of such refusal; and
2) Have his or her license, certificate, rating, qualification, or authorization issued under these regulations suspended or revoked.

B. Any person subject to these regulations who is convicted for the violation of any local or national statute relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, marijuana, or depressant or stimulant drugs or substances, may

1) Be denied any license, certificate, rating, qualification, or authorization issued under these regulations for a period of up to 1 year after the date of final conviction; or
2) Have his or her license, certificate, rating, qualification, or authorization issued under these regulations suspended or revoked.

C. Any person subject to these regulations who refuses to submit to a test to indicate the percentage by weight of alcohol in the blood, when requested by a law enforcement officer, or refuses to furnish or to authorize the release of the test results requested by the Authority may

1) Be denied any license, certificate, rating, qualification, or authorization issued under these regulations for a period of up to 1 year after the date of that refusal; or
2) Have his or her license, certificate, rating, qualification, orauthorization issued under these regulations suspended or revoked.

1.3 EXEMPTIONS AND EQUIVALENT SAFETY CASE

1.3.1.1 Exemptions and Equivalent Safety Case

No person may introduce procedures contrary to those prescribed in these regulations unless needed and an equivalent safety case has first been approved by the Authority.

CHAPTER Ⅱ - PERSONNEL LICENSING

2.1 GENERAL LICENSING REQUIREMENTS

2.1.1 GENERAL

2.1.1.1 APPLICABILITY

A. Part 2 prescribes-

1) The requirements for issuing airman licenses, and ratings; and authorizations to those licenses
2) The conditions under which those licenses, ratings, and authorizations are necessary; and
3) The privileges and limitations of holders of those licenses, ratings, and authorizations

2.1.1.2 Definitions of Licensing Requirements

For the purpose of Part 2, the following definitions shall apply-

1) **Pilot-in-Command time.** Total flight time that he/she has charge of aircraft operation while aircraft operation.
2) **Flight training equipment.** Flight simulators, flight training devices, and aircraft.
3) **Second**-in-Command time. Flight Time except for PIC time.
4) **Advanced flight training device.** A flight training device that has a cockpit that accurately replicates a specific make, model, and type aircraft cockpit, and handling characteristics that accurately model the aircraft handling characteristics
5) **Rating.** An authorization entered on or associated with a licence and forming part thereof, stating special conditions, privileges or limitations pertaining to such licence
6) **Operating position.** An air traffic control function performed within or directly associated with a control facility
7) **Aviation Medical Examiner.** A person shall be qualified and licensed under Enforcement Regulation Article 96 in the practice of medicine and shall have received training in aviation medicine from aviation medical education school which authorized by Medical Association

2.1.2 Licenses, Ratings, and Authorizations

2.1.2.1 Applicability

This section describes the licenses, ratings and pilot authorizations issued by the Authority and prescribes the requirements for testing and validating such licenses, ratings, and authorizations.

2.1.2.2 Licenses Issued

In accordance with Aviation Act Article 26, the Director of Civil Aviation Safety Authority may issue the following licenses under this Part-

1) Pilot licenses-
   a) Student pilot;
   b) Private pilot;
   c) Commercial pilot; and
   d) Airline transport pilot.
2) Flight engineer license
3) Air traffic controller license
4) Aviation Maintenance Technician
5) Aviation Repair Specialist
6) Aircraft flight operation officer
7) Flight navigator

2.1.2.3 Ratings Issued

A. The Director of Civil Aviation Safety Authority may issue the following ratings for pilots-
1) Aircraft Category ratings
   a) Aeroplane.
   b) Rotorcraft.
   c) Glider.
   d) Lighter-than-air.
   e) Power lift.
2) Aircraft Class ratings
   a) Single-engine, land.
   b) Single-engine, sea.
   c) Multi-engine, land.
   4) Multi-engine, sea
   d) Glider (High or Middle Class).
3) Aircraft type ratings
   a) Aircraft certified for at least two pilot
   b) Small helicopters for operations requiring an airline transport certificate
   c) Any aircraft considered necessary by the Director of Civil Aviation Safety Authority
4) Instrument ratings in the following aircraft
   a) Instrument - Aeroplane.
   b) Instrument - Helicopter.
5) Flight instructor license in the following rating
   a) Flight instructor license - Aeroplane
   b) Flight instructor license - Rotorcraft
   c) Flight instructor license - Lighter-than-air
   d) Flight instructor license - Glider

B. The Director of Transportation Safety Authority may place the category, class, or type rating on a pilot license when issuing that license, provided the rating reflects the appropriate category,

class, or type aircraft used to demonstrate skill and knowledge for its issuance.

C. The Director of Transportation Safety Authority may issue the following ratings for flight engineers

1) Aircraft: in the following category
   a) Aeroplane
   b) Rotorcraft.
2) Aircraft in the following class
   a) Single-engine, land.
   b) Multi-engine, land.
3) Aircraft type of rating shall apply any aircraft

D. The Director of Transportation Safety Authority may issue the following ratings for AMTs

1) The following ratings for Aircraft Category
   a) Aeroplane.
   b) Rotorcraft.
   c) Glider.
   d) Lighter-than-air.
   e) Power lift.
2) The following rating for Aircraft Class
   a) Single-engine, land.
   b) Single-engine, sea.
   c) Multi-engine, land.
   d) Multi-engine, sea
   e) Glider (High or Middle Class).
3) Type ratings in the following aircraft
   a) Aircraft over 15,000 kg maximum certificated take-off mass
   b) Rotorcraft over 15,000 kg maximum certificated take-off mass
   c) Any aircraft considered necessary by the Ministry of MOCT
4) The Director of Transportation Safety Authority may issue the following ratings for ARS:
   a) Airframe
   b) Powerplant
   c) Reciprocating engine
   d) Propellers
   e) Electronics, Electrics, Avionics

2.1.2.4 Authorizations Issued

The Director of Civil Aviation Safety Authority may issue the following authorizations under this Part-

1) Category II pilot authorization.
2) Category III pilot authorization

2.1.2.5 Duration of Licenses, Ratings, and Authorizations

The Director of Transportation Safety Authority issues all licenses without a specific expiration date.

2.1.2.6 General Requirements: Personnel Licenses, Ratings, and Authorizations

A. No person may act as a required pilot of a civil aircraft within Republic of Korea, unless that persons pilot license was issued under Aviation Rules and Regulations, or was issued or validated by the country in which the aircraft is registered.

B. No person may act as a pilot, flight instructor, required flight crew member, or air traffic controller unless that person holds an appropriate license and medical certificate issued under regulations concerning Aviation, or other documentation acceptable to the Director of Civil Aviation Safety Authority. This rule shall not be applied to military ATC person who works in military facility used by civil aircraft.

C. A pilot may not act as the pilot of an aircraft, unless that pilot holds a category, class, and type rating (if a class and type rating is required) that applies to the aircraft.

D. Unless of paragraph C, no person may receive training for the purpose of obtaining an additional pilot license or rating unless that training is conducted with the supervision of an authorized instructor.

E. The Director of Civil Aviation Safety Authority may issue a Temporary certificate to the holder of a license instead of an appropriate class or type rating for performing of special purpose which is Training, Testing, Free of charge, Not on board. This Temporary certificate shall only be valid in appropriate flight.

F. A person, who is under an revocation order of Personnel License and Rating within 2 years, is not issued Personal license and rating according to Korean Aviation Regulation 33. A.

G. The holder of Personal license and rating shall only perform the job which belongs to his/her Personal license and rating. This rule shall not be applied to military ATC personnel who works in a military facility used by civil aircraft.

H. Paragraph G and Regulation of Airmen duty describe the control of Glider (High or Middle Class) (including the handling of Airframe, Powerplant) and Test flight of new category, class or type of aircraft. This rule shall not be applied in case of obtaining of an authorization from the Director of Civil Aviation Safety Authority.

I. If a person obtains newly a higher class pilot license in the same category aircraft than a pilot license which he/she holds(according to Aviation Act Article 26), a class, type rating or instrument rating, Flight instructor license which he/she already holds is still valid in a higher class pilot license in same category aircraft than the pilot license which he/she hold.

J. If a person who holds an Aviation Maintenance Technician License obtains newly pilot license, also he is also considered to obtain a Glider license, and he may exercise the privilege of Glider license.

2.1.2.7 Pilot License and Ratings Issued on the Basis of a Foreign Pilot License

A. A person who holds a current pilot license issued by another Contracting State may apply for and be issued a private pilot license with the appropriate ratings, if the applicant-

1) Is not under an order of revocation or suspension by the country that issued the pilot license;
2) Holds a license that does not contain an endorsement stating that the applicant has not met all of the standards of ICAO for that license;
3) Holds a current medical certificate issued under Aviation Rules and Regulations or a current medical certificate issued by the country that issued the applicants pilot license; and
4) is able to read, speak, write, and understand the Korean or English language.

B. The Director of Civil Aviation Safety Authority may place upon a pilots license, which issues the aircraft ratings listed on that pilots foreign pilot license.

C. The Director of Civil Aviation Safety Authority may issue an instrument rating on a pilot license to a person who holds an instrument rating on a license issued by another Contracting State

D. A person who receives a pilot license under Aviation Act Chapter 3 and the provisions of this subsection Shall be limited to the privileges placed on the license; Shall be subject to the limitations and restrictions on the persons license issue and foreign pilot license when exercising the privileges of pilot license in an aircraft of Republic of Korea; and Shall not exercise the privileges that of the pilot license issue when the persons foreign pilot license has been revoked or suspended

E. The Director of Civil Aviation Safety Authority may place specific limitations upon a pilots license when the persons foreign pilot license is exchanged to pilot license in an aircraft of Republic of Korea.

2.1.3 Validation of Foreign and Military Licenses and Ratings

2.1.3.1 License and Ratings Issued on the Basis of a Foreign Pilot License

A. A person who holds a current pilot license issued by another Contracting State may apply for and be issued a private pilot license with the appropriate ratings without any further showing of proficiency if the applicant-

1) Is not under an order of revocation or suspension by the country that issued the pilot license;
2) Holds a license that does not contain an endorsement stating that the applicant has not met all of the standards of ICAO for that license;
3) Holds a current medical certificate issued under the Aviation Act or a current medical certificate issued by the country that issued the applicants pilot license; and
4) is able to read, speak, write, and understand the Korean language

B. The Director of Transportation Safety Authority may issue an aircraft rating and an instrument rating on a pilot license to a person who holds an aircraft rating and an instrument rating on a license issued by another Contracting State.

2.1.3.2 Special Rules for Military Pilots or Former Military Pilot

A rated military pilot or former rated military pilot may apply, on the basis of his or her military training, for An Airline Transport pilot license; a commercial pilot license; A Private pilot license; An instrument rating; A Flight instructor license.

2.1.4 General Testing and Training Requirements

2.1.4.1 General Procedure

Except for a Testing and Training procedure designated by the Director of Civil Aviation Safety Authority, Testing and Training procedure prescribed under Part 2.

2.1.4.2 Knowledge Test: Prerequisites and Passing Grades

The minimum passing grade is over 70% for the knowledge test of personnel license or rating.

2.1.4.3 Practical Test: Prerequisites

To be eligible for a practical test of personnel license or rating, an applicant shall have passed the knowledge test of the license or rating sought.

2.1.4.4 Practical Tests: General Procedures

A. Except as provided in paragraph B of this subsection, the Director of Transportation Safety Authority will determine an applicants ability to hold a license or rating issued under this subchapter based upon the applicants ability to safely perform the following during a practical test-

1) Perform the tasks specified in the areas of operation for the license or rating sought within the prescribed standards
2) Demonstrate mastery of the aircraft with the successful outcome of each task-
   a) Never seriously in doubt for the private pilot and commercial pilot tests; and
   b) Never in doubt for the airline transport pilot license and aircraft type rating tests;
3) Demonstrate sound judgement; and
4) Demonstrate single-pilot competence if the aircraft is type certified for single-pilot operations.

B. If an applicant fails any area of operation, that applicant fails the practical test.

C. An applicant is not eligible for a license or rating sought until all the areas of operation are passed.

D. The examiner or the applicant may discontinue a practical test at any time-

1) When the applicant fails one or more of the areas of operation; or
2) Due to inclement weather conditions, aircraft airworthiness, or any other safety-of-flight concern

2.1.4.5 Practical Tests: Required Aircraft and Equipment

A. An aircraft shall have the appropriate airworthiness that shall ensure a safe operation for the practical test

B. Flight simulator or flight training device for practical test must operate or check under

authorized rule

2.1.4.6 Records of Training Time

Each person shall document and record the following time in a manner acceptable to the Authority:

A. Training and aeronautical experience used to meet the requirements for a license, rating.

B. The aeronautical experience required to show recent flight experience requirements of these regulations.

2.1.4.7 Flight Training Received from Flight Instructors not Licensed by the Authority

A. A person may credit flight training toward the requirements of a pilot license or rating like one under Aviation Act Article 34 ② if that person received the training from a flight instructor of an Armed Force in a program for training military pilots

B. A person may credit flight training toward the requirements of a pilot license or rating like one under Aviation Act Article 34 ② if that person received the training from a flight instructor authorized to give such training by the licensing authority of a Contracting State, provided that the flight training is given outside Republic of Korea.

2.1.4.8 Limitations on the Use of Flight Simulators and Flight Training Device

Limitations on the use of flight simulators and flight training devices approved by the Chief Head of Regional Aviation Administration shall be applied with extra standard on the basis of Aviation Act Article 29 - 2 ③.

2.2 CERTIFICATION: PILOTS, FLIGHT INSTRUCTORS

2.2.1 Aircraft Ratings and Pilot authorization

2.2.1.1 General Requirement

To be eligible for an aircraft rating or authorization to a pilot license, an applicant shall meet the appropriate requirements for the aircraft rating or authorization sought.

2.2.1.2 Instrument Rating Requirements

A. An applicant for an instrument rating shall-

1) Have at least 50 hours of cross-country flight time as PIC, which shall be in aeroplanes or rotorcraft for an instrument rating; and

a) In accordance with Korean Aviation Regulation 29 A. 2 and Enforcement Regulation Article 91 B, a person was trained in accordance with a training program approved by special training centre or Institution which authorized foreign state(including Institution with aircraft manufacture)

b) An applicant for an instrument rating shall accomplish the special training as following-

① Ground training : A person must accomplished the required courses for the instrument rating

② Flight training : A person must accomplished over 40 hours flight training of instrument rating. Within 20 hours instrument flight training from instructor appointed by the Director of Civil Aviation Safety Authority in the simulation for which the instrument rating is sought;

C) A person must accomplished over 50 hours flight training of instrument rating in Military and considered his/her skill is qualified to have instrument rating.

B. In accordance with Korean Aviation Regulation 29 D 1 and Enforcement Regulation Article 91 A, a person was certified instrument rating from foreign state.

2.2.1.3 Category Rating

A pilot seeking a category rating-

1). Shall have received the required training and possess the aeronautical experience prescribed by this part for the aircraft category and, if applicable, class and type rating sought;

2). Shall have an endorsement in his or her logbook or training record from an authorized instructor that the applicant has been found competent in the following areas, as appropriate to the pilot license for the aircraft category and, if applicable, class and type rating sought-

a) Aeronautical knowledge areas.

b) Areas of skill.

3) Shall pass the practical test applicable to the pilot license for the aircraft category and, if applicable, class and type rating sought; and

4) Need not take an additional knowledge test, provided the applicant holds an aeroplane, rotorcraft, powered-lift, or airship rating at that pilot license level.

2.2.1.4 Class Rating

A pilot seeking an additional class rating-

1) Shall have an endorsement in his or her logbook or training record from an authorized instructor that the applicant has been found competent in the Aeronautical knowledge areas, as appropriate to the pilot license and for the aircraft class rating sought;

2) Shall pass the practical test applicable to the pilot license for the aircraft class rating sought;

3) Need not take an additional knowledge test, provided the applicant holds aeroplane, rotorcraft rating at that pilot license level

2.2.1.5 Type Rating

A. To act as a PIC of any of the following aircraft, a pilot shall hold a type rating for that aircraft:

1) Aircraft requiring more than 2 pilots to operate

2) Rotorcraft permitted to operate by one pilot

3) Other aircraft specified by the Director of Civil Aviation Safety Authority

B. A pilot seeking an aircraft type rating to be added on a pilot license, or the addition of an aircraft type rating that is accomplished concurrently with an additional aircraft category or class rating-

1) Shall hold or concurrently obtain an instrument rating that is appropriate to the aircraft category, class, or type rating sought;
2) Shall have an endorsement in his or her logbook or training record from an authorized instructor that the applicant has been found competent in the following areas, as appropriate to the pilot license for the aircraft category, class and type rating sought-
a) Aeronautical knowledge areas;
b) Areas of operation;
C. Shall pass the practical test applicable to the pilot license for the aircraft category, class, and type rating sought;

2.2.1.6 Category II and III Pilot authorization Requirements

A. An applicant for a Category II or Category III pilot authorization shall-
1) Hold a pilot license with an instrument rating or an airline transport pilot license;
2) Hold a category and class rating, and type rating, if applicable, for the aircraft for which the authorization is sought; and
3) Complete the practical test requirements.
B. Experience requirements. An applicant for a Category II or Category III pilot authorization shall have at least-
1) 50 hours of night flight time as PIC.
2) 75 hours of instrument time under actual or simulated instrument conditions hat may include not more than:
a) A combination of 25 hours of simulated instrument flight time in an approved flight simulator or an approved flight training device; or
b) 40 hours of simulated instrument flight time if accomplished in an approved course conducted by an appropriately rated ATO certified under Part 3, subchapter 3.2.
c) 250 hours of cross-country flight time as PIC.
C. Upon passing a practical test for a Category II or III pilot authorization, a pilot may renew that authorization for each type of aircraft for which the pilot holds authorization.
D. The Director of Civil Aviation Safety Authority may not renew a Category II or Category III pilot authorization for a specific type aircraft for which an authorization is held beyond 12 calendar months from the month the applicant satisfactorily passed a practical test in that type aircraft.
E. If the holder of a Category II or Category III pilot authorization passes the practical test for a renewal in the month before the authorization expires, the Director of Civil Aviation Safety Authority will consider that the holder passed it during the month the authorization expired.

2.2.2 Student Pilot

2.2.2.1 Applicability

This subchapter prescribes the requirements for the issuance of student pilot licenses

2.2.2.2 Eligibility Requirements for Student Pilots

A. To be eligible for a student pilot license, an applicant shall-

1) Be at least 17 years of age
2) Have a flight crew member Class 2 medical certificate
3) Be able to read, speak, write, and understand the Korean or English language.

B. The regulation described privilege of a holder of license and rating(i.e, rated category, class, type of aircraft) shall not be applied to the following Subparagraphs which prescribe flight of student pilot.

1) A person holding a pilot license and a medical certificate rides in aircraft other than licensed aircraft category or type and operates it for flight training under the supervision of a flight instructor(including a person designated by the Director of Civil Aviation Safety Authority who recognizes he/she has knowledge and skill for control of an appropriate aircraft)
2) A person not holding a pilot license rides in an aircraft and operates it for flight training under the supervision of a flight instructor who is authorized by the Chief Head of regional aviation administration.
3) The holder of a pilot license rides in aircraft other than licensed aircraft category or type and operates it for flight training under the supervision of a flight instructor.

C. If an applicant require issuance of a student pilot license according to paragraph B. 2, the Chief Head of regional aviation administration issues a student pilot license to the applicant when the Chief Head of regional aviation administration is determined the applicant is able to perform duty of student pilot.

D. The permission of paragraph B. 2 is validated according to the issuance of student pilot license to an applicant.

E. The regulation of revocation of a license and a medical certificate(Korean Aviation Regulation 33) is applied to a person who obtains permission of paragraph B 2.

2.2.2.3 Application

An applicant for a student pilot license shall present the Chief Head of regional aviation administration -

1) Student pilots license application form ; and,
2) Copy of a flight crew member Class 2 medical certificate

2.2.2.4 Solo Requirements for Student Pilots

A. A student pilot may not operate an aircraft in solo flight unless that student has met the requirements of this subsection.

B. A student pilot shall have Aeronautical knowledge such as;.

1) Airspace rules and procedures for the airport where the student will perform solo flight; and;.
2) Flight characteristics and operational limitations for the make and model of aircraft to be flown

C. Prior to conducting a solo flight, a student pilot shall have-

1) Received and logged flight training for the manoeuvres and procedures of this subsection that

are appropriate to the make and model of aircraft to be flown; and

2) Demonstrated satisfactory proficiency and safety, as judged by an authorized Flight Instructor in the make and model of aircraft or similar make and model of aircraft to be flown.

2.2.2.5 General Limitations

A. A student pilot may not act as a PIC of an aircraft-

1) That is carrying a passenger;
2) That is carrying property for compensation or hire
3) That is operated for compensation or hire;
4) In furtherance of a business;
5) On an international flight;
6) With a flight or surface visibility of less than 3 statute miles during daylight hours or 5 statute miles at night;
7) When the flight cannot be made with visual reference to the surface; or
8) In a manner contrary to any limitations placed in the pilots logbook by an authorized instructor.

B. A student pilot may not act as a required pilot flight crewmember on any aircraft for which more than one pilot is required by the aircraft type certificate or by these regulations under which the flight is conducted, except when receiving flight training from an authorized instructor on board an airship, and no person other than a required flight crewmember is carried on the aircraft.

C. A student pilot may not operate an aircraft in solo flight at night unless that student pilot has received-

1) Flight training at night that includes takeoffs, approaches, landings, and go-around at night at the airport where the student will conduct solo flight;
2) Navigation training at night in the vicinity of the airport where the student pilot will conduct solo flight; and
3) An endorsement for night solo flight.

2.2.2.6 Solo Cross-Country Flight Requirements

A. A student pilot who seeks solo cross-country flight privileges shall-

1) Have received flight training from an authorized instructor on the manoeuvres and procedures of this subsection that are appropriate to the make and model of aircraft for which solo cross-country privileges are sought;
2) Have demonstrated cross-country proficiency on the appropriate manoeuvres and procedures of this subsection to an authorized instructor
3) Have satisfactorily accomplished the pre-solo flight manoeuvres and procedures required in the make and model of aircraft or similar make and model of aircraft for which solo cross-country privileges are sought; and
4) Have received ground and flight training from an authorized instructor on the cross-country manoeuvres and procedures listed in this subsection that are appropriate to the aircraft to be

flown.

B. A student pilot shall obtain an endorsement from an authorized instructor to make solo flights, subject to the following conditions-

1) The authorized instructor who makes the endorsement gave the student pilot flight training at the other airport, and that training included flight in both directions over the route, entering and exiting the traffic pattern, and takeoffs and landings at the other airport;
2) The student pilot has a current solo flight endorsement
3) The instructor has determined that the student pilot is proficient to make the flight; and
4) The purpose of the flight is to practice takeoffs and landings at that other airport.

C. A student pilot shall have the endorsements prescribed in this paragraph for each make and model aircraft the student will fly on each cross-country flight-

1) Student pilot license endorsement.
   a) A student pilot shall have a solo cross-country endorsement placed on the student pilot license by the authorized instructor who conducted the training.
   b) Logbook endorsement.
      ① A student pilot shall have a solo cross-country endorsement placed in the student pilots logbook by the authorized instructor who conducted the training.
      ② A licensed pilot who is receiving training for an additional aircraft category and class rating shall have an endorsement placed in the pilots logbook by the authorized instructor who conducted the training.

D. A student pilot who is receiving training for cross-country flight shall receive and log flight training in the required manoeuvres and procedures.

2.2.3 Private Pilot

2.2.3.1 Applicability

This subsection prescribes the requirements for the issuance of private pilot licenses and ratings

2.2.3.2 Eligibility Requirements: General

To be eligible for a private pilot license, a person shall-

1) Be at least 17 years of age for a rating in other than a glider.
2) Be at least 16 years of age for a rating in a glider.
3) Pass the required knowledge test on the aeronautical knowledge areas listed in the Enforcement Regulation Article of Aviation Act.
4) Receive flight training and a logbook endorsement from an authorized instructor.
5) Meet the aeronautical experience requirements of this subchapter that apply to the aircraft rating sought before applying for the practical test.
6) Pass a practical test on the areas of operation listed that apply to the aircraft rating sought.

2.2.3.3 Aeronautical Knowledge

An applicant for a private pilot license shall receive and log ground training from an authorized

instructor on the aeronautical knowledge areas shown in the annexed list 12 of the Enforcement Regulation Article of Aviation Act.

2.2.3.4 Flight Proficiency

An applicant for a private pilot license shall receive and log ground and flight training from an authorized instructor on the following areas of operation-

1) For all categories and class ratings, as applicable-
   a) Preflight preparation;
   b) Preflight procedures;
   c) Airport operations;
   d) Takeoffs, landings, and go-arounds;
   e) Performance manoeuvres;
   f) Ground reference manoeuvres;
   g) Navigation;
   h) Slow flight and stalls;
   I) Basic instrument manoeuvres;
   j) Emergency operations;
   k) Night operations; and
   l) Postflight procedures.
2) For the category and class ratings shown below, the applicable areas of operation
   a) Aeroplane category rating with a multiengine class rating.
   b) Rotorcraft category rating with a helicopter class rating.
   c) Glider category rating-
      ① Airport and gliderport operations;
      ② Launches and landings;
      ③ Performance speeds; and
      ④ Soaring techniques.
   d) Lighter-than-air category rating with a balloon class rating-

2.2.3.5 Aeronautical Experience

A. An applicant for a private pilot license with an aeroplane or rotorcraft category rating shall receive and log one of the following minimum flight training times-
   1) At least 40 hours of flight time, and
   2) 10 hours of solo flight training that includes at least 5 hours of solo cross-country flight.
B. An applicant for a private pilot license may credit a maximum of 5 hours of training in an approved flight simulator or an approved flight training device representing the category, class, and type, if applicable, of aircraft appropriate to the rating sought

2.2.3.6 Limitations

A private pilot may not act as a required flight crewmember of an aircraft

1) That is carrying a passenger or property for compensation or hire

2) That is operated for compensation or hire

2.2.4 Commercial Pilots

2.2.4.1 Applicability

This subsection prescribes the requirements for the issuance of commercial pilot licenses and ratings

2.2.4.2 Eligibility requirements: General

To be eligible for a commercial pilot license, a person shall-

1) Be at least 18 years of age;
2) Be able to read, speak, write, and understand the Korean or English language.
3) Receive a logbook endorsement from an authorized instructor
4) Pass the required knowledge test on the aeronautical knowledge areas listed in the Enforcement Regulation Article of Aviation Act;
5) Meet the aeronautical experience requirements of the annexed list 11 of the Enforcement Regulation Article of Aviation Act that apply to the aircraft category and class rating sought before applying for the practical test;
6) Pass the required practical test on the areas of operation listed in the Enforcement Regulation Article of Aviation Act that apply to the aircraft category and class rating sought.

2.2.4.3 Aeronautical Knowledge Requirements

An applicant for a commercial pilot license shall receive and log ground training from an authorized instructor, or complete a home-study course on the required aeronautical knowledge areas shown in the annexed list 12 of the Enforcement Regulation Article of Aviation Act.

2.2.4.4 Flight Proficiency Requirements

An applicant for a commercial pilot license shall receive and log ground and flight training from an authorized instructor on the areas of operation that apply to the aircraft category and class rating sought.

2.2.4.5 Aeronautical Experience

A. An applicant for a commercial pilot license shall obtain the required flight hours of aeronautical experience set forth in the Enforcement Regulation Article of Aviation Act -

1) 200 hours for an aeroplane (A person accomplished the flight time in accordance with the course of an Aviation Training organization designated by the Director of Civil Aviation Safety Authority : 150 hours)
2) 150 hours for a helicopter rating (A person was accomplished the flight time in accordance with the course of an Aviation Training organization designated by the Director of Civil Aviation Safety Authority : 100 hours)

B. An applicant for a commercial pilot license may credit the maximum of 10 hours of training in an approved flight simulator or approved flight training device representing the applicable

category, class, and type of aircraft appropriate to the rating sought

C. An applicant for a commercial pilot license may credit the smaller one between 1 third and 50 hours of flight hours of other kinds of aircraft

2.2.4.6 Privileges and Limitations

A commercial pilot license may act in an aeroplane as-

1) The holder of a private pilot license may act
2) A PIC of an aircraft for compensation
3) A PIC of an aircraft for the carriage of persons or property
4) A PIC of an aircraft for airline transport (restricted to the aircraft requiring one pilot)
5) A Non-PIC pilot of an aircraft for airline transport

2.2.5 Airline Transport Pilots

2.2.5.1 Applicability

This subchapter prescribes the requirements for the issuance of airline transport pilot licenses and ratings

2.2.5.2 General

To be eligible for an airline transport pilot license, a person shall-

1) Be at least 21 years of age;
2) Be able to read, speak, write, and understand the Korean or English language.
3) Meet at least one of the following requirements-
   a) Hold a valid and current commercial pilot license and an instrument rating;
   b) Hold either a foreign airline transport pilot or foreign commercial pilot license and an instrument rating issued by another Contracting State.
4) Meet the aeronautical applicable experience requirements of the annexed list 11 of the Enforcement Regulation Article of Aviation Act before applying for the practical test;
5) Pass a knowledge test on the applicable aeronautical knowledge areas of the Enforcement Regulation Article of Aviation Act that apply to the aircraft category and class rating sought;
6) Pass the practical test on the applicable areas of operation listed in the Enforcement Regulation Article of Aviation Act that apply to the aircraft category and class rating sought.

2.2.5.3 Aeronautical Knowledge

The Director of Transportation Safety Authority will administer a knowledge test for an airline transport pilot license based on the aeronautical knowledge areas appropriate to the aircraft category and class rating sought; and an applicant for an air transport license shall complete a home-study course on the required aeronautical knowledge areas shown in the Enforcement Regulation Article of Aviation Act

2.2.5.4 Flight Proficiency

An applicant for an airline transport pilot license shall receive and log ground and flight training from an authorized instructor on the areas of operation that apply to the aircraft category and class rating sought.

2.2.5.5 Aeronautical Experience: Aeroplane Category Rating

An applicant for an airline transport pilot license with an aeroplane category and class rating shall have at least 1,500 hours of total time as a pilot that includes at least-

1) 200 hours of cross-country flight time;
2) 100 hours of night flight time;
3) 75 hours of instrument flight time, in actual or simulated instrument conditions-
4) Not more than 30 hours of simulated instrument time in an approved flight simulator or approved flight training device representing an aeroplane
5) 250 hours of flight time in an aeroplane as a PIC, or 150 hours of flight time as SIC performing the duties and functions of a PIC while under the supervision of a PIC or any combination thereof, which includes at least-
   a) 100 hours of cross-country flight time; and
   b) 25 hours of night flight time including 20minutes of take-off and landing time.
6) The smaller one between 1 third and 200 hours of flight hours of other kinds of aircraft

2.2.5.6 Aeronautical Experience: Rotorcraft Category and Helicopter Class Rating

An applicant for an airline transport pilot license with a rotorcraft category and helicopter class rating, shall have at least 1,000 hours of total time as a pilot that includes at least-

1) 200 hours of cross-country flight time;
2) 50 hours of night flight time;
3) 250 hours of flight time in an aeroplane as a PIC, or 150 hours of flight time as SIC performing the duties and functions of a PIC while under the supervision of a PIC or any combination thereof, which includes at least-
   a) 100 hours of cross-country flight time; and
   b) 25 hours of night flight time including 20minutes of take-off and landing time
4) 30 hours of instrument flight time in actual or simulated instrument meteorological conditions.
5) Not more than 10 hours of simulated instrument time in an approved flight simulator or approved flight training device representing a rotorcraft;
6) The smaller one between 1 third and 200 hours of flight hours of other kinds of aircraft

2.2.5.7 Additional Aircraft Category, Class, and Type Ratings

An applicant for an airline transport license with a category rating who holds an airline transport pilot license with another aircraft category rating shall-

1) Meet the applicable eligibility requirements;
2) Pass a knowledge test on the applicable aeronautical knowledge areas;
3) Meet the applicable aeronautical experience requirements; and
4) Pass the practical test on the areas of operation.

2.2.5.8 Privileges

The holder of an airline transport pilot license may act in an aeroplane as-

1. The holder of a commercial pilot license with an instrument rating may act
2. A pilot of an aircraft for airline transport
3. Other pilots in air transportation service in aircraft of the category, class, and type, as applicable, for which the airline transport pilot is rated, and in simulation of those aircraft, and endorse the logbook or other training record of the person to whom training has been given;
4. Only provided in this subsection 1, unless the airline transport pilot also holds a flight instructor license, in which case the holder may exercise the instructor privileges
5. Excluding briefings and debriefings, an airline transport pilot may not instruct in aircraft, approved flight simulators, and approved flight training devices under this subsection-

A. For more than 8 hours in any 24-consecutive-hour period; or

B. For more than 36 hours in any 7-consecutive-day period

2.3 CERTIFICATION: FLIGHT CREWMEMBERS OTHER THAN PILOTS

2.3.1 Flight Engineers

2.3.1.1 Applicability

This subchapter prescribes the requirements for issuing flight engineer licenses

2.3.1.2 Licenses and Ratings Required

A. A person only who he or she has a flight engineer license with appropriate ratings may act as a flight engineer of a civil.

B. When a flight engineer is operating in a foreign country, a flight engineer may use a current flight engineer license issued by the country in which the aircraft is operated.

2.3.1.3 Eligibility Requirements - General

To be eligible for a flight engineer license, a person shall-

1) Be at least 18 years of age
2) Be able to read, speak, write, and understand the Korean or English language.

2.3.1.4 Additional Aircraft Ratings

To add another aircraft class rating to a flight engineer license, an applicant shall-

1) Satisfactorily complete an approved flight engineer training program that is appropriate to the additional class rating sought,
2) Pass the knowledge test and practical test that is appropriate to the class of aeroplane for which an additional rating is sought.

2.3.1.5 Knowledge Requirements

A. An applicant for a flight engineer license shall pass a knowledge test on the following:

1) The regulations that apply a flight engineer.
2) The theory of flight and aerodynamics.
3) Basic meteorology with respect to engine operations.
4) Centre of gravity computations.

B. An applicant for a flight engineer class rating shall pass a knowledge test for that aeroplane class on the following:

1) Aeroplane equipment.
2) Aeroplane systems.
3) Aeroplane loading.
4) Aeroplane procedures and engine operations with respect to limitations.
5) Normal operating procedures.
6) Emergency procedures.

C. Before taking the exam, an applicant for a flight engineer license shall present satisfactory evidence of having completed the flight experience requirements.

2.3.1.6 Aeronautical Experience Requirements

An applicant for a flight engineer license with a class rating shall present, for the class rating sought, satisfactory evidence of one of the following, including more than 100 hours of the practical experience with the aircraft (the maximum of 50 hours of experience with flight simulator approved by the Chief Head of Regional Aviation Administration is credited)-

1) At least 1 year of practical experience in aircraft and aircraft engine maintenance
2) At least 200 hours of flight time in a transport category aeroplane(including military aircraft with multi-engine) as a pilot
3) Graduation from at least a 2-year specialised aeronautical training course for flight engineer designated by the Director of Civil Aviation Safety Authority
4) At least a commercial pilot license with an instrument rating and at least 5 hours of flight training in the duties of a flight engineer.

2.3.1.7 Skill Requirements

A. An applicant for a flight engineer shall pass a practical test on the duties of a flight engineer

B. An applicant shall-

1) Show satisfactorily performance in preflight inspection, servicing, starting, pre-takeoff, and post-landing procedures;
2) In flight, show satisfactorily performance of the normal duties and procedures relating to the aeroplane, aeroplane engines, propellers (if appropriate), systems, and appliances; and
3) In flight, in an aeroplane simulator, or in an approved training device, show satisfactorily performance on emergency duties and procedures and recognise and take appropriate action for malfunctions of the aeroplane, engines, propellers (if appropriate), systems and appliances.

2.3.1.8 License Issued on Basis of a Foreign Flight Engineer License

A. The Director of Transportation Safety Authority may issue a flight engineer license on the basis of a foreign flight engineer license.

B. The Director of Transportation Safety Authority may add to a license issued under this subsection those aircraft class ratings listed on the applicant's foreign flight engineer license.

2.3.1.9 Privileges

The holder of a flight engineer license may act as a flight engineer of an aircraft, working aircraft engine and airframe, except operation of the controls

2.4 LICENSING: AIRMEN OTHER THAN CREWMEMBERS

2.4.1 General

2.4.1.1 Applicability

This subchapter prescribes the requirements for the issuance of airmen other than flight crewmembers.

2.4.2 Air Traffic Controller

2.4.2.1 Applicability

This subchapter prescribes the requirements for the issuance of Air Traffic Controller.

2.4.2.2 Required Licenses, and Rating or Qualification

No person may act as an air traffic controller of civil aircraft unless he or she-

1) Holds an air traffic controller license issued to him under Aviation Act Article 26;
2) Holds a facility rating for the appropriate control facility issued under this subchapter, or
3) Has qualified for the operating position and acts under the supervision of the holder of a facility rating for that control facility.

2.4.2.3 Eligibility Requirements: General

To be eligible for an air traffic controller license a person shall-

1) Be at least 21 years of age;
2) Be able to read, write, and understand the Korean or English language and speak it without accent or impediment of speech that would interfere with two-way radio conversation; and
3) Have aeronautical knowledge and practical air traffic control experience required for air traffic controller.

2.4.2.4 Knowledge Requirements

Each applicant for an air traffic controller license shall pass a knowledge test on-

1) The flight rules;
2) Airport traffic control procedures;
3) En route traffic control procedures;
4) Communications operating procedures;
5) Flight assistance service;
6) Air navigation, and aids to air navigation; and
7) Aviation weather.

2.4.2.5 Skill Requirements: Operating Positions

No person may act as an air traffic controller at any operating position unless he or she has passed a practical test on-

1) Air traffic facility equipment and its use;
2) Weather reporting procedures and use of reports; and
3) Each of the following procedures that is applicable to that operating position:
   a) The airport, including rules, equipment, runways, taxiways, and obstructions.
   b) The terrain features, visual checkpoints, and obstructions within the lateral boundaries of the surface areas of airspace designated for the airport.
   c) Traffic patterns and associated procedures for use of preferential runways and noise abatement.
   d) Operational agreements.
   e) The centre, alternate airports, and those airways, routes, reporting points, and air navigation aids used for terminal air traffic control.
   f) Search and rescue procedures.
   g) Terminal air traffic control procedures and phraseology.
   h) Holding procedures, prescribed instrument approach, and departure procedures.
   i) Radar alignment and technical operation.
   j) The application of the prescribed radar and non-radar separation standard, as appropriate.

2.4.2.6 Practical Experience Requirements: Facility Rating

Facility Rating Requirements for a facility rating at any air traffic control facility shall be that -

1) Each applicant for a facility rating at any air traffic control facility shall hold an air traffic controller license as provided by the Director of Civil Aviation Safety Authority, except acting under the supervision of the holder of a facility rating for that control facility
2) The facility rating shall lose effect when a person holding facility rating does not act as an air traffic controller at that control facility over 6 months, except receiving training concerning air traffic control as provided by the the Director of Civil Aviation Safety Authority.

2.4.2.7 Skill Requirements: Facility Ratings

Each applicant for a facility rating at an air traffic control facility shall have passed a practical test on each item that is applicable to each operating position at the control facility at which the rating is sought.

2.4.2.8 Privileges and Limitations

An air traffic controller may not act at any operating position at a control facility for which he or she does not hold a facility rating, unless there is readily available at that control facility a current record of the operating positions at which the controller has qualified.

2.4.2.9 Maximum Hours

Maximum Hours of air traffic controller shall be based on operation regulations on air traffic control that Chief Head of regional aviation administration or Head of Air Control Center has made.

2.4.2.10 Currency Requirements

Currency requirements of air traffic controller shall be based on operation regulations on air traffic control that Chief Head of regional aviation administration or Head of Air Control Center has made

2.4.3 Flight Operations Officers

2.4.3.1 Applicability

This subchapter prescribes the requirements for the issuance of Flight Operations Officer

2.4.3.2 Eligibility Requirements: General

An applicant for an aircraft flight operations officer license shall-

1) Be at least 21 years of age;
2) Be able to read, speak, write, and understand the Korean or English language; and
3) Have aeronautical knowledge for aircraft flight operations officer.

2.4.3.3 Knowledge Requirements

A. An applicant for an aircraft flight operations officer license shall pass a knowledge test.
B. The Director of Transportation Safety Authority will accept evidence of satisfactory completion of a knowledge test for 24 months after the date the test for eligibility to take the practical test.

2.4.3.4 Experience or Training Requirements

An applicant for an aircraft flight operations officer license shall has the experience or training as one of the followings:

1) A total of at least 2 years in any one or in any combination with scheduled air carrier operations-
   a) As a pilot
   b) As a flight navigator
   c) As a meteorologist
   d) Handling wireless installation in an aircraft .
2) A total of at least 2 years as an air traffic controller holding air traffic controller license
3) At least 2-year course of study in the educational institution higher than a college according to

the Higher Education Act ; at least 3 calendar months of practical experience in flight operations or air traffic controls

4) Completion, including expected completion, of a course for flight operations officer in Aviation Training Organization designated by the Director of Civil Aviaion Safety Authority,
5) At least one year of experience within 2 years before the date of application, as an assistant in a scheduled air carrier operator under the direct supervision of a flight operations officer.

2.4.3.5 Skill Requirements

An applicant for an aircraft flight operations officer license shall pass a practical test provided by the Enforcement Regulation Article of Aviation Act.

2.4.3.6 Privileges and Requirements

An aircraft flight operations officer may act the following subchapters which are necessary related to operation of an aircraft for airline transport.

1) To make and change a Flight Plan
2) Computation of an aircraft Fuel consumption
3) Drawing up of an aircraft weight balance

2.4.4 Aviation Maintenance Technicians (Aviation Maintenance Type Ⅱ)

2.4.4.1 Applicability

This subchapter prescribes the requirements for the issuance of an Aviation Maintenance Technician license and associated ratings.

2.4.4.2 Eligibility Requirements: General

A. An applicant for an aviation maintenance type 2 license and any associated rating shall-

1) Be at least 18 years of age;
2) Demonstrate the ability to read, write, speak, and understand the Korean or English language by reading and explaining appropriate maintenance publications and by writing defect and repair statements;
3) Comply with the knowledge, experience, and competency requirements prescribed for the rating sought.

B. A licensed aviation maintenance type 2 who applies for an additional rating must meet the requirements of the Enforcement Regulation Article of Aviation Act and, within a period of 24 months from the date of passing the knowledge test, pass the practical test prescribed by the Enforcement Regulation Article of Aviation Act for the additional rating sought.

2.4.4.3 Aircraft Rating: Knowledge Requirements

A. Each applicant for an aviation maintenance type 2 license or rating shall have basic knowledge covering the aviation act, aeromechanics, airframe, aircraft engine, aircraft equipment.

B. The applicant shall pass the knowledge test before applying for the oral and practical tests

prescribed by the Enforcement Regulation Article of Aviation Act.

2.4.4.4 Experience Requirements

Each applicant for an aviation maintenance type 2 license or rating according to the Enforcement Regulation Article of Aviation Act shall present-

1) At least 3 years of experience (including at least 6 calendar months of practical experience with the aircraft sought or higher) with maintaining and modifying aircraft(or if glider, with maintaining and altering glider)
2) At least 2 years of the course of study in a college or university according to the Higher Education Act and at least 6 calendar months of maintenance experience with aircraft sought or higher, or at least 1 year of maintenance experience before completion of that course
3) Graduation from a college or a university according to the Higher Education Act with-
   a) At least 6 months of maintenance experience with aircraft; and
   b) Completion of the course in the educational institute for aviation technician
4) At least 1 year of the course required for the aviation maintenance type 2 in Aviation Training Organization designated by the Director of Civil Aviation Safety Authority.

2.4.4.5 Skill Requirements

A. An applicant for an aviation maintenance type 2 license shall pass a practical test provided by the Aviation Act Article 29.

B. To perform as an aviation maintenance type 2, an applicant shall have the basic skill of any aircraft, airframe, aircraft engine, propeller, appliance, component, inspection etc.

2.4.4.6 Privileges and Limitations

A licensed aviation maintenance type 2 may perform or supervise according to the Aviation Act Article 22 the maintenance, preventive maintenance, or modification of, or after inspection, approve for return to service any aircraft except modification limited by Minister of MOCT.

2.4.5 Aviation Repair Specialists (Aviation Maintenance Type Ⅰ)

2.4.5.1 Applicability

This subchapter prescribes the requirements for issuance of Aviation Repair Specialists (ARS) licenses and ratings

2.4.5.2 Eligibility

A. An applicant for an aviation maintenance type 1 license and any associated rating shall-

1. Be at least 21 years of age;
2. Demonstrate the ability to read, write, speak, and understand the Korean or English language by reading and explaining appropriate maintenance publications and by writing defect and repair statements
3. Comply with the knowledge, experience, and competency requirements prescribed for the rating

sought; and

B. An applicant for an aviation repair specialists License must pass the practical test prescribed by the Enforcement Regulation Article of Aviation Act within a period of 24 months from the date of passing the knowledge test.

2.4.5.3 Rating

The Director of Civil Aviation Safety Authority shall classify an Aviation Repair Specialists Licenses as an Airframe rating, a Powerplant rating, a Reciprocating rating, a Propellers rating, a Electronics, Electrics, Avionics rating according to the Aviation Act Article 28 ②.

2.4.5.4 Privileges and Limitations

A licensed Aviation Repair Specialists may perform or supervise according to the Aviation Act Article 22 the maintenance, preventive maintenance, or modification of, or after inspection, approve for return to service any aircraft.

2.4.5.5 Display of License

Each person who holds an aviation repair specialist license shall keep it within the immediate area where he/she normally exercises the privileges of the license and shall present it for inspection upon the request of the Director of Civil Aviation Safety Authority, or any law enforcement officer.

2.4.5.6 Skill Requirements

A. An applicant for an Aviation Repair Specialists license shall pass a practical test.

B. The tests cover the applicants basic skill in performing practical projects on the subjects covered by the written test for that rating. An applicant for a powerplant rating must show his ability to make satisfactory minor repairs to, and minor alterations of, propeller.

2.5 MEDICAL STANDARDS AND CERTIFICATION

2.5.1 General

2.5.1.1 Applicability

This subchapter prescribes the medical standards and certification procedures for issuing and reissuing Class 1, Class 2, and Class 3 airman medical certificates (as medical certificate).

2.5.1.2 Medical Records

A. Each applicant for a medical certificate shall provide the aviation medical examiner (as medical examiner) who appoint by Director of Civil Aviation Bureau with a personally certified statement of medical facts concerning personal, familial, and hereditary history that is as complete and accurate as the applicant's knowledge permits.

B. Whenever the medical examiner finds that additional medical information or history is needed,

the medical examiner will request that the applicant or other person under paragraph ③ to release all available information or records concerning that history.

C. An applicant delegate any clinic, hospital, physician or other relative institution to provide the requested medical information or history that authorize to release the medical examiner.

D. If an applicant medical certificate fails to provide the requested medical information or history, the medical examiner may deny the application and report to Korea Academy of Aerospace Medicine (As medicine association). The medicine association report to Director of Aviation Bureau and Chief of Administer Regional Aviation Administration for suspend, modify or revoke all medical certificates the airman holds.

E. If an airman medical certificate is suspended or modified under paragraph ④ of this subchapter, that suspension or modification remains in effect until-

1) The holder or applicant provides the requested information, history, or authorization to the medical examiner, and
2) The medical examiner determines whether the holder or applicant meets the medical standards.

2.5.1.3 Aviation Medical Examiner: Authority

A. In accordance with Aviation Act Enforcement Regulation Article 96, Each AME shall be qualified and licensed in the practice of medicine and shall have received training from the medicine association.

B. The Minister of MOCT will designate aviation medical examiner within paragraph ① to-

1) Accept applications for physical examinations necessary for issuing medical certificates.
2) Issue or renew medical certificates in accordance with Aviation Act Enforcement Regulation Article 95 ⑦ Attachment 14.
3) Suspend or deny medical certificates in failure to meet any requirement of aviation medical examination.

C. Each AME shall report to the medicine association any individual case where, in the examiner's judgement, an applicant's failure to meet any requirement could jeopardise flight safety.

D. More than one time in every month, each AME shall report the applicant medical examination result to the medicine association.

2.5.1.4 Korean Academy of Aerospace Medicine: Authority

A. The Minister of MOCT will designate Korea Academy of Aerospace Medicine (As medicine association) to training institution for aviation medical examiner under Aviation Act Enforcement Regulation Article 96 ⑤

B. The Minister of MOCT may delegate to authorized medicine association for following-

1) Establish the special training plane and training for AME
2) Supervise aviation medical examination
3) Advice to issue and renew medical certification for suspension or deny

C. AME request the medicine association to reconsider the applicant medical examination result. The advisory committee of medicine association shall make final judgement to issue or deny the

applicant medical certificates.

D. The medicine association retains the right to reconsider any action of an AME.

E. A holder of a medical certificate issued by an AME may consider it to be affirmed as issued unless the medicine association reverses that issuance within 60 days after the date of issuance.

F. More than one time in every four of month, the medicine association shall report the applicant medical examination result to Director of Aviation Bureau. If an applicant's failure to meet any requirement could jeopardise flight safety, it shall report the Minister of MOCT and Chief of Administer Regional Aviation Administration.

2.5.2 Medical Certificate Procedures

2.5.2.1 Applicability

2.5.2.2 Issuance of Medical Certificate

A. The medical examiner will issue the applicable medical certificate to any person who meets the medical standards prescribed in Aviation Act Enforcement Regulation Article 95 ⑦ attachment 14, based on medical examination and evaluation of the applicant's history and condition.

B. Each person to be issued a medical certificate shall undergo a medical examination based on the physical and mental standards contained in this subchapter.

C. Any person who does not meet the medical standards of this subchapter may apply for the discretionary issuance of a certificate under Article 155.

2.5.2.3 Standard and Duration of a Medical Certificate

The standard and duration of a class 1, class 2, class 3 medical certificate of aircraft crew member shall be based on the Enforcement Regulation Article 95.

2.5.2.4 Special Issuance of Medical Certificate

A. AME shall request the advisement of medicine association for issue or deny the applicant medical certificates.

B. The advisory committee of medicine association shall make final judgement that request by AME in the earliest time.

C. In accordance with Aviation Act Enforcement Regulation Article 95 ⑦ attachment 14, the advisory committee of medicine association may issue the medical certificate to an applicant who does not meet the applicable standards. If the applicant shows the satisfaction of the medical examiner that applicant can be performed without any problem in operational conditions.

D. The medical examiner may issue a medical limitation on a license when the advisory committee of medicine association determines the safe performance of the license holder's duties as paragraph ③.

The duties authorized by the medical certificate can be performed without jeopardising flight safety and relevant ability, skill, and experience of the applicant and operational conditions have been given due consideration.

Circumstances in which a medical examination may be deferred. The prescribed re-examination of a licence holder involved in an inevitable situation may be deferred, provided that such determent shall only be made as an exception and shall not exceed:

a single period of six months in the case of a flight crew member of an private aircraft operating in an secluded area where an Aviation medical examiner does not exist or aboard a deep-sea fishing vessel for six months or more;

two consecutive periods each of three months in the case of a flight crew member of an commercial aircraft operating in an area where an Aviation medical examiner does not exist provided that in each case a favorable medical report is obtained after examination by a physician legally qualified to practice medicine in that area. A report of the medical examination shall be sent to any Aviation medical examiner;

in the case of a private pilot, a single period not exceeding 24 months where the medical examination is carried out by an examiner designated by the Contracting State in which the applicant is temporarily located. A report of the medical examination shall be sent to any Aviation medical examiner in Korea.

2.5.2.5 Renewal of Medical Certificate

The requirements for the renewal of a Medical Assessment are the same as those for the initial assessment except where otherwise specifically stated.

2.5.2.6 Denial of Medical Certificate

Any applicant who is denied a medical certificate by an AME may, within 30 days after the date of the denial, apply in writing and in duplicate to the Korea Academy of Aerospace Medicine for reconsideration of that denial. If the applicant does not ask for reconsideration during the 30-day period after the date of the denial, the Authority will consider that he or she has withdrawn the application for a medical certificate.

The denial of a medical certificate-

By an aviation medical examiner is not a denial by the AME; and

By the Authority is considered to be a denial by the Korea Academy of Aerospace Medicine.

2.5.3 Physical and Mental Standards-All Medical Certificate

2.5.3.1 Applicability

2.5.3.2 General Medical Requirements

No person may hold nor be issued a medical certificate who-

1) Has any organic, functional or structural disease, defect or limitation (active, latent, acute or chronic);
2) Has any wound, injury or squealer from operation; or
3) Uses any medication or other treatment that, based on the case history and appropriate,

qualified medical judgement relating to the condition(s) involved, the AME finds-

a) Makes the applicant unable to safely perform the duties or exercise the privileges of the license(s) or rating(s) applied for or held; or

b) Makes the applicant unable to safely perform the duties or exercise the privileges of the license(s) or rating(s) applied for within valid period.

2.5.3.3 Mental Standards

No person may hold nor be issued a medical certificate who has an established medical history or clinical diagnosis of-

1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts;
2) A psychosis; (Except a person of history of acute toxic psychosis need not be regarded as disqualifying, provided that the applicant has suffered no permanent impairment.
3) A bipolar (manic-depressive) disorder;
4) Substance dependence, except where there is established clinical evidence, satisfactory to the Authority, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years; or
5) Other personality disorders, neurosis, or other mental condition that would likely jeopardise flight safety.

2.5.3.4 Visual Requirements

A. Each person holding or being issued with a medical certificate shall have the normal function of the eyes and their adnexa, and shall have no active pathological condition, acute or chronic, nor any sequelae of surgery or trauma of the eyes or their adnexa likely to reduce proper visual function to an extent that would jeopardize flight safety.

B. Each person issued a medical certificate shall meet the following minimum visual standards-

1) Distant visual acuity of not less than 6/6 (20/20, 1.0) for Class 1, 6/12(20/40, 0.5) for Class 2 and 6/9(20/30.0.7) for Class 3 in each eye separately, with or without corrective lenses and provided that person-
   a) Uses not more than one pair of correcting lenses to demonstrate compliance with visual acuity requirements;
2) Uncorrected distance visual acuity of not less than 6/60 (20/200, 0.1) in either eye or the refractive error falls within the range of 5 dioptres (equivalent spherical error);
3) Near visual acuity to read an N5 chart (N5 refers to "Times Roman" type-face) at a distance selected by the applicant in the range of 30 to 50 with or without corrective lenses or its equivalent at a distance of 100cm(The 100cm equivalent be tested in the CLASS 1 and CLASS 3 only)
   a) prescribed in accordance with article 102, correcting lence are worn and kept during the exercise
   b) May not use single-vision near correction lences (full lence of one power only, appropriate to reading);

c) May use ²lookover², bifocal or trifocal lence in order to read the instruments and a chat or manual held in the hand, and to make use of distant vision through the windscreen without removing the lenses;

d) Whenever there is a requirement to obtain or renew correcting lenses, an applicant is expected to advise the refractionist of distances for the visual flight deck tasks relevant to the types of aircraft in which the applicant is likely to fuction

4) Normal fields of vision; colour perception necessary for the safe performance of airman duties; under conditions that may reasonably be expected to occur in performing airman duties.

2.5.3.5 Auditory Requirements

A. No person may hold nor be issued a medical certificate having any hearing defect which is likely to jeopardize flight safety.

B. Each person holding or being issued a Class 1 medical certificate shall-

1) Be tested on a pure-tone in a room of noise level is not less than 70 dB and be able to hear voice of under 35 dB to 500 Hz, 1000 Hz, 2000 Hz, under 50 dB to 3000 Hz in every second using each ear

2) Hear an average conversational voice in a quiet room, using both ears, at a distance of 2 meters from the examiner, with the back turned to the examiner;

3) The clearance to hear of one year is more than 85%.

C. Each person holding or being issued a Class 2 medical certificate shall

1) Hear an average conversational voice in a quiet room of its noise level is under 50 dB, using both ears, at a distance of 2 meters from the examiner, with the back turned to the examiner;

D. Each person holding or being issued a Class 3 medical certificate shall

1) Be tested on a pure-tone in a room of noise level is not less than 50 dB and be able to hear voice of under 55 dB to 500 Hz, 1000 Hz, 2000 Hz in every second using each ear.

2) Be able to hear voice of under 20 dB to 500 Hz, 1000 Hz, 2000 Hz in using one ear

3) Hear an average conversational voice in a quiet room of its noise level is under 50 dB, using both ears, at a distance of 2 meters from the examiner, with the back turned to the examiner;

2.5.3.6 Cardiovascular

A. No person may hold nor be issued a medical certificate having any abnormality of the heart, congenital or acquired, which is likely to jeopardise flight safety.

B. No person may hold nor be issued a medical certificate having an established medical history or clinical diagnosis of any of the following cardiovascular conditions:

1) Myocardial infarction.

2) Angina pectoris.

3) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant.

4) Cardiac valve replacement.
5) Permanent cardiac pacemaker implantation.
6) Heart replacement.

C. No person may hold or be issued a medical certificate if that person has:
1) Systolic and diastolic blood pressures outside normal limits; or
2) A significant functional or structural abnormality of the circulatory tree.

2.5.3.7 Neurological Requirements

A. No person may hold nor be issued a medical certificate having any neurological disorder, disturbance of consciousness, or neurological condition which is likely to jeopardise flight safety.

B. No person may hold nor be issued a medical certificate having an established medical history or clinical diagnosis of any of the following neurological conditions:
1) Epilepsy.
2) A disturbance of consciousness without satisfactory medical explanation of the cause
3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause.

2.5.3.8 Visual Acuity Test Requirements

A. Visual acuity tests should be conducted in an environment with a level of illumination which corresponds to ordinary office illumination(30-60cd/m2)

B. Visual acuity should be measured by means of a series of Landolt rings or similar optotypes, placed at a distance from, applicant appropriate to the method of testing adopted

2.5.3.9 Color Perception Test Requirements

The applicant shall be tested for the ability to correctly identify a series of pseudoisochromatic plates in daylight or in artificial light of the same colour temperature such as that provided by CIE standard illuminants C or D65 as specified by International Commission on Illumination

2.5.3.10 Contact Lenses

A. The lenses are monofocal and non-tinted;

B. The lenses are well tolerated ; and

C. a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges.

D. With a large refractive error shall use contact lenses or high index spectacle lenses.

2.5.3.11 Uncorrected Distant Visual Acuity

Applicants whose uncorrected distant visual acuity in either eye is worse than 6/60 shall be required to provided a full ophthalmic report prior to initial Medical Assessment and every five years thereafter.

2.5.4 Ophthalmic Examination

an ophthalmic report is required at the discretion of the Aviation Medical Examiner. Both uncorrected and corrected visual acuity are normally measured and recorded at each re-examination. Condition which indicate a need to obtain an ophthalmic report include: a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity, and the occurrence of eye disease, eye injury or eye surgery. .....

2.5.4.1 Eye Surgery

Applicants who have undergone surgery affecting the refractive status of the eye shall be assessed as unfit unless they are free from those sequelae which are likely to interfere with the safe exercise of their licence and rating privileges

2.5.4.2 Sunglasses

Sunglasses worn during the exercise of the privileges of the licence or rating held should be non-polarizing and of a neutral grey tint.

CHAPTER Ⅲ - AVIATION TRAINING ORGANIZATIONS

3.1 GENERAL

3.1.1 Applicability

A. This Chapter prescribes the requirements for certifying and administering Aviation Training organizations (ATO), which conducts training for the personnel who engage themselves in aviation related duties in accordance with Aviation Act Article 74-2 and its Enforcement Regulation Article 218-2.

B. This chapter shall not be applied when AOC holder establishes his/her own training institute to train his/her airmen.

C. For the training organization which takes charge of the training for airmen and type rating certificate, the Decree of Training standards and directive, and designation of specialized training organization for each airmen certificate, which is grounded on Aviation Act Article 29 Paragraph 4 and it Enforcement Regulation Article 93, shall be applied.

3.1.2 Definitions

For the purpose of this Chapter, the following definitions shall apply-

1) Line Operational Flight Training. Training in a simulator with a complete crew using representative flight segments, which contain normal, abnormal, and emergency procedures that may be expected in line operations.
2) Satellite Training Center. A training center at a location other than that of the certificate holder.
3) Flight Training Equipment. Flight simulators, flight training devices, and aircraft which are used for flight training.
4) Safety Management Course. Training course for human factor, scientific research method, aircraft safety management, and accident prevention and investigations.
5) Flight Operation Management Course. Training course for safe and economical operation, method of coping with the change of environments properly, technical management and Crew Resource Management(CRM)
6) Pilot Ground School Course. Training course for pilots using training material, CBT etc.
7) Pilot Training Course. Training course for pilot flight training using flight training equipment.
8) Accountable manager. The manager who has corporate authority for ensuring that all training can be financed and carried out to the standard required by the Head of CASA.
9) Airport Security Course. Training course for the whole duties of aviation security which is related to airport operations.
10) Aviation Training Organization (ATO). A flight training organization which conducts all or substantially all of each flight training course using simulation media which are qualified and approved by the Head of CASA in accordance with Aviation Act Article 74 -2 and its Enforcement Regulation Article 218-2 .
11) Training specifications. A document issued to a certified Aviation Training organization by

the Authority that prescribes that organizations training, checking, and testing authorizations and limitations, and specifies training program requirements.

3.2 ATO CERTIFICATES

3.2.1 Operating Requirements

No person may operate an ATO without an ATO certificate, or in violation of the training specifications issued by the Head of CASA.

3.2.2 Application for Certificate

A. Each applicant for an ATO certificate and training specifications shall submit an application of ATO approval using the form in attachment No. 1 to the Head of CASA at least 60 calendar days before the beginning of any proposed training.

B. An applicant for a certificate shall ensure that the facilities and equipment described in its application are-

1) Resume of establisher and accountable manager
2) Contents included in training specification
3) Evaluation standard and method
4) A summary of flight simulator and flight training devices to be used
5) Training facilities
6) An employment status including instructor, evaluator etc.
7) A detailed operation plan for each training course
8) Record keeping system for maintaining the record of training and qualification of trainee, instructor and evaluator etc.

C. An applicant for a certificate shall ensure that the facilities and equipment described in its application are available for inspection and ready to operate.

3.2.3 Issuance of Certificate

A. If an applicant complies with the requirement in this Chapter, the Head of CASA shall issue an ATO certificate by using the form of attachment No.2 form

B. The ATO certificate mentioned in paragraph A. shall include the followings. -However, the items that can not be applied to the intended course because of its specific character can be excluded.

1) The name and address of an ATO establisher;
2) The name and location of an ATO;
3) The date of issue and period of validity for each page issued;
4) The authorized locations of operations; and
5) Training specifications for the following categories
   a) An organization chart of the ATO;
   b) A training course ;
   c) The standards and procedures for an evaluation;

d) The category, class, and type of aircraft or flight simulator that may be used for training, testing, and checking;

e) The level of simulator designated by Regional Aviation Administration, and the make, model, and series of aeroplane concerned.

f) The name and address of the approved satellite training center.

g) Any other items the Head of CASA may require or allow

C. The holder of an ATO certificate may conduct training in accordance with a training program approved by the Head of CASA at a satellite ATO if -

1) The facilities, equipment, personnel, and course content of the satellite ATO meet the applicable requirements;

2) The instructors and evaluators at the satellite ATO are under the direct supervision of management personnel of the principal ATO;

3) The certificate holder notifies the Authority in writing that a particular satellite ATO is to begin operations at least 60 days prior to proposed to commencement of operations at that satellite ATO; and

4) The certificate holders training specifications reflect the name and address of the satellite ATO and the approved courses offered at the satellite ATO.

D. The head of CASA will issue ATO certificate that include training specifications of the satellite ATO.

3.2.4 Application for Amendment

A. The holder of ATO certificate shall submit an application for the approval of changing ATO by using the form in attachment No.2 in case one of the following changes happen.

1) The changes prescribed in Article 3.2.3 paragraph B. 1), 2), 4) and 5)

2) The changes of facilities, equipments, procedure and training course that may effect the conditions of approval

B. In case the items specified in paragraph A. are changed, the Head of CASA may prescribe the conditions under which the ATO may operate.

C. Other than paragraph a. and b., the Head of CASA may change an ATO certificate when he determines it is necessary because the Aviation Act or aviation related regulation has been changed.

3.2.5 Notice to the Authority

Each ATO shall notify the Head of CASA of any the following changes without delay.

1) The accountable manager;

2) The instructor and evaluator; and

3) Any other items that is affecting the progress of training

3.2.6 Suspension or Revocation of Certificate

The Head of CASA may suspend or revoke ATO certificate in the following case -

1) When the ATO is operated contrary to on the contrary to the ATO certificate and training

specifications;

2) When the report specified in article 3.2.5 was made falsely;
3) When the ATO is not complying with the inspection specified in article 3.3.2
4) When a false advertisement, different from the original approval in ATO certificate, was made
5) When violating the regulation prescribed in this chapter; and
6) When not complying with the prescribed direction of the Head of CASA.

3.2.7 Training Courses and Personnel Requirement

A. Each ATO shall adhere to its approved curriculum.

B. Each ATO may not change the approved curriculum unless the change is approved by the Head of CASA in advance.

C. Each ATO shall employ at least one accountable manager who can perform the training activities in accordance with this Chapter.

D. Each ATO shall maintain a sufficient number of approved instructors, evaluators and management personnel who are qualified and competent to perform required duties.

3.3 TRAINING LOCATION AND FACILITIES

3.3.1 Facilities and Equipment

A. Each ATO should provide thenecessary facilities, equipment, or training materials in consideration of the need of the context of training, the number of trainees, or the number oftraining per year.

B. Each ATO shall ensure that curriculum materials for the training should meet the following requirements/standards.

1) Textbooks and reference materials should contain appropriate contents which is above the standards and levels established by ICAO.
2) Necessary learning materials should be provided for the training course suitable for aircraft operations, aviation security, flight operations and safety management of the each type concerned.
3) Model and lay-out which shows instrument, structure of equipment, function and manipulation of the type concerned should be provided.

C. Each ATO shall ensure that the aerodrome, used for the flight training, is capable of conducting standard take-off on the following conditions-

1) The weight of an aircraft applied will be maximum take-off weight
2) The weather condition applied will be wind 5kt and the average maximum temperature of the region.
3) The operating method applied will be in accordance with the flight manual or flight regulations issued by aircraft manufacturer.

D. Each ATO shall provide adequate flight training facilities including the class room, briefing room for ground school and practical training , which has -

1) Sufficient space to hold students capacity.
2) Necessary office equipment such as desk, chair, black board, computer and beam projector

etc.

3) Compliance with Building and Construction Act

E. Each ATO shall ensure that the aircrafts used for flight training -

1) Are sufficient number for flight training.
2) Have sufficient performance, structure, equipment for the training concerned.
3) Have sufficient copies of flight manual approved by the aircraft manufacture company and the Head of CASA for flight training.
4) Have necessary maintenance measures for maintaining airworthiness of aircraft.

F. Each ATO shall ensure that the simulator used for flight training -

1) Is compatible with the type of aircraft designated by the Head of CASA.
2) Has necessary performance, structure, equipment for flight training concerned.
3) Has necessary maintenance measures for maintaining performance and function.
4) Each ATO shall maintain simulator log book.
5) Each ATO shall ensure that each simulator is-
   a) Maintained to ensure the reliability of the performances, functions, and other characteristics that were required for qualification;
   b) Modified to conform with any modification to the aircraft being simulated if the modification results in changes to performance, function, or other characteristics required for qualification;
   c) Given a functional pre-flight check each day before being used; and
   d) Provided with a discrepancy log in which the instructor or evaluator, at the end of each training session, enter each discrepancy.

G. Each ATO shall not make any change of ATO facilities and equipment unless the Head of CASA approves the change.

F. Each ATO shall establish and maintain a principal business office that is physically located at the address shown on its certificate.

3.3.2 Inspection

A. The Head of CASA shall inspect the document, which is attached to an application and submitted for ATO approval in accordance with the form in Attachment No. 4, and inspect training facilities and equipment etc.

B. The Head of CASA shall conduct inspection more than once a year in accordance with the form in Attachment No.4 to confirm the ATOs compliance with this Chapter, and conducts special inspection when the ATO is considered not to meet the requirements of ATO approval.

C. The Head of CASA shall notify the ATO, in writing, of any deficiencies found during the inspection and order the ATO to take action for improvement.

3.4 TRAINING COURSES

3.4.1 Categories of Training Courses

A. The Head of CASA may approve the following training courses to an applicant for, or holder of Aviation Training Organization, provided the applicant meets the requirement of this chapter

1) Pilot ground school training course;
2) Flight training course;
3) Aviation security training course;
4) Flight operations training course;
5) Aviation safety management training course; and
6) Any other necessary training course applied by an applicant and approved by the Head of CASA.

B. When approving the training course specified in Paragraph a., the Head of CASA may classify the course in details in training specifications in consideration of training contents.

3.4.2 Contents of Training Courses

Each ATO shall ensure that training course includes the followings.

1) Trainees personal requirement for the registration of the training course;
2) Operating plan including the curriculum, training objective and training criteria etc;
3) Course objective;
4) Method of test and evaluation; and
5) Any other necessary items for training.

3.4.3 Changes of Training Courses, etc

A. The Head of CASA may demand adjustment to the training courses from an ATO when he/she concludes that the training course does not meet the requirements prescribed in the approved course of training.

B. The Head of CASA may suspend or revoke the ATO certificate if the ATO does not follow adjustment ordered in accordance with prescribed Paragraph a. within 30 calendar days.

3.5 PERSONNEL REQUIREMENTS

3.5.1 Organizer Requirements

To be eligible for an organizer of ATO, a person shall -

1) Be at least 25 years of age
2) Be qualified to operate the ATO properly
3) Be established as a chief of corporation who is not incompetent, interdict or bankrupted person

3.5.2 Accountable Manager Requirements

To be eligible for accountable manager of ATO, a person shall -

1) Be at least 25 years of age
2) Be qualified to operate and manage the ATO properly
3) Have a necessary knowledge and experience required for training course.

3.5.3 Chief Instructor Requirements

No person can act as a chief instructor unless he is qualified to be an instructor and have more than 5 years

experience as an instructor in a related training department.

3.5.4 Instructor Requirements

A. To be eligible for a instructor, a person shall-

1) Be at least 18 years of age;
2) Be able to read, speak, write, and understand the Korean or English language
3) In case of a ground instructor, have a specific knowledge on subjects he is in charge of and more than 5 years experience.
4) Hold an airmen certificate or instructor certificate appropriate to the training course. (This requirement is limited to the concerned training course)

B. To be eligible for a flight instructor in flight training course, a person shall -

1) In case of an airline transport pilot, hold airline transport pilot license and type rating, and have logged 1000 hours of total flight time as a PIC for air transport aircraft or 500 hours of flight time as a PIC of the type of aircraft concerned. The flight time in flight simulator are admitted in case of full flight simulator instructor
2) Have a flight instructor certificate if he/she is to provide flight training in accordance with Aviation Act Article 2 ②
3) Complete the instructor training and testing requirements prescribed in Article 3.5.5 if he/she is to flight train using flight simulator.

C. Each ATO shall designate the instructor, in writing, who is in charge of the approved training course.

3.5.5 Instructor Training and Testing Requirements

A. Except as provided in paragraph b., prior to designation and every 12 calendar months beginning the first day of the month following an instructors initial designation, a certificate holder shall ensure that each its instructors meet the following requirements.

1) Each aircraft flight instructor or simulator flight instructor shall satisfactorily demonstrate knowledge, proficiency and teaching competency to chief instructor.
2) Each instructor shall satisfactorily complete a course of ground instruction in at least -
   a) The fundamental principles of the learning process;
   b) Elements of effective teaching;
   c) Instructor duties, privileges and responsibilities;
   d) Training policies and procedures;
   e) Crew resource management and crew co-ordination (for applicable training only); and
   f) Evaluation method.
3) Each instructor who instructs in a flight simulator or flight training device shall complete a ground instruction and simulator flight training course which shall include -
   a) Proper operation of flight simulator and flight training device controls and systems;
   b) Proper operation of environmental and fault panels;
   c) Limitations of simulation; and
   d) Minimum Equipment List (MEL).

4) Each flight instructor who provides training in an aircraft shall satisfactory complete a course of ground instruction and flight training in an aircraft, flight simulator, or flight device, which shall include -

a) Flight training procedures and flight manoeuvres;

b) Aircraft subsystems and operating rules;

c) Emergency operations procedures;

d) Emergency situations likely to develop during training; and

e) Appropriate safety measures.

B. The authority will consider completion of a curriculum required by paragraph a. taken in the calendar month before or after the month in which it is due as taken in the month in which it was due for the purpose of computing when the next training is due.

3.5.6 Evaluator Requirements and Authorization

A. Each ATO shall ensure that each person authorized as an evaluator -

1) Is at least 25 years of age;

2) Is able to read, speak, write, and understand Korean or English language

3) Prior to designation, satisfactorily completes a curriculum that includes the following -

a) Evaluator duties, function and responsibilities;

b) Methods, procedures, and techniques for conducting required tests and checks; and

c) Evaluation of pilot performance; (limited to flight training course)

4) Each evaluator who conducts an evaluation for the pilots of air transport category aircraft shall have logged 2,000 hours of total flight time as a PIC of air transport category aircraft or 1,000 hours of flight time as a PIC of the type of aircraft concerned, and complete the knowledge and proficiency check in aircraft and flight simulator in accordance with Aviation Act Enforcement Regulation Article 163.

B. For designating an evaluator in accordance with the paragraph A., each ATO shall submit an application, by the form provided in attachment no. 5, to the Head of CASA for approval. The Head of CASA shall conduct a designation check for the applicant, which correspondsto the check specified in Aviation Act Enforcement Regulation Article 161, and issues the ATO evaluator a certificate using the form provided in Attachment No. 6.

C. Each evaluator who conducts a pilot qualification check in accordance with Aviation Act article 51 and its Enforcement Regulatory article 149 through 149-3 shall meet the qualification requirements in Aviation Act Enforcement Regulation article 162, and designated by the Head of CASA in accordance with Aviation Act Enforcement Regulation article 151.

D. The Authority will consider completion of a curriculum required by paragraph a. 3) and 4) taken in the calendar month before or after the month in which it is due as taken in the month in which it was due for the purpose of computing when the next training is due.

3.5.7 Instructor ad Evaluator Privileges and limitation

A. An ATO may allow an instructor to provide - (Evaluation in flight training course shall be conducted by evaluator)

1) Instruction for each curriculum for which that instructor is qualified.
2) Test and checking for which that instructor is qualified. Test and exam in courses by certified instructor;

B. An ATO may not allow an instructor to, excluding briefings and debriefings, conduct more than 8 hours of instruction in any 24-consecutive-hour period, or more than 6 days or 40 hours in any 7 day period.

C. An ATO may not allow an instructor to provide an instruction in an aircraft unless that instructor, if instructing or evaluating in an aircraft in flight while occupying a required crewmember seat, holds at least a valid second-class medical certificate.

3.6 OPERATING RULES

3.6.1 Approval of the Training Courses

A. The training course or curriculum which the student completed by another ATO can be recognized if the course or curriculum is conducted by the ATO in connection with that of the other ATO.

B. The completion of AOC holders training program approved by the Head of CASA can be regarded as completion of the ATOs training course or curriculum concerned.

3.6.2 Limitations

A. Each ATO shall-

1) Ensure that a flight simulator or flight training device freeze, slow motion, or repositioning feature is not used during testing or checking; and
2) Ensure that a repositioning feature is used during line operational simulation for evaluation and line-oriented flight training only to advance along a flight route to the point where the descent and approach phase of the flight begins.
3) Keep the required number of personnel, facilities and equipment.

b. The holder of an ATO certificate may not provide training to a student who is enrolled in an approved course of training unless each airport, flight training equipment, each authorized instructor and evaluator meets the requirements and the standards specified in the certificate holders training specifications.

3.7 ADMINISTRATIVE RULES

3.7.1 Record Keeping

a. Each ATO shall maintain a record for each trainee that contains -

1) The name of the trainee;
2) A copy of Medical certificate, if required;
3) The name of the course and the make and model of flight training equipment used, if applicable;
4) The trainees performance on each lesson and the name of the instructor providing instruction;
5) The result of each knowledge test and end-of-course practical test and the signature of the

evaluator conducting the test(s); and

6) The number of hours of additional training and the result of evaluation, which was accomplished after any unsatisfactory practical test.

B. The Authority will not consider a students logbook as sufficient for the records required by paragraph A.

C. Each ATO shall maintain the following record for each instructor or evaluator designated to instruct a course approved in accordance with this chapter that indicates that the instructor or evaluator has complied with the applicable requirements of this chapter.

1) Initial training record of each instructor and evaluator
2) Recurrent training record of each instructor and evaluator

D. Each ATO shall-

1) Maintain the records required by paragraph a. for at least 2 year following the completion of training, testing or checking;
2) Maintain the qualification records required by paragraph c. while the instructor or evaluator is in the employ of the certificate holder and for 2 year thereafter.

E. Each ATO shall provide the records required by this article to the Head of CASA upon request.

F. Each ATO shall provide to a trainee, upon request, a copy of his or her training records.

3.7.2 Graduation Certificates

A. Each ATO shall issue upon completion of training a graduation certificate to each student who completes its approved course of training by the form in attachment no. 7.

B. Each ATO shall include in each graduation certificate-

1) The name of the ATO and the certificate number of the ATO;
2) The name of the graduate to whom it was issued;
3) The approved curriculum title;
4) The date of graduation;
5) A statement that the student has satisfactorily completed each required stage of the approved course of training including the tests for those stages;
6) An authentication by an official of the ATO

C. An ATO may not issue a graduation certificate to a student unless the student has-

1) Completed the training specified in the approved course of training; and
2) Passed the required final tests.

3.7.3 Transcripts

A. Upon request, each ATO shall provide a transcript of a student's grades to each student who is graduated from that ATO or who leaves it before being graduated.

B. Each ATO shall include in the transcript required -

1) The curriculum in which the student was enrolled;
2) Whether the student satisfactorily completed that curriculum;
3) The final grades the student received; and

4) An authentication by an official of the school

3.7.4 Advertising Limitations

A. The ATO may not;

1) Make any statement relating to its ATO certification and training specifications that is false or designed to mislead any person contemplating enrolment in that ATO
2) Advertise that the ATO is certified unless it clearly differentiates between courses that have been approved under this chapter and those that have not been approved under this chapter.

B. An ATO whose certificate has been surrendered, suspended, revoked, or terminated shall promptly remove all indications, including signs, wherever located, that the ATO was certified by the Head of CASA

CHAPTER Ⅳ - AIRCRAFT REGISTRATION AND MARKING

4.1 GENERAL

4.1.1.1 Applicability

Part 4 prescribes the requirements for registration and marking of civil aircraft under the provisions of the aviation act.

4.1.1.2 Definitions

For the purpose of part 4, the following definitions shall apply:

1) Lighter-than-air aircraft. Any aircraft supported chiefly by its buoyancy in the air.
2) Fireproof material. A material capable of withstanding heat as well as or better than steel when the dimensions in both cases are appropriate for the specific purpose.
3) State of registry. The state on whose register the aircraft is entered.
4) Heavier-than-air aircraft. Any aircraft deriving its lift in flight chiefly from aerodynamic forces.

4.2 REGISTRATION REQUIREMENTS

4.2.1.1 General

No person may operate a civil aircraft that is eligible for registration under the laws of Korea unless it has been registered by its owner under the provisions of the laws of Korea and the authority has issued a certificate of aircraft registration

4.2.1.2 Registration Eligibility

An aircraft is not eligible for registration if it is-

1) Not owned by a natural citizen
2) Foreign state or public body
3) Foreign corporation or groups
4) Foreigner that own more than half of stock or foreign corporation that actually dominate.
5) Corporation that foreigner owns or more than half of executive is foreigner.

4.2.1.3 Application

A person who wishes to register an aircraft in Korea must submit an application for aircraft registration to the director of the registry in a form and manner acceptable to the authority.

4.3 NATIONALITY AND REGISTRATION MARKS

4.3.1.1 Applicability

This subchapter prescribes the requirements for the identification and marking of civil aircraft registered in Korea.

4.3.1.2 General

(a) No person may operate a civil aircraft registered in Korea unless it displays nationality and registration marks in accordance with the requirements of this section. The letter or letters used to identify the nationality of Korea shall conform to the requirements outlined in ICAO Annex 7. This is to be followed by a series of numbers or letters assigned by the director of the registry.

(b) Unless otherwise authorized by the authority, no person may place on any aircraft a design, mark, or symbol that modifies or confuses the nationality and registration marks.

(c) permanent marking of aircraft nationality and registration shall-

1) be painted on the aircraft or affixed by other means insuring a similar degree of permanence;
2) have no ornamentation;
3) contrast in color with the background; and
4) Be legible.

4.3.1.3 Display of Marks: General

(a) Each owner shall display on that aircraft marks consisting of the roman capital letter denoting nationality of Korea followed by the registration number of the aircraft in arabic numerals. Each suffix letter used in the marks displayed must also be a roman capital letter.

(b) If, because of the aircraft configuration, it is not possible to mark the aircraft in accordance with this part, the owner may apply to the authority for a different procedure.

4.3.1.4 Size of Marks

(a) Each operator of an aircraft shall display marks on the aircraft meeting the size requirements of this section.

(b) Height. The character marks shall be of equal height and on-

(1) fixed-wing aircraft
  1) Main wing : must be at least 50 centimeters high
  2) Vertical or fuselage : must be at least 15 centimeters high
(2) rotorcraft
  1) Under the fuselage : must be at least 50 centimeters high
  2) Side of fuselage : must be at least 15 centimeters high
(3) airship
  1) fuselage : must be at least 50 centimeters
  2) horizontal and vertical stabilizer : must be at least 15centimeters high

(c) Width. Characters must be two-thirds as wide as they are high, except the number "1", which must be one-sixth as wide as it is high, and the letters "m" and "w" which may be as wide as they are high.

(d) Thickness. Characters shall be formed by solid lines one-sixth as thick as the character is high.

(e) Spacing. The space between each character may not be less than one-fourth of the character width.

(f) Uniformity. The marks required by this part for fixed-wing aircraft must have the same height, width, thickness, and spacing on both sides of the aircraft.

4.3.1.5 Deviations for Size and Location of Marks

(a) If either one of the surfaces authorized for displaying required marks is large enough for display of marks meeting the size requirements of this section and the other is not, the operator shall place full-size marks on the larger surface.

(b) If neither surface is large enough for full-size marks, the authority may approve marks as large as practicable for display on the larger of the two surfaces.

4.3.1.6 Location of Marks on Fixed-wing Aircraft

(a) The operator of a fixed-wing aircraft shall display the required marks on either the vertical tail surfaces or the sides of the fuselage.

(b) the marks required by paragraph (a) of this section shall be displayed as follows:

(1) If displayed on the vertical tail surfaces, horizontally on both surfaces, horizontally on both surfaces of a single vertical tail or on the outer surfaces of a multi-vertical tail.

(2) If displayed on the fuselage surfaces, horizontally on both sides of the fuselage between the trailing edge of the wing and the leading edge of the horizontal stabilizer.

(3) If engine pods or other appurtenances are located in the area described in paragraph (b)(2) and are an integral part of the aircraft, the operator may place the marks on those pods or appurtenances.

4.3.1.7 Location of Marks on Rotorcraft

Each operator of a rotorcraft shall display marks horizontally on both surfaces of the cabin, fuselage, boom, or tail, such that the rotorcraft can be readily identified.

4.3.1.8 Location of Marks on Lighter-than-air Aircraft

(a) Airships. The operator shall place marks on an airship to appear on-

(1) the hull, located lengthwise on each side of the hull and on its upper surface on the line of symmetry; or

(2) the horizontal and vertical stabilizers surfaces-

1) for the horizontal stabilizer, located on the right half of the upper surface and on the left half of the lower surface, with the tops of the letters and numbers toward the leading edge; and

2) for the vertical stabilizer, located on each side of the bottom half stabilizer, with the letters and numbers placed horizontally.

Note: balloons among lighter-than-air aircraft shall not be register

4.3.1.9 Sale of Aircraft: Removal of Marks

When an aircraft that is registered in Korea is sold, the holder of the certificate of aircraft registration shall remove, before its delivery to the purchaser, all nationality and registration marks of Korea, in 4.2.1.2(a)(1).

4.3.1.10 Identification Plate Required

(a) the operator shall affix to each aircraft registered under the laws of Korea an identification plate-

(1) containing the aircraft type, model, serial number, marks of nationality, and license

(2) made of fireproof metal or other fireproof material of suitable physical properties

(3) secured to the aircraft in a prominent position, near the main entrance door.

CHAPTER Ⅴ - AIRWORTHINESS CERTIFICATES

5.1 GENERAL

5.1.1.1 Applicability

(a) This part prescribes the requirements for

(1) Certification of aircraft and aeronautical components;

(2) Issuance of Airworthiness Certificates and other certifications for aeronautical products;

(3) Continued airworthiness of aircraft and aeronautical components;

(4) Rebuilding and modifications of aircraft and aeronautical components;

(5) Maintenance and preventive maintenance of aircraft and aeronautical components;

(6) Aircraft inspection requirements; and

(7) Air operator aircraft maintenance and inspection requirements

5.1.1.2 Definitions

For the purpose of Part 5, the following definitions shall apply

1) **Modification**. The alteration of an aircraft/aeronautical product in conformity with an approved standard.

2) **Major modification**. An alteration not listed in the aircraft, aircraft engine, or propeller specifications

ⓐ That might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or

ⓑ That is not done according to accepted practices or cannot be done by elementary operations.

See: IS: 5.1.1.2(a).

3) **Major repair**. A repair:

ⓐ That, if improperly done, might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or

ⓑ That is not done according to accepted practices or cannot be done by elementary operations.

See: IS: 5.1.1.2(b).

4) **State of Registry**. The Contracting State on whose register the aircraft is entered.

5) **State of Design.** The Contracting State which approved the original type certificate and any subsequent supplemental type certificates for an aircraft, or which approved the design of an aeronautical product or appliance.

6) **Preventative maintenance**. Simple or minor preservation operations and there placement of small standard parts not involving complex assembly operations.

See: IS: 5.1.1.2(c).

7) **Overhaul**. The restoration of an aircraft/aeronautical product using methods, techniques, and practices acceptable to the Authority, including disassembly, cleaning, and inspection as permitted, repair as necessary, and re-assembly; and tested in accordance with approved standards and technical data, or in accordance with current standards and technical data acceptable to the Head of Civil Aviation Safety Authority (hereafter CASA), which have been developed and documented by the State of Design, holder of the type certificate, supplemental type certificate, or a material, part, process, or appliance approval under Parts Manufacturing Authorization (PMA) or Technical Standard Order (TSO).

8) **Rebuild.** The restoration of an aircraft/aeronautical product by using methods, techniques, and practices acceptable to the Authority, when it has been disassembled, cleaned, inspected as permitted, repaired as necessary, reassembled, and tested to the same tolerances and limits as a new item, using either new parts or used parts that conform to new part tolerances and limits. This work will be performed by only the manufacturer or an organization approved by the manufacturer, and authorized by the State of Registry.

9) **State of Manufacture**. The Contracting State, under whose authority an aircraft was assembled, approved for compliance with the type certificate and all extant supplemental type certificates, test flown and approved for operation. The state of manufacture may or may not also be the state of design.

10) **Required inspection items**. Maintenance items and/or alterations that must be inspected by a person other than the one performing the work, and include at least those that could result in a failure, malfunction, or defect endangering the safe operation of the aircraft, if not properly performed or if improper parts or materials are used.

5.1.1.3 Acronyms

The following acronyms are used in Part 5:

1) AOC Air Operator Certificate
2) AMO Approved Maintenance Organization
3) MEL Minimum Equipment List
4) PIC Pilot in command
5) TSO Technical Standard Order

5.2 TYPE CERTIFICATES

5.2.1.1 Applicability

This subchapter prescribes procedural requirements for the issue of type certificates for "product". For the purposes of this part, the word "product" means an aircraft, aircraft engine, or propeller.

5.2.1.2 Type Certificate of Aircraft

(a) Any manufacturer of product manufactured/designed within Korea who is a Korean citizen may apply for type certificates, and for amendments to the type certificates held by him.

(b) An applicant is entitled to a type certificate for a product, if he/she submits the type design, test reports, and computations necessary to show that the product to be certificated meets the applicable airworthiness requirements of the Korean Civil Aviation Safety Regulations and any special conditions prescribed by the Head of Civil Aviation Safety Authority (CASA), and the Head finds, upon examination of the type design, and after completing all tests and inspections, that the type design and the product meet the applicable requirements of the Korean Civil Aviation Safety Regulations, and further finds that they meet the applicable airworthiness requirements of the Korean Civil Aviation Safety Regulations or that any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety.

(c) A type certificate may be issued for a product that is manufactured in a foreign country with which

Republic of Korea has an agreement for the acceptance of these products for export and import and that is to be imported into Republic of Korea if

1) The country in which the product was manufactured certifies that the product has been examined, tested, and found to meet the applicable requirements of this subchapters designated, or the applicable requirements of the country in which the product was manufactured, and any other requirements the Head may prescribe to provide levels no greater than those provided by the applicable requirements of this subchapter.

5.2.1.3 Application for Type Certificate

(a) An application for a type certificate is made on a form and in a manner prescribed by the Head of CASA and is submitted to the Head.

(b) An application for a certificate must be accompanied by

1) for an aircraft type certificate

ⓐ a three-view drawing of that aircraft

ⓑ available preliminary basic data

ⓒ proposed operating characteristics and limitations.

2) for an aircraft engine or propeller

ⓐ a general arrangement drawing,

ⓑ a description of the design features,

ⓒ the operating characteristics,

ⓓ proposed operating limitations, of the engine, or propeller.

5.2.1.4 Inspection Scope of Type Certificate

(a) Each applicant for a type certificate under the section 5.2.1.2 (b) must allow the Head of CASA to make any inspection and any flight and ground test necessary to determine compliance with the applicable requirements of the Korean Civil Aviation Safety Regulations.

1) Compliance with the applicable airworthiness requirements;

2) That materials and products conform to the specifications in the type design;

3) That parts of the products conform to the drawings in the type design; and

4) That the manufacturing processes, construction and assembly conform to those specified in the type design.

(b) The detail procedural requirements for the determination of conformity to the requirements for the type certificate and design, and for obtaining and using a delegation option authorization for type certificate may be specified by the Head of CASA

5.2.1.5 Issuance of Type Certificate

(a) If, upon examination of the type design and after completing all tests and inspections according to the section 5.2.1.4, the Head finds that the type design and the product meet the applicable requirements of Korean Civil Aviation Safety Regulations, and further finds that they meet the applicable requirements of Korean Civil Aviation Safety Regulations or that any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety, an applicant is entitled to a type

certificate for the product.

(b) When the Head issues the Type Certificate in accordance with (a) of this section, he /she shall return the applicant followings with assigning the Type Certificate Number on them.

1) TCDS (Type Certificate Data Sheet) that is the part of the TC which documents the conditions and limitations necessary to meet the airworthiness requirements of Korean Civil Aviation Safety Regulations,

2) the list of drawing, and

3) component list

(c) Head shall complete the TCDS when issuing Type Certificate and it should be sent to the applicant. This will be applied to the amendment of TC.

5.2.1.6 Partial Omission of Inspection for Type Certificate

(a) Following Inspection items may be omitted while issuing Type Certificate for the product manufactured in a foreign country in accordance with the section 5.2.1.2 (c) of this part.

1) Inspection for the drawing schedule

2) Inspection for design, drawing list, drawing, component list, and production schedule for the components manufactured in a foreign country,.

5.2.1.7 Type Certificate validation of Imported Aircraft

(a) A type certificate for a product that is manufactured in a foreign country may be accepted by the Head for the type of the product if the country in which the product was manufactured certifies that the product has been examined, tested, and found to meet the applicable TC requirements of the county.

A product type certificated under this section is considered to be type certificated under the Korean Civil Aviation Safety Regulations.

(b) The Head of CASA must perform any inspection and any flight and ground test necessary to determine compliance with the applicable requirements of the Korean Civil Aviation Safety Regulations in accordance with (a) of this section. However, the foreign country with which Republic of Korea has an agreement for the acceptance of these products for export and import, the Head may omit those inspections. In this case, the agreement must contain an item for the validation of Type Certificate.

(c) If the Head found after completion of the inspection in accordance with (b) of this section that the product meets applicable requirements of technical standards, he/she shall issue the Type Certificate according to the applicable enforcement rule.

(d) If the Head determined to issue the Type Certificate under this section, he may use the original TCDS issued by the country in which the product has been manufactured.

5.2.1.8 Validation of Type Certificate

(a) An application for an approval of a type certificate under the section 5.2.1.7 (a) is made on a form and in a manner prescribed by the Head and is submitted to the Head of CASA

(b) An application for an approval of a type certificate according to (a) of this section must be accompanied by available preliminary basic data like --.

1) Type Certificate issued by a foreign country in which the product has been manufactured.
2) Type Certificate Data Sheet of the TC above 1).
3) Description of the design
4) Statement of conformity that the product conforms to the type design therefor.
5) Flight manual or any equivalent document containing operational procedures.
6) Instructions for continued airworthiness and manufacturer's maintenance manuals having airworthiness limitations sections
7) Any other information necessary for the operation of the product.

5.2.1.9 Inspection Scope of Validation for Type Certificate Validation

When making inspections for type certification prescribed in 5.2.1.8 (b), the Head of CASA shall inspect the design of type, manufacturing processes of aircraft, etc. manufactured according to the design.

5.2.1.10 Issuance of Type Certificate Validation

Upon completion of the inspections under the section 5.2.1.7(b), if the Head finds that the type design and the product meet the applicable requirements of Korean Civil Aviation Safety Regulations, and that any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety, he shall issue a Type Certificate Validation in a form (Number 3) in annexed 9 to the applicant.

5.2.1.11 Production Certificate

(a) Any person may apply for a production certificate if he holds, for the product concerned, a Current type certificate under section 5.2.1.2 Right to the benefits of that type certificate under a licensing agreement; or Supplemental type certificate.

An applicant is entitled to a production certificate if the Head finds, after examination of the supporting data and after inspection of the organization, production facilities, personnel, and quality system that the applicant has complied.

(b) An applicant who is producing a Type Certificated product under section 5.2.1.2 and holding Production Certificate issued by an Agency recognized by the enforcement rule may be recognized as a Production Certificate Holder under this section.

5.2.1.12 Application of Production certificate

(a) Each application for a production certificate under the section 5.2.1.11 (a) must be made in a form and manner prescribed in Implementation Standard (I.S) and submitted to the Head of CASA

(b) Each application for a production certificate must include an outline of the information on

1) A quality control system for any product,
2) A description of the methods used for production, including the identification of any special manufacturing processes involved,
3) A general description of the production facility and personnel.
4) Data describing the inspection and test procedures.

5.2.1.13 Inspection Scope for Production Certificate

The Head shall make any inspections and tests necessary while issuing Production Certificate under the section 5.2.1.11(a), including production technique, facility, personnel, inspection system, and production processes to determine compliance with the applicable regulations in this subchapter.

5.2.1.14 Issuance of Production Certificate

The Head shall issue the Production Certificate in a CASA Form if he/she finds, after examination of the supporting data and after inspection of the organization and production facilities according the section 5.2.1.13.

5.2.1.15 Approval Agency

"An Agency recognized by the enforcement rule" under the section 5.2.1.11 (b) means any Agency accepted by a foreign country with which Republic of Korea has an agreement for the Aviation Safety.

5.3 SUPPLEMENTAL TYPE CERTIFICATES

5.3.1.1 Applicability

This subchapter prescribes procedural requirements for the issue of supplemental type certificates.

5.3.1.2 Issuance of Supplemental Type Certificate

(a) Any person who alters a product by introducing a change in type design under section 5.2.1.2shall apply to the Head for a supplemental type certificate by the form of amendment of type certificate in annex with the type certificate and documents required by the section 5.2.1.3(b).

5.3.1.3 Application of Supplemental Type Certificate

(a) The provision of section 5.2.1.3 (c) with respect to submitting documents shall apply in this section 5.3.1.3.

5.4 AIRWORTHINESS CERTIFICATES

5.4.1.1 Applicability

This subchapter prescribes procedures required for the issue of airworthiness certificates.

5.4.1.2 Eligibility

(a) Any registered owner (or representative) of the Republic of Korea registered aircraft, or agent of the owner, may apply for an airworthiness certificate for that aircraft.

(b) Each applicant for an airworthiness certificate shall apply in a form and manner acceptable to the Authority.

5.4.1.3 Classification of Airworthiness Certificate

The Head of Local Aviation Authority may issue an Airworthiness Certificate in the specific category and

model designated by the State of Design in type certificate.

(a) Standard Airworthiness Certificates

(b) Special Airworthiness Certificates

1) Primary Certificate
2) Restricted Certificate
3) Limited Certificate
4) Provisional Certificate
5) Special Flight Permit
6) Experimental Certificate

5.4.1.4 Amendment of Airworthiness Certificate

(a) The Authority may amend or modify an Airworthiness Certificate:

1) Upon application from an operator.
2) When it is determined to be necessary by the Head of the Local Aviation Authority.

5.4.1.5 Transfer or Surrender of Airworthiness Certificate

(a) An owner shall transfer an Airworthiness Certificate

1) To the lessee upon lease of an aircraft within or outside the Republic of Korea.
2) To the buyer upon sale of the aircraft within the Republic of Korea.

(b) An owner or operator shall surrender the Airworthiness Certificate for the aircraft to the issuing Authority upon sale of that aircraft outside of the Republic of Korea.

5.4.1.6 Effective Dates of Airworthiness Certificate

(a) Airworthiness Certificates are effective for one year unless sooner surrendered, suspended or revoked, or a special termination date is otherwise established by the Authority.

(b) When an aircraft imported for registration in the Republic of Korea has a Certificate of Airworthiness issued by another Contracting State, the Airworthiness Certificate is no more effective and to be re-issued by the Local Authority.

5.4.1.7 Aircraft Identification

Each applicant for an airworthiness certificate shall show that the aircraft is properly registered and marked, including identification plates.

5.4.1.8 Issue of Standard Airworthiness Certificate

The Head of the Local Authority will issue a Standard Airworthiness certificate if

1) The applicant presents evidence to the Head of Local Authority that the aircraft conforms to a type design approved under a type certificate or a supplemental type certificate and to the applicable Airworthiness Directives of the State of Manufacture;
2) The aircraft has been inspected in accordance with the performance rules of this regulation for inspections and found airworthy by persons authorized by the Head of C.A.S. A. to make such determinations.
3) The Head of Local Authority finds after an inspection that the aircraft conforms to type design and is in

condition for safe operation.

5.4.1.9 Airworthiness Directives

(a) Upon registration of an aircraft in the Republic of Korea, the Head of CASA .will notify the State of Design of the aircraft of the registration in the Republic of Korea, and request that he/she is ready to receive any and all airworthiness directives addressing that aircraft, airframe, aircraft engine, propeller, appliance, or component part.

(b) Whenever the State of Design considers that a condition in an aircraft, airframe, aircraft engine, propeller, appliance, or component part is unsafe as shown by the issuance of an airworthiness directive by that State, the Head will make the requirements of such directives apply to any civil aircraft of the type identified in that airworthiness directive registered in the Republic of Korea.

(c) The Head may identify manufacturer's service bulletins and other sources of data, or develop and prescribe inspections, procedures and limitations, for mandatory compliance pertaining to affected aircraft in the Republic of Korea.

(d) No person may operate any civil aircraft registered in the Republic of Korea to which the measures of this subsection apply, except in accordance with the applicable directives.

5.4.1.11 Issue of Special Airworthiness Certificate

(a) The Head of CASA or Local Authority may issue a Special Airworthiness Certificate for Flight Test or Ferry Flight to the aircraft that does not qualify for a Standard Certificate.

(b) Aircraft holding Special Airworthiness Certificates shall be subject to operating limitations within the Republic of Korea and may not make international flights. The Head of CASA or Local Authority shall issue specific operating limitations for each Special Airworthiness Certificate.

(c) The Head of CASA or Local Authority may issue Special Flight Permits to an aircraft that is capable of safe flight, but unable to meet applicable airworthiness requirements, for the purpose of

1) Flying to a base where repairs, modifications, maintenance, or inspections are to be performed, or to a point of storage;
2) Testing after repairs, modifications, or maintenance have been performed;
3) Delivering or exporting the aircraft;
4) Evacuating aircraft from areas of impending danger; and
5) Operating at weight in excess of the aircraft's maximum Certified Takeoff Weight for flight beyond normal range over water or land areas where adequate landing facilities or appropriate fuel is not available. The excess weight is limited to additional fuel, fuel-carrying facilities, and navigation equipment necessary for the flight.

(d) The Authority may issue a special flight permit with continuing authorization issued to an aircraft that may not meet applicable airworthiness requirements but are capable of safe flight, for the purpose of flying aircraft to a base where maintenance or alterations are to be performed. The permit issued under this paragraph is an authorization, including conditions and limitations for flight, which is set forth in the AOC Holder's specific operating provisions. This permit under this paragraph may be issued to an AOC Holder certificated under Part 9.

(e) In the case of Special Flight Permits, the Head of CASA or Local Authority shall require a properly

executed maintenance endorsement in the aircraft permanent record by a person or organization, authorized in accordance to Part 5, stating that the subject aircraft has been inspected and found to be safe for the intended flight.

(f) The operator shall obtain all required over-flight authorizations from countries to be over-flown on flights outside the Republic of Korea.

5.5 CONTINUED AIRWORTHINESS OF AIRCRAFT AND COMPONENTS

5.5.1.1 Applicability

This subchapter prescribes rules governing the continued airworthiness of civil aircraft registered in the Republic of Korea.

5.5.1.2 Responsibility

(a) The owner of an aircraft or, in the case of a leased aircraft, the lessee, shall be responsible for maintaining the aircraft in an airworthy condition by ensuring that

1) All maintenance, overhaul, modifications and repairs which affect airworthiness are performed as prescribed by the requirements of Aviation Law or Regulations of the Republic of Korea
2) Maintenance personnel make appropriate entries in the aircraft maintenance records certifying that the aircraft is airworthy;
3) The approval for return to service (maintenance release) is completed to the effect that the maintenance work performed has been completed satisfactorily and in accordance with the prescribed methods; and
4) In the event there are open discrepancies, the maintenance release includes a list of the uncorrected maintenance items and these items are made a part of the aircraft permanent record

5.5.1.3 General

(a) No person may perform maintenance, preventive maintenance, or modifications on an aircraft other than as prescribed in this regulation.

(b) No person may operate an aircraft for which a manufacturer's maintenance manual or instructions for continued airworthiness has been issued that contains an airworthiness limitation section unless the mandatory replacement times, inspection intervals, and related procedures specified in that section or alternative inspection intervals and related procedures set forth in the specific operating provisions approved under part 9, or in accordance with the inspection program approved under Part 8 (Aircraft Operation) have been complied with.

(c) No person may operate an aeronautical product to which an Airworthiness Directive applies, issued either by the State of Design, or State of Manufacture and adopted for the Republic of Korea's registered aircraft by the Head of CASA, or by the State of Registry for aircraft operated within the Republic of Korea, except in accordance with the requirements of that Airworthiness Directive.

(d) When the Head of CASA determines that an airframe or aeronautical product has exhibited an unsafe condition and that condition is likely to exist or to develop in other products of the same type design, he/she may issue an Airworthiness Directive prescribing inspections and the conditions and limitations, if any, under which those products may continue to be operated.

5.5.1.4 Reports of Failures, Malfunctions, and Defects

(a) Owners or operators of aircraft shall report to the Head of CASA or Local Authority any failures, malfunctions, or defects that result in at least the following

1) Fires during flight and whether the related fire-warning system properly operated;
2) Fires during flight not protected by a related fire-warning system;
3) False fire warning during flight;
4) An engine exhaust system that causes damage during flight to the engine, adjacent structure, equipment, or components;
5) An aircraft component that causes accumulation or circulation of smoke, vapor, or toxic or noxious fumes in the crew compartment or passenger cabin during flight;
6) Engine shutdown during flight because of flameout;
7) Engine shutdown during flight when external damage to the engine or aircraft structure occurs;
8) Engine shutdown during flight due to foreign object ingestion or icing;
9) Shutdown during flight of more than one engine;
10) A propeller feathering system or ability of the system to control overspeed during flight;
11) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage during flight;
12) An unintended landing gear extension or retraction, or opening or closing of landing gear doors during flight;
13) Brake system components that result in loss of brake actuating force when the aircraft is in motion on the ground;
14) Aircraft structure that requires major repair;
15) Cracks, permanent deformation, or corrosion of aircraft structure, if more than the maximum acceptable to the manufacturer or the Head of CASA or Local Authority;
16) Aircraft components or systems malfunctions that result in taking emergency actions during flight (except action to shut down an engine);
17) Each interruption to a flight, unscheduled change of aircraft en route, or unscheduled stop or diversion from a route, caused by known or suspected technical difficulties or malfunctions;.
18) Any abnormal vibration or buffeting caused by a structural or system malfunction, defect, or failure;
19) A failure or malfunction of more than one attitude, airspeed, or altitude instrument during a given operation of the aircraft.
20) The number of engines removed prematurely because of malfunction, failure or defect, listed by make and model and the aircraft type in which it was installed; or
21) The number of propeller feAtherings in flight, listed by type of propeller and engine and aircraft on which it was installed

(b) Each report required by this Subsection shall

1) Be made within 3 days after determining that the failure, malfunction, or defect required to be reported has occurred; and
2) Include as much of the following information as is available and applicable

ⓐ Aircraft serial number;

ⓑ When the failure, malfunction, or defect is associated with an article approved under a TSO

authorization, the article serial number and model designation, as appropriate;

ⓒ When the failure, malfunction or defect is associated with an engine or propeller, the engine or propeller serial number, as appropriate;

ⓓ Product model;

ⓔ Identification of the part, component, or system involved, including the part number; and

ⓕ Nature of the failure, malfunction, or defect.

(c) The Head of CASA, if the State of Registry of the aircraft, will submit all such reports upon receipt to the State of Design.

(d) The Head of CASA, if not the State of Registry of the aircraft, will submit all such reports upon receipt to the State of Registry.

5.6 AIRCRAFT MAINTENANCE AND INSPECTION

5.6.1.1 Applicability

This subchapter prescribes rules governing the maintenance and inspection of any aircraft having an Airworthiness Certificate of the Republic of Korea or associated aeronautical products.

5.6.1.2 Persons Authorized to Preventive Maintenance, and Modifications

(a) The persons authorized to perform maintenance subject to this subchapter include

1) A pilot licensed by the Head of CASA In this case, the pilot is allowed to perform preflight inspection as a preventive maintenance which does not affect the aircraft airworthiness when there is no certificated mechanic available to perform preventive maintenance;
2) A person performing maintenance under the supervision of a aviation Type I or Type II maintenance;
3) A aviation Type I or Type II maintenance technician;
4) An AOC holder, approved to perform maintenance under an equivalent system to an AMO and
5) An AMO.

(b) This subchapter outlines the privileges and limitations of these entities with respect to the extent and type of work they may perform regarding

1) Maintenance,
2) Preventive Maintenance,
3) Modification,
4) Inspection, and
5) Approvals for return to service.

5.6.1.3 Persons Authorized to Perform Maintenance

(a) No person may perform any task defined as maintenance on an aircraft or aeronautical products, except as provided in the following

1) A pilot licensed by the Authority may perform preventive maintenance on any aircraft owned or operated by that pilot so long as the aircraft is not listed for use by an AOC holder and there is no certificated mechanic available to perform preflight inspection as a preventive maintenance which does not affect the aircraft airworthiness ;

2) A person working under the supervision of a aviation Type I or Type II maintenance technician, may perform the maintenance, preventive maintenance, and modifications that the supervisory aviation maintenance technician is authorized to perform

ⓐ If the supervisor personally observes the work being done to the extent necessary to ensure that it is being done properly, and

ⓑ If the supervisor is readily available, in person, for consultation.

3) A licensed aviation Type I or Type II maintenance technician may perform or supervise the maintenance or modification of an aircraft or aeronautical product for which he or she is rated subject to the limitation of this part of these regulations.

4) An AMO may perform aircraft maintenance within the limits specified by the Head of CASA

5) The AOC holder may perform aircraft maintenance as specified by the Head of CASA

6) A manufacturer holding an AMO may

ⓐ Rebuild or alter any aeronautical product manufactured by that manufacturer under a type or production certificate;

ⓑ Rebuild or alter any aeronautical product manufactured by that manufacturer under a TSO Authorization, a Parts Manufacturer Approval by the State of Design, or Product and Process Specification issued by the State of Design; and

ⓒ Perform any inspection required by Part 8 (operations) on aircraft it manufacturers, while currently operating under a production certificate or under a currently approved production inspection system for such aircraft.

5.6.1.4. Authorized Personnel to Approve for Return to Service

(a) No person or entity may approve an aircraft, airframe, aircraft engine, propeller, appliance, or component part for return to service after it has undergone maintenance, preventive maintenance, rebuilding, or modification, except as provided in the following:

1) A pilot licensed by the Head of CASA may return his or her aircraft to service after performing authorized preventive maintenance.

2) A licensed aviation Type I or Type II maintenance technician may approve aircraft and aeronautical products for return to service after he or she has performed, supervised, or inspected its maintenance subject to the limitation.

3) An AMO may approve aircraft and aeronautical products for return to service as provided in the specifications approved by the Head of CASA

4) An AOC holder may approve aircraft and aeronautical products for return to service as specified by the Head of CASA

5.6.1.5 Persons Authorized to Perform Inspections

No person may perform the inspections required for aircraft and aeronautical products prior to or after it has undergone maintenance, preventive maintenance, rebuilding, or modification, except as provided in the following:

1) A Type I or Type II aviation maintenance technician may conduct the required inspections of aircraft and aeronautical products for which he or she is rated and current.

2) An AMO may perform the required inspections of aircraft and aeronautical products as provided in the specifications approved by the Head of CASA
3) An AOC holder may perform the required inspections of aircraft and aeronautical products in accordance with specifications issued by the Head of CASA

5.6.1.6 Performance Rules: Maintenance

(a) Each person performing maintenance, preventive maintenance, or modification on an aeronautical product shall use the methods, techniques, and practices prescribed in
1) The current manufacturer's maintenance manual or instructions for Continued Airworthiness prepared by its manufacturer; and
2) Additional methods, techniques and practices required by the Head of CASA; or methods, techniques and practices designated by him/her where the manufacturer's documents were not available.

(b) Each person shall use the tools, equipment, and test apparatus necessary to assure completion of the work in accordance with accepted industry practices. If the manufacturer involved recommends special equipment or test apparatus, the person performing maintenance shall use that equipment or apparatus or its equivalent acceptable to the Head of CASA

(c) Each person performing maintenance, preventive maintenance, or modification on an aeronautical product shall do that work in such a manner, and use materials of such a quality, that the condition of the aeronautical product worked on will be at least equal to its original or properly altered condition with regard to aerodynamic function, structural strength, resistance to vibration and deterioration, and other qualities affecting airworthiness.

(d) The methods, techniques, and practices contained in an AOC holder's maintenance control manual and continuous maintenance program, as approved by the Head of CASA will constitute an acceptable means of compliance with the requirements of this subsection.

5.6.1.7 Performance Rules: Inspections

(a) General. Each person performing an inspection required by the Head of CASA shall
1) Perform the inspection so as to determine whether the aircraft, or portion(s) thereof under inspection, meets all applicable airworthiness requirements; and
2) If there is an inspection program required or accepted for the specific aircraft being inspected, perform the inspection in accordance with the instructions and procedures set forth in the inspection program.

(b) Rotorcraft. Each person performing an inspection required on a rotorcraft shall inspect the following systems in accordance with the maintenance manual or Instructions for Continued Airworthiness of the manufacturer concerned
1) The drive shafts or similar systems,
2) The main rotor transmission gear box for obvious defects,
3) The main rotor and center section (or the equivalent area), and
4) The auxiliary rotor on helicopters.

(c) Annual and 100-hour inspections. (Except the person who holds a maintenance program approved by the Head of CASA)
1) Each person performing an annual or 100-hour inspection shall use a checklist while performing the

inspection. The checklist may be of the person's own design, one provided by the manufacturer of the equipment being inspected, or one obtained from another source. This checklist shall include the scope and detail of the items prescribed by the Head of CASA

2) See Implementation Standard for components to be included in an annual or 100-hour inspection

5.6.1.8 Performance Rules: Airworthiness Limitation

Each person performing an inspection or other maintenance specified in an airworthiness limitations section of a current manufacturer's maintenance manual, or Instructions for Continued Airworthiness, shall perform the inspection or other maintenance in accordance with that section, or in accordance with specifications approved by the Head of CASA

5.7 MAINTENANCE RECORDS AND ENTIRES

5.7.1.1 Content, Form, and Disposition of Maintenance, Preventive Maintenance, Rebuilding, and Modification Records

(a) Each person who maintains, performs preventive maintenance, rebuilds, or modifies an aircraft or aeronautical product shall, when the work is performed satisfactorily, make an entry in the maintenance record of that equipment as follows

1) A description (or reference to data acceptable to the Head of CASA of work performed;

2) Completion date of the work performed;

3) Name, signature, certificate number, and kind of license held by the person approving the work

Note: The signature constitutes the approval for return to service only for the work performed.

(b) The person performing the work shall enter records of major repairs and major modifications, and dispose of that form in the manner prescribed by the Head of CASA

(c) A person working under supervision of a Type I or Type II aviation maintenance technician may not perform any inspection required in Part 8 (operation) or any inspection performed after a major repair or modification.

(d) See Implementing Standard for the maintenance form requirements and a sample major repair and modification form.

5.7.1.2 Records of Overhaul and Rebuilding

(a) No person may describe in any required maintenance entry or form, an aeronautical product as being overhauled unless

1) It has been disassembled, cleaned, inspected as permitted, repaired as necessary, and reassembled using methods, techniques, and practices acceptable to the Head of CASA and

2) It has been tested in accordance with approved standards and technical data, or in accordance with current standards and technical data acceptable to the Head of CASA, which have been developed and documented by the holder of the type certificate, supplemental type certificate, or a material, part, process, or appliance manufacturing approval.

(b) No person may describe in any required maintenance entry or form an aircraft or other aeronautical product as being rebuilt unless it has been disassembled, cleaned, inspected as permitted, repaired as necessary, reassembled, and tested to the same tolerances and limits as a new item, using either new parts or used parts that conform to new part tolerances and limits.

5.7.1.3 Approval for Return to Service after Maintenance, Preventive Maintenance, Rebuilding, or Modification

No person may approve for return to service any aeronautical product that has undergone maintenance, preventive maintenance, rebuilding, or modification unless

1) The appropriate maintenance record entry has been made;
2) The repair or modification form authorized by or furnished by the Head of CASA has been executed in a manner prescribed by him/her
3) If a repair or modification results in any change in the aircraft operating limitations or flight data contained in the approved aircraft flight manual, those operating limitations or flight data are appropriately revised and set forth as prescribed.
4) See Implementing Standard for the repair or modification form requirements

5.7.1.4 Content, Form, and Disposition of Records for Inspection

(a) Maintenance record entries. The person approving or disapproving the return to service of an aeronautical product after any inspection performed in accordance with Part 8, shall make an entry in the maintenance record of that equipment containing the following information

1) Type of inspection and a brief description of the extent of the inspection;
2) Date of the inspection and aircraft total time in service;
3) Signature, the license number, and kind of license held by the person approving or disapproving for return to service the aeronautical product;
4) If the aircraft is found to be airworthy and approved for return to service, the following or a similarly worded statement "I certify that this aircraft has been inspected in accordance with (insert type) inspection and was determined to be in airworthy condition"
5) If the aircraft is not approved for return to service because of needed maintenance, non-compliance with the applicable specifications, airworthiness directives, or other approved data, the following or a similarly worded statement certify that this aircraft has been inspected in accordance with (insert type) inspection and a list of discrepancies and unairworthy items dated (date) has been provided for the aircraft owner or operator; and
6) If an inspection is conducted under an inspection program provided for in Part 8 (operation), the person performing the inspection shall make an entry identifying the inspection program accomplished, and containing a statement that the inspection was performed in accordance with the inspections and procedures for that particular program.

(b) Listing of discrepancies. The person performing any inspection required in Part 8 (operation) who finds that the aircraft is not airworthy or does not meet the applicable type certificate data sheet, airworthiness directives or other approved data upon which its airworthiness depends, shall give the owner/operator a signed and dated list of those discrepancies.

CHAPTER Ⅵ - APPROVED MAINTENANCE ORGANIZATION

6.1 GENERAL

6.1.1.1 Applicability

Part 6 prescribes the requirements for issuing approvals to organizations for the maintenance preventive maintenance, and modifications of aircraft and aeronautical products and prescribes the general operating rules for an Approved Maintenance Organization (AMO). The approval, when granted, shall apply to the whole organization and shall be headed by the accountable manager

6.1.1.2 Definitions

(a) For the purpose of Part 6, the following definitions shall apply

1) **Primary Standard**. A standard defined and maintained by the Ministry of Commerce, Industry & Energy (M.C.I. E) and used to calibrate secondary standards.
2) **Secondary Standards**. A standard maintained by comparison with a primary standard.
3) **Housing**. Buildings, hangers, and other structures to accommodate the necessary equipment and materials of a maintenance organization that

① Provide working space for the performance of maintenance, preventive maintenance, or modifications for which the maintenance organization is certificated and rated; and

② Provide structures for the proper protection of aircraft, airframes, aircraft engines, propellers, appliances, components, parts, and subassemblies thereof during disassembly, cleaning, inspection, repair, modification, assembly, and testing; and

③ Provide for the proper storage, segregation, and protection of materials, parts, and supplies

4) **Tools, Equipment and Test Equipment**. Used by an AMO for the performance of maintenance or calibration on an aircraft or aeronautical product. See also working standard.
5) **Accountable manager (Maintenance).** The manager who has corporate authority for ensuring that all maintenance, preventive maintenance, and modification required by the aircraft owner/operator can be financed and carried out to the standard required by the Head of Civil Aviation Safety Authority (CASA). The accountable manager may delegate to another person in the organization, in writing, to become the accountable manager, when authorized by the Head of Civil Aviation Safety Authority (CASA).
6) **Calibration**. A set of operations, performed in accordance with a definite documented procedure, that compares the measurement performed by a measurement device or working standard for the purpose of detecting and reporting or eliminating by adjustment errors in the measurement device, working standard, or aeronautical product tested
7) **Composite**. Structural materials made of substances, including, but not limited to, wood, metal, ceramic, plastic, fiber-reinforced materials, graphite, boron, or epoxy, with built-in strengthening agents that may by in the form of filaments, foils, powders, or flakes, of a different material
8) **Signature**. An individual's unique identification used as a means of authenticating a maintenance

record entry or maintenance record. A signature may be hand-written, electronic, or any other form acceptable to the Head of Civil Aviation Safety Authority (CASA).

9) **Facility**. A physical plant, including land, buildings, and equipment, which provide the means for the performance of maintenance, preventive maintenance, or modifications of any article.

10) **Specific operating provisions**. The Specific Operating Provisions describe the ratings (Class and/or Limited) in detail and will contain or reference material and process specifications used in performing repair work, along with any limitations applied to the maintenance organization. The accountable manager and the Head of Civil Aviation Safety Authority (CASA) sign this document.

11) **Approved data**. Technical information approved by the Head of Civil Aviation Safety Authority (CASA).

12) **Certificated Approved Maintenance Organization**. A maintenance organization approved by the Head of Civil Aviation Safety Authority (CASA).

13) **Working Standard.** A calibrated standard that is used in the performance of maintenance and/or calibrations in any work area for the purpose of forming the basis for product acceptance or for making a finding of airworthiness (approval for return to service) to an aircraft or aeronautical product. A working standard may be maintained by comparison with primary standards, secondary standards, reference standards or transfer standards, as appropriate. A working standard is not to be used to test, measure, or calibrate other working standards or measurement devices.

14) **Transfer Standard**. Any standard that is used to compare a measurement process, system, or device at one location or level with another measurement process, system or device at another location or level.

15) **Maintenance release**. An approved maintenance organization document signed by an authorized approved maintenance organization representative that states that the article worked on is approved for return to service for the maintenance, preventive maintenance, or modification performed

16) **Approval for return to service**. A certification by an approved maintenance organization representative that the maintenance, preventive maintenance, or modification performed on an aircraft, airframe, aircraft engine, propeller, appliance, or component part thereof was accomplished using the methods, techniques, and practices, prescribed in the current manufacturer's maintenance manual or instructions for continued airworthiness prepared by its manufacturer, or by using other methods, techniques, and practices acceptable to the Head of Civil Aviation Safety Authority (CASA).

17) **Reference Standard**. A standard that is used to maintain working standards

18) **Traceability**. A characteristic of a calibration, analogous to a pedigree. A traceable calibration is achieved when each Measurement Device and Working Standard, in a hierarchy stretching back to the National Standard, was itself properly calibrated, and the results properly documented. The documentation provides the information needed to show that all calibrations in the chain of calibrations were properly performed.

19) **Measurement Device**. A calibrated calibrator, standard, equipment and test equipment that is intended to be used to test, measure, or calibrate other measurement devices. It is not to be used to test, measure, or calibrate an aeronautical product.

20) **Computer system**. Any electronic or automated system capable of receiving, storing, and processing external data, and transmitting and presenting such data in a usable form for the accomplishment of a specific function

21) **Specialized maintenance**. Any maintenance not normally performed by an AMO (e.g., tire retreating, plating, etc.)

22) **Standard**. An object, artifact, tool, test equipment, system, or experiment that stores, embodies, or otherwise provides a physical quantity, which serves as the basis for measurement of the quantity. It also includes a document describing the operations and process that must be performed in order for a particular end to be achieved.

23) **Article**. Any item, including but not limited to, an aircraft, airframe, aircraft engine, propeller, appliance, accessory, assembly, subassembly, system, subsystem, component, unit, product, or part.

6.1.1.3 Acronyms

The following acronyms are used in Part 6.

1) AMO Approved Maintenance Organization (Part 1)
2) PMA Parts Manufacturing Authorization
3) TSO Technical Standard Order

6.1.1.4 Certificate and Specific Operating Provisions

(a) The AMO certificate will consist of two documents

1) A one page certificate signed by the Head of Civil Aviation Safety Authority (CASA), and
2) A multi-page specific operating provisions signed by the Accountable Manager and the Authority containing the terms, conditions, and authorizations

(b) No person may operate as a certificated approved maintenance organization without, or in violation of, an approved maintenance organization certificate issued under this Part.

(c) A certificated approved maintenance organization may perform maintenance, preventive maintenance, or modifications on an aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof only for which it is rating and within the limitations placed in its specific operating limitations

(d) The AMO certificate will contain

1) The certificate number specifically assigned to the AMO;
2) The name and location (main place of business) of the AMO;
3) The date of issue and period of validity;
4) The ratings issued to the AMO; and
5) Head of Civil Aviation Safety Authority (CASA) signature.

(e) The AMO Specific Operating Provisions will contain

1) The certificate number specifically assigned to the AMO;
2) The class or limited ratings issued in detail, including special approvals and limitations issued;
3) The date issued or revised
4) Accountable manager and Head of CASA signatures.

(f) The certificate issued to each certificated maintenance organization must be available in the premises for

inspection by the public and the Head of CASA

(g) Implementing Standard: See IS: 6.1.1.4(d) for a sample AMO certificate

6.1.1.5 Advertising

(a) No approved maintenance organization may advertise as a certificated approved maintenance organization until an approved maintenance organization certificate has been issued to that facility.

(b) No certificated approved maintenance organization may make any statement, either in writing or orally, about itself that is false or is designed to mislead any person.

(c) Whenever the advertising of an approved maintenance organization indicates that it is certificated, the advertisement must clearly state the approved maintenance organization's certificate number

6.1.1.6 Deviation Authority

(a) The Head of CASA may, upon consideration of the circumstances of a particular maintenance organization, issue a deviation providing relief from specified sections of this Part, provided that the Head of CASA finds that the circumstances presented warrant the deviation and that a level of safety will be maintained equal to that provided by the rule from which the deviation is sought. This deviation authority will be issued as a Letter of Deviation Authority.

(b) A Letter of Deviation Authority may be terminated or amended at any time by the Head of CASA

(c) A request for deviation authority must be made in a form and manner acceptable to the Head of CASA and submitted to the Head of CASA at least 60days before the date the deviation from specified sections in this part is necessary for the intended maintenance, preventive maintenance, or modification. A request for deviation authority must contain complete statement of the circumstances and justifications for the deviation requested, and show that a level of safety will be maintained equal to that provided by the rule from which the deviation is sought.

(d) Each certificated maintenance organization that receives a Letter of Deviation Authority must have a means of notifying the appropriate management, certifying staff, and personnel of the deviation, including the extent of the deviation and when the deviation is terminated or amended.

6.2 CERTIFICATION

6.2.1.1 Application for an AMO Certificate

(a) The Head of CASA will require an applicant for an AMO certificate to submit the following

1) An application in a form and a manner prescribed by the Head of CASA
2) Its maintenance procedures manual in duplicate; N/AN/A
3) Maintenance Control Manual
4) Aircraft Maintenance Programme
5) A list of the maintenance functions to be performed for it, under contract, by another AMO
6) A list of all AMO certificates and ratings pertinent to those certificates issued by any contracting State other than Korea and
7)Any additional information the Head of CASA requires the applicant to submit

(b) An application for the amendment of an existing AMO certificate shall be made on a form and in a

manner prescribed by the Authority. If applicable, the AMO shall submit the required amendment to the maintenance procedure manual to the Authority for approval

(c) Implementing Standard: See IS: 6.2.1.1 for sample of an application identified in sub paragraph (a)(1).

6.2.1.2 Issuance of an AMO Certificate

(a) An applicant may be issued an AMO certificate if, after investigation, the Head of CASA finds that the applicant

1) Meets the applicable regulations and standards for the holder of an AMO; and

2) Is properly and adequately equipped for the performance of maintenance of aircraft or aeronautical product for which it seeks approval

6.2.1.3 Duration and Renewal Of Certificate

(a) A certificate or rating issued to an approved maintenance organization located in Korea is effective from the date of issue until the approved maintenance organization surrenders it or the Head of CASA

(b) A certificate or rating issued to an approved maintenance organization located outside the Korea is effective from the date of issue until

1) The approved maintenance organization surrenders the certificate, or

2) The Head of CASA suspends or revokes the certificate.

(c) The holder of a certificate that expires or is surrendered, suspended, or revoked by the Head of CASA must return the certificate and specific operating provisions to the Head of CASA

(d) A certificated approved maintenance organization located outside [STATE] that applies for a renewal of its approved maintenance organization certificate for aircraft registered in Korea must:

1) Submit its request for renewal no later than 90 days before the approved maintenance organization's current certificate expires. If a request for renewal is not made within this period, the approved maintenance organization must follow the application procedure prescribed by the Head of CASA.

2) Send its request for renewal to the Head of CASA that has jurisdiction over the approved maintenance organization.

6.2.1.4 Continued Validity of Approval

(a) Unless the approval has previously been surrendered, superseded, suspended, revoked or expired by virtue of exceeding any expiration date that may be specified in the approval certificate, the continued validity of approval is dependent upon

1) The AMO remaining in compliance with this Part;

2) The Head of CASA being granted access to the organization's facilities to determine continued compliance with this regulation; and

3) The payment of any charges prescribed by the Head of CASA

(b) The holder of an AMO certificate that expires or is surrendered, suspended, or revoked, shall return it to the Authority.

6.2.1.5 Changes to the AMO and Certificate Amendments

(a) To enable the Head of CASA to determine continued compliance with this Part, the AMO shall provide

written notification to the Head of CASAeither prior to, or within a time period determined by the Head of CASA to be as soon as practicable after, any of the following changes:

1) The name of the organization;
2) The location of the organization;
3) The housing, facilities, equipment, tools, material, procedures, work scope and certifying staff that could affect the AMO rating or ratings;
4) The ratings held by the AMO, whether granted by the Head of CASA or held through an AMO certification issued by another contracting State;
5) Additional locations of the organization;
6) The accountable manager; or
7) The list of management personnel identified as described in the maintenance procedure manual

(a) The Head of CASA will amend the AMO certificate if the AMO notifies him/her of a change in:

1) Location or housing and facilities;
2) Additional locations of the organization;
3) Rating, including deletions;
4) Name of the organization with same ownership; or
5) Ownership.

(b) The Head of CASA may amend the AMO certificate if the AMO notifies him/her of a change in

1) The accountable manager; or
2) The list of management personnel identified as described in the maintenance procedure manual.

(d) When the Head of CASA issues an amendment to an AMO certificate because of new ownership of the AMO, the Head of CASA will assign a new certificate number to the amended AMO certificate.

(e) The Head of CASA may

1) Prescribe, in writing, the conditions under which the AMO may continue to operate during any period of implementation of the changes noted in subparagraph (a); and
2) Hold the AMO certificate in abeyance if the Head of CASA determines that approval of the AMO certificate should be delayed; the Head of CASA will notify the AMO certificate holder, in writing, of the reasons for any such delay.

(f) If changes are made by the AMO to the items listed in subparagraph (a) without notification to the Head of CASA and amendment of the AMO certificate by him/her, the AMO certificate may be suspended by him/her.

6.2.1.6 Ratings of the AMO

(a) The following ratings are issued under this subchapter

1) Airframe ratings. An aircraft rating on an approved maintenance organization certificate permits that approved maintenance organization to perform maintenance, preventive maintenance, or modifications on an aircraft, including work on the powerplant(s) of that aircraft up to, but not including, overhaul as that term defined in 5.1.1.2(a)(5) under the following classes:

① Class 1: Aircraft (other than rotorcraft and aircraft composed primarily of composite material) of 5,700 kg maximum certificated takeoff weight or less

② Class 2: Aircraft (other than rotorcraft and aircraft composed primarily of composite material) over

5,700 kg maximum certificated takeoff weight and up to, and including, 34,200 kg maximum certificated takeoff weight.

③ Class 3: Aircraft, (other than rotorcraft and aircraft composed primarily composite material) over 34,200 kg maximum certificated takeoff weight.

④ Class 4: Rotorcraft (other than rotorcraft composed primarily of composite material) of 2,736 kg maximum certificated takeoff weight or less.

⑤ Class 5: Rotorcraft (other than rotorcraft composed primarily of composite material) over 2,736 kg maximum certificated takeoff weight

⑥ Class 6: Aircraft composed primarily of composite material, of 5,700 kg maximum certificated takeoff weight or less

⑦ Class 7: Aircraft composed primarily of composite material, over 5,700 kg maximum certificated takeoff weight

2) Powerplant ratings. A powerplant rating on an approved maintenance organization certificate permits that approved maintenance organization to perform maintenance, preventive maintenance, or modifications of powerplants under the following classes:

① Class 1: Reciprocating engines.

② Class 2: Turbopropeller and turboshaft engines.

③ Class 3: Turbojet and turbofan engines

3) Propeller ratings. A propeller rating on an approved maintenance organization certificate permits that approved maintenance organization to perform maintenance, preventive maintenance, or modifications of propellers under the following classes:

① Class 1: Fixed-pitch and ground-adjustable propellers.

② Class 2: Variable-pitch propellers.

4) Avionics ratings. An avionics rating on an approved maintenance organization certificate permits that approved maintenance organization to perform maintenance, preventive maintenance, or modifications of avionics equipment under the following ratings:

① Class 1: Communication equipment: Any radio transmitting equipment or receiving equipment, or both, used in aircraft to send or receive communications, regardless of carrier frequency or type of modulation used; including auxiliary and related aircraft interphone systems, amplifier systems, electrical or electronic intercrew signalling devices, and similar equipment; but not including equipment used for navigation of the aircraft or as an aid to navigation, equipment for measuring altitude or terrain clearance, other measuring equipment operated on radio or radar principles, or mechanical, electrical, gyroscopic, or electronic instruments that are a part of communications avionics equipment.

② Class 2: Navigational equipment: Any avionics system used in aircraft for en-route or approach navigation, except equipment operated on radar or pulsed radio frequency principles, but not including equipment for measuring altitude or terrain clearance or other distance equipment operated on pulsed radio frequency principles.

③ Class 3: Pulsed equipment: Any aircraft electronic system operated on pulsed radio frequency principles.

5) Computer systems ratings. A computer systems rating on an approved maintenance organization

certificate permits that approved maintenance organization to perform maintenance, preventive maintenance, or modifications of digital computer systems and components thereof, that have the function of receiving external data, processing such data, and transmitting and presenting the processed data under the following classes:

① Class1: Aircraft computer systems.

② Class 2: Powerplant computer systems.

③ Class 3: Avionics computer systems

6) Instrument ratings. An instrument rating on an approved maintenance organization certificate permits that approved maintenance organization to perform maintenance, preventive maintenance, or modifications of instruments under the following classes:

① Class 1: Mechanical: Any diaphragm, bourdon tube, aneroid, optical, or mechanically driven centrifugal instrument that is used on aircraft or to operate aircraft, including tachometers, airspeed indicators, pressure gauges, drift sights, magnetic compasses, altimeters, or similar mechanical instruments.

② Class 2: Electrical: Any self-synchronous and electrical indicating instruments and systems, including remote indicating instruments, cylinder head temperature gauges, or similar electrical instruments.

③ Class 3: Gyroscopic: Any instrument or system using gyroscopic principles and motivated by air pressure or electrical energy, including automatic pilot control units, turn and bank indicators, directional gyros, and their parts, and flux gate and gyrosyn compasses.

④ Class 4: Electronic: Any instruments whose operation depends on electron tubes, transistors, or similar devices including capacitance type quantity gauges, system amplifiers, and engine analyzers.

7) Accessory ratings. An accessory rating on an approved maintenance organization certificate permits that approved maintenance organization to perform maintenance, preventive maintenance, or modifications of accessory equipment under the following classes:

① Class 1: Mechanical. The accessories that depend on friction, hydraulics, mechanical linkage, or pneumatic pressure for operation.

② Class 2: Electrical. The accessories that depend on electrical energy.

③ Class 3: Electronic. The accessories that depend on the use of an electron tube transistors, lasers, fiber optics, solid-state, integrated circuits, vacuum tubes, or similar electronic controls.

④ Class 4: Auxiliary power units (APU's) that may be installed on aircraft as self-contained units to supplement the aircraft's engines as a source of hydraulic, pneumatic, or electrical power.

(b) See IS: 6.2.1.6 for a detailed explanation of each rating

6.2.1.7 AMO Limited Ratings

(a) Whenever the Head of CASA finds it appropriate, he may issue a limited rating to an AMO that maintains or alters only a particular type of airframe, powerplant, propeller, radio, instrument, or accessory, or parts thereof, or performs only specialized maintenance requiring equipment and skills not ordinarily found in an AMO. Such a rating may be limited to a specific model aircraft, engine, or constituent part, or to any number of parts made by a particular manufacturer.

(b) Limited ratings are issued for

1) Aircraft;
2) Airframe;
3) Powerplants;
4) Propellers;
5) Avionics equipment;
6) Computer systems;
7) Instruments;
8) Accessories; and
9) Any other purpose for which the Head of CASA finds the applicant's request appropriate.

(c) Specialized service ratings. A specialized service rating may be issued to a maintenance organization to perform specific maintenance or processes. The specific operating provisions of the approved maintenance organization must identify the specification used in performing that specialized service. The specification may be--

① A civil or military specification that is currently used by industry and approved by the Head of CASA or

② A specification developed by the approved maintenance organization and approved by the Head of CASA

6.3 HOUSING, FACILITIES, EQUIPMENT AND MATERIALS

6.3.1.1 General

A certificated approved maintenance organization must provide personnel, facilities, equipment, and materials in quantity and quality that meet the standards required for the issuance of the certificate and ratings that the approved maintenance organization holds.

6.3.1.2 Housing and Facility Requirements

(a) Housing and facilities shall be provided appropriate for all planned work ensuring, in particular, protection from weather

(b) All work environments shall be appropriate for the task carried out and shall not impair the effectiveness of personnel

(c) Office accommodation shall be appropriate for the management of planned work including, in particular, the management of quality, planning, and technical records

(d) Specialized workshops and bays shall be segregated, as appropriate, to insure that environmental and work area contamination is unlikely to occur

(e) Storage facilities shall be provided for parts, equipment, tools and material

(f) Storage conditions shall be provided security for serviceable parts, segregation of serviceable from unserviceable parts, and prevent deterioration of and damage to stored items.

(g) See IS: 6.3.1.2for detailed requirements pertaining to housing and facilities

6.3.1.3 Equipment, Tools, and Material

(a) The AMO shall have available the necessary equipment, tools, and material to perform the approved scope of work and these items shall be under full control of the AMO. The availability of equipment and tools means permanent availability except in the case of any tool or equipment that is so rarely needed that its permanent availability is not necessary.

(b) The Head of CASA may exempt an AMO from possessing specific tools and equipment for maintenance or repair of an aircraft or aeronautical product specified in the AMO's approval, if these items can be acquired temporarily, by prior arrangement, and be under full control of the AMO when needed to perform required maintenance or repairs.

(c) The AMO shall control all applicable tools, equipment, and test equipment used for product acceptance and/or for making a finding of airworthiness.

(d) The AMO shall ensure that all applicable tools, equipment, and test equipment used for product acceptance and/or for making a finding of airworthiness are calibrated to ensure correct calibration to a standard acceptable to the Head of CASA and traceable to the Korean National Standards.

(e) The AMO shall keep all records of calibrations and the standards used for calibration.

(f) See IS: 6.3.1.3 for detailed requirements pertaining to tools, equipment, and test equipment.

6.4 ADMINISTRATIVE RULES

6.4.1.1 Personnel and Training Requirements

(a) A management person or group of persons acceptable to the Head of CASA, whose responsibilities include ensuring that the AMO is in compliance with these regulations, shall be nominated.

(b) The person or persons nominated as manager shall represent the maintenance management structure of the AMO, and be responsible for all functions specified in Part 6.

(c) Nominated managers shall be directly responsible to an accountable manager who shall be acceptable to the Head of CASA

(d) The AMO shall employ sufficient personnel to plan, perform, supervise and inspect and release the work in accordance with the approval.

(e) The competence of personnel involved in maintenance shall be established in accordance with a procedure and to a standard acceptable to the Head of CASA

(f) The person signing maintenance release or an approval for return to service shall be qualified in accordance with Part 2, 2.4.4 or 2.4.6 as appropriate to the work performed and is acceptable to the Head of CASA

(g) The maintenance personnel and the certifying staff shall meet the qualification requirements and receive initial and continuation training to their assigned tasks and responsibilities in accordance with a program acceptable to the Head of CASA. The training program established by the AMO shall include training in knowledge and skills related to human performance, including co-ordination with other maintenance personnel and flight crew.

(f) See IS: 6.4.1.1 for detailed personnel requirements.

6.4.1.2 Rest and Duty Limitations for Persons performing Maintenance Functions in an AMO

(a) No person may assign, nor shall any person perform maintenance functions for aircraft, unless that

person has had enough rest period of time prior to the beginning of duty.

(b) No person may schedule a person performing maintenance functions for aircraft for more than 12 consecutive hours of duty.

(c) In situations involving unscheduled aircraft unserviceability, persons performing maintenance functions for aircraft may be continued on duty for

1) Up to 16 consecutive hours; or

2) 20 hours in 24 consecutive hours.

(d) Following unscheduled duty periods, the person performing maintenance functions for aircraft shall have a mandatory rest enough period of time.

(e) The AMO shall relieve the person performing maintenance functions from all duties for 24 consecutive hours during any 7 consecutive day period

Note: If this requirement is conflicting against the labor law, the latter will have the superiority.

6.4.1.3 Record of Certifying Staff

(a) The AMO shall maintain a roster of all certifying staff, which includes details of the scope of their authorization.

(b) Certifying staff shall be notified in writing of the scope of their authorization.

(c) See IS 6.4.1.3for detailed requirements pertaining to records of certifying staff.

6.5 AMO OPERATING RULES

6.5.1.1 AMO Procedures Manual

Note: The purpose of the AMO Procedures Manual is to set forth the procedures, the means, and methods of the AMO. Compliance with its contents will assure compliance with the Part 6 requirements, which is a pre-requisite to obtaining and retaining an AMO certificate.

(a) An AMO Maintenance Procedure Manual and any subsequent amendments thereto shall be approved by the Head of CASA prior to use.

(b) The AMOMaintenance Procedures Manual shall specify the scope of work required of the AMO in order to satisfy the relevant requirements needed for an approval of an aircraft or aeronautical product for return to service.

(c) The procedures manual and any other manual it identifies must:

1) Include instructions and information necessary to allow the personnel concerned to perform their duties and responsibilities with a high degree of safety;

2) Be in a form that is easy to revise and contains a system which allows personnel to determine current revision status;

3) Have the date of the last revision printed on each page containing the revision;

4) Not be contrary to any applicable Korea regulation or the AMO's specific operating provisions; and

5) Include a reference to appropriate civil aviation regulations

(d) The AMO shall provide an Approved Maintenance Procedures Manual for use by the organization, containing the following information

1) A statement signed by the accountable manager confirming that the maintenance organization Procedures Manual and any associated manuals define the AMO's compliance with this regulation and will be complied with at all times;
2) A procedure to establish and maintain a current list of the titles and names of the management personnel accepted by the Head of CASAThe list of personnel may be separate from the Procedures Manual but must be kept current and available for review by the Head of CASA when requested;
3) A list which describes the duties and responsibility of the management personnel and which matters on which they may deal directly with the Head of CASA on behalf of the AMO;
4) An organization chart showing associated chains of responsibility of the management personnel.
5) A procedure to establish and maintain a current roster of certifying personnel;
6) A description of the procedures used to establish the competence of maintenance personnel;
7) A general description of manpower resources;
8) A description of the method used for the completion and retention of the maintenance records;
9) A description of the procedure for preparing the maintenance release and the circumstances under which the release is to be signed;
10) A description, when applicable, of additional procedures for complying with an AOC holder's maintenance procedures and requirements;
11) A description of the procedures for complying with the service information reporting requirement contained in 6.5.1.9;
12) A description of the procedure for receiving, amending and distributing within the maintenance organization all necessary airworthiness data from the type certificate holder or the type design organization;
13) A general description of the facilities located at each address specified in the AMO's approval certificate;
14) A general description of the AMO's scope of work relevant to the extent of approval;
15) The notification procedure for AMO to use when requesting the approval of changes to the organization of the AMO from the Head of CASA;
16) The amendment procedure for the AMO procedures manual, including the submission to the Head of CASA;
17) The AMO's procedures, acceptable to the Head of CASA to ensure good maintenance practices and compliance with all relevant requirements in this subsection;
18) The AMO's procedures to establish and maintain an independent quality system to monitor compliance with the adequacy of the procedures to ensure good quality maintenance practices and airworthy aircraft and aeronautical products. Compliance monitoring must include a feedback system to the person or group of persons specified in 6.4.1.1, and ultimately to the accountable manager to ensure, as necessary, corrective action. Such a system shall be acceptable to the Head of CASA
19) The AMO procedures for self-evaluations, including methods and frequency of such evaluations, and procedures for reporting results to the accountable manager for review and action;

20) A list of operators, if appropriate, to which the AMO provides an aircraft maintenance service;

21) A list of organizations performing maintenance on behalf of the AMO; and

22) A list of the AMO's line maintenance locations and procedures, if applicable.

(e) See IS: 6.5.1.1 for detailed requirements concerning the Procedures Manual and a sample Maintenance Procedures Manual format

6.5.1.2 Maintenance Procedures and Independent Quality Assurance System

(a) The AMO shall establish procedures acceptable to the Head of CASA to insure good maintenance practices and compliance with all relevant requirements in these regulations such that aircraft and aeronautical products maybe properly released to service.

(b) The AMO shall establish an independent quality assurance system, acceptable to the Authority, to monitor compliance with and adequacy of the procedures and by providing a system of inspection to ensure that all maintenance is properly performed.

Note: The quality assurance system may be an independent system under the control of the quality manager that evaluates the maintenance procedures and the correctness of the Equivalent Safety Case process.

(c) The quality assurance system shall include a procedure to initially qualify and periodically perform audits on persons performing work on behalf of the AMO.

(d) Compliance monitoring shall include a feedback system to the designated management person or group of persons directly responsible for the quality system and ultimately to the accountable manager to ensure, as necessary, corrective action.

(e) The maintenance procedures shall cover all aspects of maintenance activity and describe standards to which the AMO intends to work. The aircraft/aircraft component design AMO standards and aircraft operator standards must be taken into account.

(f) The maintenance procedures should address the provisions and limitations of Part 6

(g) The AMO's quality system shall be sufficient to review all maintenance procedures as described in the Procedures Manual in accordance with an approved program once a year for each aircraft type maintained.

(h) The AMO's quality system shall indicate when audits are due, when completed, and establish a system of audit reports, which can be seen by visiting CASA staff on request. The audit system shall clearly establish a means by which audit reports containing observations about non-compliance or poor standards are communicated to the accountable manager

(i) See IS: 6.5.1.2 for a detailed list of inspection items evaluated by the quality system.

6.5.1.3 Capability List

(a) Each certificated approved maintenance organization must prepare and retain a current capability list acceptable to the Head of CASA The approved maintenance organization may not perform maintenance, preventive maintenance, or modifications on an article until the article has been listed on the capability list in accordance with this Part and 6.5.1.1(d)(19).

(b) The capability list must identify each article by make and model, part number, or other nomenclature designated by the article's manufacturer

(c) An article may be listed on the capability list only if the article is within the scope of the ratings and classes of the approved maintenance organization's certificate, and only after the approved maintenance organization has performed a self-evaluation in accordance with 6.5.1.1(d)(19). The approved maintenance organization must perform the self-evaluation described in this paragraph to determine that the maintenance organization has all of the facilities, equipment, material, technical data, processes, housing, and trained personnel in place to perform the work on the article as required by this part. If the approved maintenance organization makes that determination, it may list the article on the capability list

(d) The document of the evaluation described in paragraph (c) of this section must be signed by the accountable manager and must be retained on file by the approved maintenance organization.

(e) Upon listing an additional article on its capability list, the maintenance organization must send a copy of the list to the Head of CASA having jurisdiction over the approved maintenance organization.

(f) The capability list(s) must be available in the premises for inspection by the public and the Head of CASA

(g) The self-evaluations must be available in the premises for inspection by the Head of CASA

(h) The AMO shall retain the capability list(s) and self-evaluation(s) for two years from the date accepted by the accountable manager.

6.5.1.4 Privileges of the AMO

(a) The AMO shall carry out the following tasks as permitted by and in accordance with the AMO maintenance procedures manual

1) Maintain any aircraft or aeronautical product for which it is rated at the location identified in the approval certificate

2) Maintain any aircraft for which it is rated at any location subject to the need for such maintenance arising from unserviceability of the aircraft;

3) Describe the activities in support of a specificAOC holder where that AOC has requested the services of the AMO at locations other than the location identified on the AMO certificate and the AMO has been rated to maintain the aircraft of that specific AOC holder at the requested location in the AMO operating provisions approved by the Head of CASA; and

4) Issue an approval for return to service or a maintenance release in respect of subparagraphs (a) (1), (2), and (3) of this subsection upon completion of maintenance in accordance with limitations applicable to the AMO.

(b) An AMO may not contract out the maintenance, preventative maintenance, modification or alteration of a complete type-certificated product, and it may not provide only approval for return to service of a product following contract maintenance.

(C) The AMO may maintain or alter any article for which it is rated at a place other than the AMO, if

1) The function would be performed in the same manner as when performed at the AMO and in accordance with this subchapter;

2) All necessary personnel, equipment, material, and technical and/or approved standards are available at the place where the work is to be done; and

3) The maintenance procedure manual of the AMO sets forth approved procedures governing work to be performed at a place other than the AMO.

6.5.1.5 Limitations of the AMO

The AMO shall maintain an aircraft or aeronautical product for which it is approved only when all necessary housing, facilities, equipment, tools, material, approved technical data and certifying staff are available.

6.5.1.6 Certificate of Release to Service

(a) A certificate of release to service shall be issued by appropriately authorized certifying staff when satisfied that all required maintenance of the aircraft or aeronautical product has been properly carried out by the AMO in accordance with the maintenance procedure manual.

Note: An aeronautical product which has been maintained off the aircraft requires the issue of a certificate of release to service for such maintenance and another certificate of release to service in regard to being installed properly on the aircraft, when such action occurs.

(b) A certificate of release to service shall contain

1) Basic details of the maintenance carried out;
2) The date such maintenance was completed; and
3) The identity, including the authorization reference, of the AMO and certifying staff issuing the certificate.

(c) See IS: 6.5.1.6for detailed requirements concerning a certificate of release to service,

6.5.1.7 Maintenance Records

(a) The AMO shall record, in a form acceptable to the Head of CASA, all details for maintenance work performed.

(b) The AMO shall provide a copy of each certificate of release to service to the aircraft operator, together with a copy of any specific airworthiness data used for repairs/modifications performed.

(c) The AMO shall retain a copy of all detailed maintenance records and any associated airworthiness data for two years from the date the aircraft or aeronautical product to which the work relates was released from the AMO.

Note: Where an AOC holder contracts an AMO to keep the aircraft operator's certificates of release to service and any associated airworthiness data, the retention period will be that required by Part 5.

(d) Each person who maintains, performs preventive maintenance, rebuilds, or modifies an aircraft/aeronautical product shall make an entry in the maintenance record of that equipment:

1) A description and reference to data acceptable to the Head of CASA of work performed.
2) The date of completion of the work performed.
3) The name of the person performing the work if other than the person specified in this subsection.

4) If the work performed on the aircraft/aeronautical product has been performed satisfactorily, the signature, certificate number, and kind of certificate held by the person approving the work.

5) The authorized signature, the AMO certificate number, and kind of certificate held bythe person approving or disapproving for return to service the aircraft, airframe, aircraft engine, propeller, appliance, component part, or portions thereof;

6) The signature constitutes the approval for return to service only for the work performed

7) In addition to the entry required by this paragraph, major repairs and major modifications shall be entered on a form, and the form disposed of by the person performing the work, in the manner prescribed by the Head of CASA

(e) No person shall describe in any required maintenance entry or form an aircraft or aeronautical component as being overhauled unless:

1) Using methods, techniques, and practices acceptable to the Head of CASA, it has been disassembled, cleaned, inspected as permitted, repaired as necessary, and reassembled; and

2) It has been tested in accordance with approved standards and technical data, or in accordance with current standards and technical data acceptable to the Head of CASA, which have been developed and documented by the holder of the type certificate, supplemental type certificate, or a material, part, process, or appliance approval under a TSO.

(f) No person may describe in any required maintenance entry or form, an aircraft or other aeronautical product as being rebuilt unless it has been

1) Disassembled, cleaned, inspected as permitted;

2) Repaired as necessary; and

3) Reassembled and tested to the same tolerances and limits as a new item, using either new parts or used parts that either conforms to new part tolerances and limits, or to approve oversized or undersized dimensions.

(g) No person may approve for return to service any aircraft or aeronautical product that has undergone maintenance, preventive maintenance, rebuilding, or modification unless:

1) The appropriate maintenance record entry has been made;

2) The repair or modification form authorized by or furnished by the Authority has been executed in a manner prescribed by the Head of CASA;

(h) If a repair or modification results in any change in the aircraft operating limitations or flight data contained in the approved aircraft flight manual, those operating limitations or flight data shall be appropriately revised and set forth as prescribed by the Head of CASA

(i) Maintenance record entries for inspections. The person approving or disapproving for return to service an aircraft/aeronautical product, after any inspection performed in accordance with this regulation, shall make an entry in the maintenance record of that equipment containing the following information:

1) The type of inspection and a brief description of the extent of the inspection;

2) The date of the inspection and aircraft total time in service; and

3) The authorized signature, the AMO certificate number, and kind of certificate held by the person approving or disapproving for return to service the aircraft, airframe, aircraft engine, propeller, appliance, component part, or portions thereof;

4) If the aircraft is found to be airworthy and approved for return to service, the following or a similarly

worded statement certify that this aircraft has been inspected in accordance with (insert type) inspection and was determined to be in airworthy condition;

5) If the aircraft is not approved for return to service because of needed maintenance, non-compliance with the applicable specifications, airworthiness directives, or other approved data, the following or a similarly worded statement certify that this aircraft has been inspected in accordance with (insert type) inspection and a list of discrepancies and unairworthy items dated (date) has been provided for the aircraft owner or operator; and

6) If an inspection is conducted under an inspection program provided for in this regulation, the entry shall identify the inspection program accomplished, and contains a statement that the inspection was performed in accordance with the inspections and procedures for that particular program.

(j) Listing of discrepancies. If the person performing any inspection required by this regulation finds that the aircraft is not airworthy or does not meet the applicable type certificate data sheet, airworthiness directives, or other approved data upon which its airworthiness depends, that person shall give the owner or lessee a signed and dated list of those discrepancies.

6.5.1.8 Airworthiness Data

(a) The AMO shall be in receipt of all airworthiness data appropriate to support the work performed from the Head of CASA, the aircraft/aeronautical product design organization, and any other approved design organization in the State of Manufacture or State of Design, as appropriate.

Note: The Head of CASA may classify data from another authority or organization as mandatory and may require the AMO to hold such data.

(b) Where the AMO modifies airworthiness data specified in paragraph (a) to a format or presentation more useful for its maintenance activities, the AMO shall submit to the Head of CASA an amendment to the maintenance procedure manual for any such proposed modifications for acceptance.

(c) All airworthiness data used by the AMO shall be kept current and made available to all personnel who require access to that data to perform their duties.

See IS: 6.5.1.8for detailed requirements concerning airworthiness data.

6.5.1.9 Reporting of Unairworthy Conditions

(a) The AMO shall report to the Head of CASA and the aircraft design organization of the State of Design any identified condition that could present a serious hazard to the aircraft.

(b) Reports shall be made on a form and in a manner prescribed by the Head of CASA and contain all pertinent information about the condition known to the AMO.

(c) Where the AMO is contracted by an AOC holder to carry out maintenance, that AMO shall report to the AOC holder any condition affecting the aircraft or aeronautical product.

(d) Reports shall be made as soon as practicable, but in any case within three days of the AMO identifying the condition to which the report relates.

6.5.1.10 CASA Inspections

Each certificated approved maintenance organization must allow the Head of CASA to inspect that approved maintenance organization and any of its contract maintenance facilities at any time to determine compliance with this part. Arrangements for maintenance, preventive maintenance, or modifications by a contractor must include provisions for inspections of the contractor by the Head of CASA

6.5.1.11 Performance Standards

(a) Each certificated approved maintenance organization that performs any maintenance, preventive maintenance, modifications for an air operator certificated under Part 9 having an approved maintenance program under Part 9.4.1.12and approved continuous maintenance program under Part 9.4.1.13 shall perform that work in accordance with the air operator's manuals.

(b) Except as provided in paragraph (a), each certificated approved maintenance organization shall perform its maintenance and modification operations in accordance with the applicable standards in Part 5. It shall maintain, in current condition, all manufacturer's service manuals, instructions, and service bulletins that relate to the articles that it maintains or modifies

(c) In addition, each certificated approved maintenance organization with an avionics rating shall comply with those sections in Part 5 that apply to electronic systems, and shall use materials that conform to approved specifications for equipment appropriate to its rating. It shall use test apparatus, shop equipment, performance standards, test methods, modifications, and calibrations that conform to the manufacturer's specifications or instructions, approved specification, and if not otherwise specified, to accept good practices of the aircraft avionics industry.

CHAPTER Ⅶ - INSTRUMENT AND EQUIPMENT

7.1 GENERAL

7.1.1 Applicability and Definitions

7.1.1.1 Applicability

(A) chapter 7 which includes aviation act article 40 or article 42 clause 2 and annexed paper, prescribes the minimum instrument and equipment requirements for all aircraft in all operations to AOC (AOC holders. Where AOC requirements are redundant to AOC or CAT requirements, or more detailed, the AOC requirements will be followed.)

(B) Chapter 7 is applicable to all civil aircraft except specially described items.

(C) article 7 clause 3 is applicable to aircraft which uses air transportation business and aircraft using business

7.1.1.2 Definition

Extended Over Water Operation.

In the case of single-engine land planes, extended over water operation means a distance of more than 185 km (100 nm) from land suitable for making an emergency landing. In the in the case of multi-engine land planes, more than 370 km (200 nm) from land suitable for making an emergency landing, with the capability of continuing flight with one engine inoperative.

7.1.1.3 Acronyms

The following acronyms are used in chapter 7:

(1) ADF - Automatic Direction Finder
(2) AOC - Air Operator Certificate
(3) DH - Decision Height
(4) DME - Distance Measuring Equipment
(5) ELT - Emergency Locator Transmitter
(6) ILS - Instrument Landing System
(7) IFR - Instrument Flight Rating
(8) IMC - Instrument Meteorological Conditions
(9) LRNS - Long Range Navigation Systems
(10) MEL - Minimum Equipment List
(11) MHZ - Megahertz
(12) MLS - Microwave Landing System
(13) MNPS - Minimal Navigation Performance Specifications
(14) NDB - Non-Directional Beacon
(15) PBE - Pressure Breathing Equipment
(16) RVSM - Reduced Vertical Separation Minimum

(17) SSR - Secondary Surveillance Radar
(18) VFR - Visual Flight Rules
(19) VMC - Visual Meteorological Conditions
(20) VOR - Vhf Omni-Directional Range
(21) VSM - Vertical Separation Minimum

7.1.1.4 General Instrument and Equipment Requirements

(A) In addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, the instruments, equipment and flight documents shall be installed or carried, as appropriate, in aircraft according to the aircraft used and to the circumstances under which the flight is to be conducted.

(B) All required instruments and equipment shall be approved and installed in accordance with applicable airworthiness requirements.

(C) Prior to operation in [Korea] of any aircraft not registered in [Korea] that uses an airworthiness inspection program approved or accepted by the state of registry, the owner/operator shall ensure that instruments and equipment required by [Korea] but not installed in the aircraft are properly installed and inspected in accordance with the requirements of the state of registry.

(d) If equipment is to be used by one flight crewmember at his station during flight, it shall be installed so as to be readily operable from his or her station.

(e) When a single item of equipment is required to be operated by more than one flight crewmember, it shall be installed so that the equipment is readily operable from any station at which the equipment is required to be operated.

(f) an AOC holder shall ensure that a flight does not commence unless the required equipment

(1) meets the minimum performance standard and the operational and airworthiness requirements;

(2) is installed such that the failure of any single unit required for either communication or navigation purposes, or both, will not result in the inability to communicate and/or navigate safely on the route being flown; and

(3) is in operable condition for the kind of operation being conducted, except as provided in the MEL.

7.2 INSTRUMENT AND EQUIPMENT

7.2.1 Flight and Navigation Instruments

7.2.1.1 General Requirements

(A) all aircraft shall be equipped with flight and navigational instruments which will enable the flight crew to

(1) control the flight path of the aircraft

(2) carry out any required procedural maneuvers; and

(3) Observe the operating limitations of the aircraft in the expected operating conditions.

(b) when a means is provided for transferring an instrument from its primary operating system to an alternative system, the means shall include a positive positioning control and shall be marked to indicate clearly which system is being used

(c) those instruments that are used by any one flight crew member shall be so arranged as to permit the flight

crew member to see the indications readily from his station, with the minimum practicable deviation from the position and line of vision which he normally assumes when looking forward along the flight path

7.2.1.2 Minimum Flight and Navigational Instrument

No person may operate any aircraft unless it is equipped with the following flight and navigational instruments:

(1) An airspeed indicating system calibrated in knots.

(2) a sensitive pressure altimeter calibrated in feet with a sub-scale setting calibrated in hectopascals/millibars, adjustable for any barometric pressure likely to be set during flight

(3) An accurate timepiece indicating the time in hours, minutes and seconds (approval not required).

(4) A magnetic compass.

7.2.1.3 Instruments for Operators Requiring Two Pilots

Whenever two pilots are required, each pilot's station shall have separate flight instruments as follows:

(1) an airspeed indicator calibrated in knots;

(2) a sensitive pressure altimeter calibrated in feet with a sub-scale setting calibrated in hectopascals/millibars, adjustable for any barometric pressure likely to be set during flight;

(3) a vertical speed indicator;

(4) a turn and slip indicator, or a turn co-ordinator incorporating a slip indicator;

(5) an attitude indicator;

(6) a stabilized direction indicator.

7.2.1.4 IFR Instrument

(a) all aircraft when operated in IFR, or when the aircraft cannot be maintained in a desired attitude without reference to one or more flight instruments, shall be equipped with

(1) an airspeed indicating system with a means of preventing malfunctioning due to either condensation or icing;

(2) a turn and slip indicator;

(3) an attitude indicator (artificial horizon);

(4) a heading indicator (directional gyroscope);

(5) a means of indicating whether the supply of power to the gyroscopic instruments is adequate;

(6) a means of indicating in the flight crew compartment the outside air temperature;

(7) a rate-of-climb and descent indicator;

(8) such additional instruments or equipment as may be prescribed by the authority.

(b) All aircraft intended to land in imc or at night shall be provided with radio navigation equipment capable of receiving signals providing guidance to

(1) a point from which a visual landing can be effected; or

(2) each aerodrome at which it is intended to land in imc; and

(3) any designated alternate aerodromes

7.2.1.5 Standby Attitude Indicator: All Aircraft

(A) no person may operate an aeroplane with a maximum certified take-off mass exceeding 5,700 kg and aircraft having a maximum approved passenger seating configuration of more than 9 seats unless it is equipped with a single standby attitude indicator (artificial horizon) that

(1) operates independently of any other attitude indicating system;

(2) is powered continuously during normal operation;

(3) after a total failure of the normal electrical generating system, is automatically powered for a minimum of 30 minutes from a source independent of the normal electrical generating system.

(b) when the standby attitude indicator is being operated by emergency power, it shall be clearly evident to the flight crew.

(c) where the standby attitude indicator has its own dedicated power supply there shall be an associated indication, either on the instrument or on the instrument pane when this supply is in use.

(d) if the standby attitude instrument system is installed and usable through flight attitudes of 360 of pitch and roll, the turn and slip indicators may be replaced by slip indicators.

7.2.1.6 Instruments and Equipment for Category II Operations

(A) the instruments and equipment listed in this subsection, aviation act article 68 and article 199, shall be installed in each aircraft operated in a category ii operation. This subsection does not require duplication of instruments and equipment required by 7.2.1.2 for any other provisions of chapter 7 or 7.2.1.6.

1) Group 1

A) two localizer and glide slope receiving systems.

Note : each system shall provide a basic ils display and each side of the instrument panel must have a basic ils display. However, a single localizer antenna and a single glide slope antenna may be used.

b) a communications system that does not affect the operation of at least one of the ILS systems.

c) a marker beacon receiver that provides distinctive aural and visual indications of the outer and the middle markers.

d) two gyroscopic pitch and bank indicating systems.

e) two gyroscopic direction indicating systems.

f) two airspeed indicators.

g) two sensitive altimeters adjustable for barometric pressure, having markings at 20 foot intervals and each having a placarded correction for altimeter scale error and for the wheel height of the aircraft.

h) two vertical speed indicators.

i) a flight control guidance system that consists of either an automatic approach coupler or a flight director system.

Note: a flight director system must display computed information as steering command in relation to an ILS localizer and, on the same instrument, either computed informationas pitch command in relation to an ILS glide slope or basic ils glide slope information. An automatic approach coupler must provide at least automatic steering in relation to an ils localizer. The flight control guidance system may be operated from one of the receiving systems required by paragraph a).

j) for category ii operations with decision heights below 150 feet either a marker beacon receiver providing aural and visual indications of the inner marker or a radio altimeter.

2) Group II

A) warning systems for immediate detection by the pilot of system faults in items (a)(1)(i), (a)(1)(iv), (a)(1)(iv) and (a)(1)(ix), of group i and, if installed for use in category iii operations, the radio altimeter and autothrottle system.

B) dual controls.

C) an externally vented static pressure system with an alternate static pressure source.

D) a windshield wiper or equivalent means of providing adequate cockpit visibility for a safe visual transition by either pilot to touchdown and rollout.

E) a heat source for each airspeed system pitot tube installed or an equivalent means of preventing malfunctioning due to icing of the pitot system.

(b) implementing standard: see is: 7.2.1.6 for category ii instrument and equipment approval and maintenance requirements.

7.2.2 Communication Equipment

7.2.2.1 Radio Equipment

(A) no person may operate an aircraft unless it is equipped with radio equipment required for the kind of operation being conducted.

(b) all aircraft operated in VFRas a controlled flight or in VFRshall be provided with radio communication equipment capable of conducting two-way communication with those aeronautical stations and on those frequencies prescribed by the authority, including the aeronautic emergency frequency 121.5 MHz.

Note: this requirement is considered fulfilled if the ability to conduct the communications specified therein is established during radio propagation conditions which are normal for the route.

(c) no person may operate an aeroplane under IFR unless it is equipped with an audio selector panel accessible to each required flight crewmember.

7.2.3 Aircraft Light and Instrument Illumination

7.2.3.1 Aircraft Light and Instrument Illumination.

1) a landing light;

2) illumination for all flight instruments and equipment that are essential for the safe operation of the aircraft;

3) lights in all passenger compartments;

4) a flashlight for each crewmember station (approval not required).

7.2.4 Warning Instruments And Systems

7.2.4.1 Mach Number Indicator

All aircraft with speed limitations expressed in terms of mach number shall be equipped with a mach number indicator.

7.2.4.2 Loss Of Pressurization Indicator

All pressurized aircraft intended to be operated at flight altitudes at which the atmospheric pressure is less than 376hpa or altitude of more than 25,000 shall be equipped with a device to provide positive warning to the flight crew of any dangerous loss of pressurization.

7.2.4.3 Altitude Alerting System

For operations in defined portions of airspace where, based on regional air navigation agreement, a VSMof 300 m (1,000 ft) is applied above fl 290, an aircraft shall be provided with equipment which is capable of providing an alert to the flight crew when a deviation occurs from the selected flight level. The threshold for the alert may not exceed ±90 m (300 ft).

7.2.5 Emergency, Rescue And Survival Equipment

7.2.5.1 Emergency Equipment: All Aircraft

Each item of emergency and flotation equipment shown in aviation act article 41 shall be

1) readily accessible to the crew and, with regard to equipment located in the passenger compartment, to passengers without appreciable time for preparatory procedures;
2) clearly identified and clearly marked to indicate its method of operation;
3) marked as to date of last inspection;
4) marked as to contents when carried in a compartment or container.

7.2.5.2 Visual Signaling Devices

No person may operate an aircraft over water or across land areas which have been designated by [state] as areas in which search and rescue would be especially difficult, unless equipped with such signaling devices as may be appropriate to the area overflown, to include

1) visual signals for use by intercepting and intercepted aircraft;
2) at least one pyrotechnic signaling device for each life raft required for over water operations.

7.2.5.3 Survival Kits

No person may operate an aircraft across land areas in which search and rescue would be especially difficult, unless equipped with enough survival kits for the number of occupants of the aeroplane and is appropriately equipped for the route to be flown.

7.2.5.4 Emergency Locator Transmitter

(A) all aircraft on all flights shall be equipped with an automatically activated ELT.

(b) batteries used in ELT's shall be replaced (or recharged if the battery is rechargeable) when

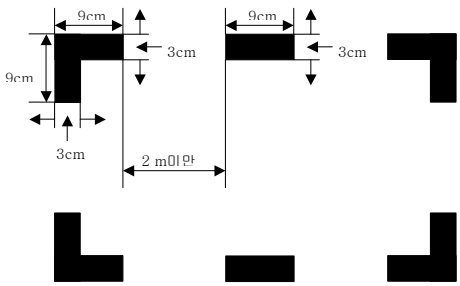
1) the transmitter has been in use for more than one cumulative hour
2) 50 percent of their useful life (or for rechargeable batteries, 50 percent of their useful life of charge) has expired.
3) the expiration date for a replacement or recharged ELT battery shall be legibly marked on the outside of the transmitter.

Note: the battery useful life (or useful life of charge) requirements do not apply to batteries (such as water-activated batteries) that are essentially unaffected during probable storage intervals.

7.2.5.5 Marking of Break-In Points

(A) if areas of the fuselage suitable for break-in by rescue crews in an emergency are marked on an aeroplane, such areas shall be marked as shown below, and the color of the markings shall be red or yellow and, if necessary, they shall be outlined in white to contrast with the background.

(b) if the corner markings are more than 2 m apart, intermediate lines 9 cm x 3 cm shall be inserted so that there is no more than 2 m between adjacent markings.



7.2.5.6 Oxygen Storage and Dispensing Apparatus

(A) all aircraft intended to be operated at altitudes requiring the use of supplemental oxygen shall be equipped with adequate oxygen storage and dispensing apparatus.

(b) the oxygen apparatus, the minimum rate of oxygen flow, and the supply of oxygen shall meet applicable airworthiness standards for type certification in the transport category as specified by the authority.

7.2.5.7 Flotation Device for Helicopter Ditching

All helicopters flying over water at a distance from land corresponding to more than 10 minutes at normal cruise speed in the case of performance class 1 or 2 helicopters, or flying over water beyond auto rotational or safe forced landing distance from land in the case of performance class 3 helicopters, shall be fitted with a permanent or rapidly deployable means of floatation so as to ensure a safe ditching of the helicopter.

7.2.6 Miscellaneous Systems and Equipment

7.2.6.1 Icing Protection Equipment

Unless an aeroplane is certified under the transport category airworthiness requirements relating to ice protection, no person may operate an aeroplane in icing conditions unless it is equipped for the prevention or

removal of ice on windshields, wings, empennage, propellers, and other parts of the aeroplane where ice formation will adversely affect the safety of the aeroplane.

7.2.6.2 Maritime Sound Signaling Device

All seaplanes for all flights shall be equipped with equipment for making the sound signals prescribed in the international regulations for preventing collisions at sea, where applicable.

7.2.6.3 Anchors

All seaplanes for all flights shall be equipped with one anchor, and one sea anchor (drogue), when necessary to assist in maneuvering (approval for the anchors not required).

Note.- "seaplanes" includes amphibians operated as seaplanes.

7.3 INSTRUMENT AND EQUIPMENT REQUIREMENTS: COMMERCIAL AIR TRANSPORT

7.3.1 Flight and Navigational Instruments

7.3.1.1 IFR Instruments

(a) NO PERSON MAY OPERATE AN AEROPLANE UNDER IFR, OR UNDER VFR OVER ROUTES THAT CANNOT BE NAVIGATED BY REFERENCE TO VISUAL LANDMARKS, UNLESS THE aeroplane is equipped with navigation equipment in accordance with the requirements of air traffic services in the area(s) of operation, but not less than:

1) one VOR receiving system, one ADF system, one DME and one marker beacon receiving system
2) one ils or MLS where ils or MLS is required for approach navigation purposes
3) an area navigation system when area navigation is required for the route being a flown;
4) an additional VOR receiving system on any route, or part thereof, where navigation is based only on VOR signals; and
5) an additional ADFsystem on any route, or part thereof, where navigation is based only on NDB signals.

(b) no person may conduct single pilot IFR operations unless the aeroplane is equipped with an Autopilot with at least altitude hold and heading mode.

7.3.1.2 Navigation Equipment for Operations in MNPS Airspace

(a) no AOCholder may operate an aeroplane in MNPS airspace unless it is equipped with navigation equipment that-

1) continuously provides indications to the flight crew of adherence to or departure from track to the required degree of accuracy at any point along that track;
2) has been authorized by the state of registry for MNPS operations concerned.

Note: equipment shall comply with minimum navigation performance specifications prescribed in ICAO doc 7030 in the form of regional supplementary procedures.

(b) the navigation equipment required for operations in MNPS airspace shall be visible and usable by either pilot seated at his duty station

(c) for unrestricted operation in MNPSairspace an aeroplane shall be equipped with two independent long-range navigation systems (LRNS).

(d) for operation in MNPS airspace along notified special routes, an aeroplane shall be equipped with one LRNS unless otherwise specified.

7.3.2 Communication Equipment

7.3.2.1 Radio Equipment

(a) no personmay operate an aeroplane in IFR, or in VFR over routes that cannot be navigated by reference to visual landmarks, unless the aeroplane is equipped with communication and navigation equipment in accordance with the requirements of air traffic services in the area(s) of operation, but not less than

1) two independent radio communication systems necessary under normal operating conditions to communicate with an appropriate ground station from any point on the route including diversions.

Note: each system shall have an independent antenna installation except that, where rigidly supported non-wire antennae or other antenna installations of equivalent reliability are used, only one antenna is required.

2) secondary Surveillance Radar Transponder Equipment as required for the route being flown.

(b) when more than one communications equipment unit is required, each shall be independent of the other or others to the extent that a failure in any one will not result in failure of any other.

(c) no person may conduct single pilot IFR or night operations unless the aeroplane is equipped with a headset with boom microphone or equivalent and a transmit button on the control wheel.

7.3.2.2 Crewmember Interphone System

(A) no AOC holder may operate an aeroplane on which a flight crew of more than one is required unless it is equipped with a flight crew interphone system, including headsets and microphones, not of a handheld type, for use by all members of the flight crew.

(b) no AOC holder may operate an aeroplane with a maximum certified take-off mass exceeding 15,000 kg or having a maximum approved passenger seating configuration of more than 19 unless it is equipped with a crew member interphone system that

1) operates independently of the public address system except for handsets, headsets, microphones, selector switches and signaling devices;

2) provides a means of two-way communication between the flight crew compartment and each

a) passenger compartment

b) galley located other than on a passenger deck level

c) remote crew compartment that is not on the passenger deck and is not easily accessible from a passenger compartment

3) is readily accessible for use

a) from each of the required flight crew stations in the flight crew compartment

b) at required cabin crew member stations close to each separate or pair of floor level emergency exits;

4) has an alerting system incorporating aural or visual signals for use by flight crew members to alert the cabin crew and for use by cabin crew members to alert the flight crew

5) has a means for the recipient of a call to determine whether it is a normal call or an emergency call;

6) provides on the ground a means of two-way communication between ground personnel and at least two flight crew members.

7.3.3 Aeroplane Lights and Instrument Illumination

7.3.3.1 Aeroplane Lights and Instrument Illumination

(A) no AOC holder may operate an aircraft by day or night unless it is equipped with:

1) two landing lights

2) an anti-collision light system

3) illumination for all flight instruments and equipment that are essential for the safe operation of the aircraft

4) lights in all passenger compartments;

5) a flashlight for each crewmember station (approval not required).

(b) no AOC holder may operate an aircraft by night unless, in addition to the equipment specified in paragraph (a) above, it is equipped with

1) navigation/position lights

2) two landing lights or a single light having two separately energized filaments;

3) lights to conform to the international regulations for preventing collisions at sea if the aircraft is a seaplane or an amphibian aircraft.

7.3.4 Engine Instruments

7.3.4.1 Engine Instruments

(a) unless the authority allows or requires different instrumentation for turbine engine powered aeroplanes to provide equivalent safety, no person may conduct any commercial air transport operations in any aircraft without the following engine instruments:

1) an independent fuel pressure warning device for each engine or a master warning device for all engines with a means for isolating the individual warning circuits from the master warning device.

2) a fuel flowmeter.

3) a means for indicating fuel quantity in each fuel tank to be used

4) an oil pressure indicator for each engine.

5) an oil quantity indicator for each oil-tank when a transfer or separate oil reserve supply is used.

6) an oil-in temperature indicator for each engine.

7) a tachometer for each engine.

(b) in addition to the listed equipment requirements in paragraph (a), reciprocating engine aircraft shall have the following:

1) a carburettor air temperature indicator for each engine.
2) a cylinder head temperature indicator for each air-cooled engine.
3) a manifold pressure indicator for each engine.
4) a device for each reversible propeller, to indicate to the pilot when the propeller is in reverse pitch, that complies with the following:
   a) the device may be actuated at any point in the reversing cycle between the normal low pitch stop position and full reverse pitch, but it may not give an indication at or above the normal low pitch stop position.
   b) the source of indication shall be actuated by the propeller blade angle or be directly responsive to IT.

7.3.5 Warning Instruments and Systems

7.3.5.1 Landing Gear: Aural Warning Device

(A) each aeroplane with landing gear shall have a landing gear aural warning device that functions continuously under the following conditions:

1) for aeroplanes with an established approach wing-flap position, whenever the wing flaps are extended beyond the maximum certified approach climb configuration position in the aeroplane flight manual and the landing gear is not fully extended and locked.
2) for aeroplanes without an established approach climb wing flap position, whenever the wing flaps are extended beyond the position at which landing gear extension is normally performed and the landing gear is not fully extended and locked.

(b) the warning system required by paragraph (a) of this section:

1) may not have a manual shutoff;
2) shall be in addition to the throttle-actuated device installed under the type certification airworthiness requirements;
3) may utilize any part of the throttle-actuated system including the aural warning device.

(C) The flap position -sensing unit may be installed at any suitable place in the aeroplane.

7.3.5.2 Altitude Alerting System

No AOC holder may operate a turbine propeller powered aeroplane with a maximum certified take-off mass in excess of 5,700 kg or having a maximum approved passenger seating configuration of more than 9 seats, or a turbo-jet powered aeroplane unless -

(1) it is equipped with an altitude alerting system capable of alerting the flight crew upon approaching preselected altitude in either ascent or descent; and

(2) alerting the flight crew by at least an aural signal, when deviating above or below a preselected altitude

7.3.5.3 Ground Proximity Warning System (GPWS)

(a) no AOC holder may operate a turbine-powered aeroplane unless it is equipped with a ground proximity

warning system. As follows items

1) a turbine propeller powered aeroplane with a maximum certified take-off mass in excess of 5,700 kg or having a maximum approved passenger seating configuration of more than 9 seats or a turbojet powered aeroplane : not less than 1

2) a turbine propeller powered aeroplane with a maximum certified take-off mass in excess of 15,000 kg or having a maximum approved passenger seating configuration of more than 30 seats or a turbo-jet powered aeroplane : not less than 1 (after Jan. 01. 2005, when aeroplane closer to terrain, aircraft equipped with GPWS is the structure which displays and indicates the terrain or building to flight crew. And then that can alert to flight crew does protection act.)

(b) GPWS which is described by paragraph (a), automatically alert audible and visual signal about descent rate, terrain closure rate, altitude loss after take-off or go-around, unsafe terrain clearance while not in landing configuration and descent below the instrument glide path to flight crew.

(c) on or after 1 January 1999, a ground proximity warning system shall provide, as a minimum, warnings of the following circumstances

1) excessive descent rate.

2) excessive terrain closure rate.

3) excessive altitude loss after take-off or go-around.

4) unsafe terrain clearance while not in landing configuration; and

5) excessive descent below the instrument glide path.

7.3.5.4 Weather Radar

No person may operate an aircraft in commercial air transport in an area where potentially hazardous weather conditions may be expected unless it is equipped with a Weather Radar.

7.3.5.5 Airborne Collusion Avoidance System

(A) Aircraft must equipped with ACAS Ⅱ(Airborne Collusion Avoidance System) by international civil aviation treaty annexed paper 10. As follows items

1) a turbine propeller powered aeroplane with a maximum certified take-off mass in excess of 15,000 kg or having a maximum approved passenger seating configuration of more than 30 seats : not less than 1

2) a turbine propeller powered aeroplane with a maximum certified take-off mass in excess of 5,700 kg or having a maximum approved passenger seating configuration of more than 19 seats: not less than 1, but only aircraft which is used as air transportation, after Jan. 01. 2005.

(b) by paragraph (a), ACAS Ⅱ must display other aircraft`s location and closure rate in it`s monitor. And to avoid dangerous situation, ACAS Ⅱ must have indication instrument and audible caution.

7.3.5.6 Pressure-Altitude Reporting Transponder

No AOC holder may operate aircraft unless it is equipped with pressure-altitude reporting transponder.

7.3.5.7 Low-Altitude Windshear System

(a) no AOC holder may operate aircraft unless it is equipped with Low-Altitude Windshear System, after Jan. 01. 2001 a turbo-jet powered aeroplane which is introduced, with a maximum certified take-off mass

in excess of 5,700 kg or having a maximum approved passenger seating configuration of more than 10 seats.

(b) Low-Altitude Windshear System have to alert wind shear meeting terrain and entering sensing caution through audible, visual warning to flight crew. If possible it must give the information about flight induction indications.

7.3.6 Flight and Cockpit Voice Recorders

7.3.6.1 Cockpit Voice Recorders

(A) no AOC holder may operate a large multi-engine turbine powered aeroplane with approved passenger seating of 10 or more unless an approved cockpit voice recorder system is installed. But follows below items

1) as international civil aviation treaty annexed paper 6, aeroplane with a maximum certified take-off mass in excess of 5,700 kg : not less than FDR 1, CVR 1 more
2) aircraft built after Jan. 01. 2005 should have FDR and CVR which can record through digital method. Also aircraft CVR built after Jan. 01. 2003 should record last flight`s information not less than 2 hours.

(b) to facilitate location and identification in case of an accident, the cockpit voice recorder shall

1) be either bright orange or bright yellow;
2) have reflective tape affixed to the external surface to facilitate its location under water;
3) have an approved underwater locating device on or adjacent to the recorder, which is secured in such a manner that it is not likely to be separated during a crash impact.

7.3.6.2 Flight Data Recorders

(a) no person may operate a large aeroplane in commercial air transport that is certified for operations above 25,000 feet altitude or is turbine engine powered, unless it is equipped with one or more approved flight data recording systems.

(b) to facilitate location and identification in case of an accident, the cockpit voice recorder shall

1) be either bright orange or bright yellow;
2) after Jan.01. 2005 have reflective tape affixed to the external surface to facilitate its location under water; and
3) have an approved underwater locating device on or adjacent to the recorder, which is secured in such a manner that it is not likely to be separated during a crash impact.
4) be constructed, located and installed so as to provide maximum practical protection for the recordings in order that the recorded information may be preserved, recovered and transcribed.
5) be calibrated as required by the authority

(C) implementing standard: see is: 7.3.6.2for specific data to be recorded by flight recorders

7.3.7 Emergency, Rescue, and Survival Equipment

7.3.7.1 Emergency Exit Equipment

(A) each passenger-carrying land plane emergency exit (other than over-the-wing) that is more than 6 feet

from the ground with the aeroplane on the ground and the landing gear extended, shall have an approved means to assist the occupants in descending to the ground.

(B) each passenger emergency exit, its means of access, and its means of opening shall be conspicuously marked by a sign visible to occupants approaching along the main passenger aisle.

(C) each passenger-carrying aeroplane shall have an emergency lighting system, independent of the main lighting system that

1) illuminates each passenger exit marking and locating sign;
2) provides enough general lighting in the passenger cabin; and
3) includes floor proximity emergency escape path marking.

(D) each passenger emergency exit and the means of opening that exit from the outside shall be marked on the outside of the aeroplane.

(E) each passenger-carrying aeroplane shall be equipped with a slip-resistant escape route that meets the requirements under which that aeroplane was type certified.

(F) implementing standard: see is: 7.3.7.1 for details of the emergency exit equipment requirements

7.3.7.2 Emergency Locator Transmitter

(A) all aircraft on all flights shall be equipped with an ELT as follows items

1) equipped with two transmitter : aircraft flying 120 minutes above sea at cruise speed or 740km (400nm) which ever is shorter can be applicable following items and then one of them must be automatically operated
   a) aircraft type approved by manufacturing country after jan.01.2003
   b) all aircraft after jan.01.2005
2) installation not less than one: except (a) 1) , emergency locator transmitter installed at aircraft type approved by manufacturing country after jan.01.2003 and all aircraft after jan.01.2005 must be automatically operated.

(B) no person may operate an aeroplane in extended overwater operations without having on the aeroplane a survival type ELTthat transmits simultaneously on 121.5 and 406MHz, and meets technical standards specified by the authority. If by dec.31.2004 121.5MHz alone can be operated or 121.5MHz and 406.0MHz both can be operated.

(C) at least one survival type ELT shall be located with each liferaft carried

7.3.7.3 Portable Fire Extinguishers

No person may operate an aircraft unless it is equipped with portable fire extinguishers accessible for use in crew, passenger, and cargo compartments as follows:

1) the type and quantity of extinguishing agent shall be suitable for the kinds of fires likely to occur in the compartment where the extinguisher is intended to be used.

Note: for passenger compartments, the extinguisher shall be designed to minimize the hazard of toxic gas concentrations.

2) at least one portable fire extinguisher shall be provided and conveniently located for use in each class e

cargo compartment which is accessible to crew members during flight, and at least one shall be located in each upper and lower lobe galley.

3) at least one portable fire extinguisher shall be conveniently located on the flight deck for use by the flight crew.
4) at least one portable fire extinguisher shall be conveniently located in the passenger compartment of aeroplanes having a passenger seating capacity of 30 or less.
5) For each aeroplane having a passenger seating capacity of more than 30, there shall be at least the following number of portable fire extinguishers conveniently located and uniformly distributed throughout the compartment.

Minimum Number of Hand Fire Extinguishers Passenger Seating Capacity	
6 through 30	1
31 through 60	2
61 through 200	3
201 through 300	4
301 through 400	5
401 through 500	6
501 through 600	7
601 or more	8

7.3.7.4 Lavatory Fire Extinguisher

(a) each aeroplane having a passenger seating capacity of more than 19 should have fire extinguisher in the disposal receptacle for towels, paper, or waste.
(b) Built-in lavatory fire extinguishers shall be designed to discharge automatically into each disposal receptacle upon occurrence of a fire in the receptacle.

7.3.7.5 Lavatory Smoke Detector

Each aeroplane having a passenger seating capacity of more than 19 should be equipped with Smoke Detector or equivalent that provides.

1) A warning light in the cockpit; or
2) A warning light or audio warning in the passenger cabin whichwould be readily detected by a flight attendant, taking into consideration the positioning of flight attendants throughout the passenger compartment during various phases of flight.

7.3.7.6 Crash Axe

No AOC holder shall operate a large aeroplane unless it is equipped with a crash axe appropriate to effective use in that type of aeroplane, stored in a place not visible to passengers on the aeroplane.

7.3.7.7 First-Aid and Emergency Medical Kit

(a) No person may operate and aircraft unless it is equipped with accessible first-aid kits and, on passenger flights, an approved emergency medical kit for treatment of injuries or medical emergencies that might occur during flight time or in minor accidents.

(b) The number of first-aid kits to be carried shall be to the following scale:

Number of passenger seats installed	Number of first-aid kits required
0 to 54	1
51 to 150	2
151 to 250	3
251 and more	4

(c) AOC should be equipped with 1 set of Emergency Medical Kit for doctors or equivalent person in the aircraft approved for more than 251 person capability
See IS: 7.3.7.7 for details First-Aid and Emergency Medical Kit.

7.3.7.8 Oxygen Storage and Dispensing Apparatus

(a) No AOC holder may operate an aeroplane at altitudes above 10,000 feet unless it is equipped with oxygen masks, located so as to be within the immediate reach of flight crew members while at their assigned duty station.

(b) No AOC holder may operate a pressurized aeroplane at altitudes above 25,000 feet unless

1) Flight crewmember oxygen masks are of a quick donning type
2) Sufficient spare outlets and masks and/or sufficient portable oxygen units with masks are distributed evenly throughout the cabin to ensure immediate availability of oxygen to each required cabin crew member regardless of his location at the time of cabin pressurization failure
3) An oxygen-dispensing unit connected to oxygen supply terminals is installed so as to be immediately available to each occupant, wherever seated. The total number of dispensing units and outlets shall exceed the number of seats by at least 10%. The extra units are to be evenly distributed throughout the cabin.

(c) The amount of supplemental oxygen for sustenance required for a particular operation shall be determined on the basis of flight altitudes and flight duration, consistent with the operating procedures established for each operation in the Operations Manual and with the routes to be flown, and with the emergency procedures specified in the Operations Manual.

(d) Implementing Standard: See IS: 7.3.7.8 to determine the amount of supplemental oxygen needed for non-pressurized and pressurized aircraft.

7.3.7.9 Protective Breathing Equipment

(a) No AOC holder may operate an aeroplane with a maximum certified takeoff mass exceeding 5700 kg. or having a maximum approved seating configuration of more than 19 seats unless

1) It has PBE to protect the eyes, nose and mouth of each flight crew member while on flight deck duty and to provide oxygen for a period of not less than 15 minutes; and
2) It has sufficient portable PBE to protect the eyes, nose and mouth of all required cabin crewmembers and to provide breathing gas for a period of not less than 15 minutes.

(b) The oxygen supply for PBE may be provided by the required supplemental oxygen system.

(c) The PBE intended for flight crew use shall be conveniently located on the flight deck and be easily accessible for immediate use by each required flight crew member at their assigned duty station.

(d) The PBE intended for cabin crew use shall be installed adjacent to each required cabin crewmember duty station.

(e) Easily accessible portable PBE shall be provided and located at or adjacent to the required hand fire extinguishers except that, where the fire extinguisher is located inside a cargo compartment, the PBE shall be stowed outside but adjacent to the entrance to that compartment.

(f) The PBE while in use shall not prevent required communication.

7.3.7.10 First Aid Oxygen Dispensing Units

(a) No AOC holder may conduct a passenger carrying operation in a pressurized aeroplane altitudes above 25,000 feet, when a cabin crewmember is required to be carried, unless it is equipped with
1) Undiluted first-aid oxygen for passengers who, for physiological reasons, may require oxygen following a cabin depressurization; and
2) A sufficient number of dispensing units, but in no case less than two, with a means for cabin crew to use the supply.

(b) The amount of first-aid oxygen required in paragraph (a) for a particular operation and route shall be determined on the basis of
1) Flight duration after cabin depressurization at cabin altitudes of more than 8,000 feet;
2) An average flow rate of at least 3 liters Standard Temperature Pressure Dry/minute/person; and
3) At least 2% of the passengers carried, but in no case for less than one person.

7.3.7.11 Megaphones

(a) Each person operating a passenger-carrying aeroplane shall have a portable battery-powered megaphone or megaphones readily accessible to the crew members assigned to direct emergency evacuation.

(b) The number and location of megaphones required in paragraph (a) shall be determined as follows:
1) On aeroplanes with a seating capacity of more than 60 and less than 100 passengers, one megaphone shall be located at the most rearward location in the passenger cabin where it would be readily accessible to a normal flight attendant seat; and
2) On aeroplanes with a seating capacity of more than 99 passengers, two megaphones in the passenger cabin on each aeroplane one installed at the forward end and the other at the most rearward location, more 200 seats three installed where it would be readily accessible to a normal flight attendant seat.

Note: The Authority may grant a deviation from the requirements of paragraph (b) if the Authority finds that a different location would be more useful for evacuation of persons during an emergency.

7.3.7.12 Individual Flotation Devices

(a) All aircraft operated on flights over water at a distance of more than 93 km (50 NM) from land suitable for making an emergency landing shall be equipped with one life jacket or equivalent individual floatation device for each person on board.

(b) All life jackets or equivalent individual floatation devices shall be stowed in a position easily accessible from the seat or berth of the person for whose use it is provided.

(c) For extended overwater operations, each individual floatation device shall be fitted with an approved survivor locator light.

(d) Upon application by an aircraft operator, the Authority may approve the operation of an aeroplane over water without individual flotation devices, if the aircraft operator shows that the water over which the aeroplane is to be operated is not of such size and depth that individual flotation devices should be required for the survival of its occupants in the event the flight terminates in that water.

7.3.7.13 Life Raft

(a) No person may operate an aeroplane in commercial air transport in extended overwater operations without having on the aeroplane enough life rafts with rated capacities and buoyancy to accommodate the occupants of the aeroplane.

Note: Unless excess rafts of enough capacity are provided, the buoyancy and seating capacity of the rafts shall accommodate all occupants of the aeroplane in the event of a loss of one raft of the largest rated capacity.

(b) Life rafts shall be stowed so as to facilitate their ready use in emergency.

(c) Life rafts shall be equipped with

1) A survivor locator light;
2) A survival kit;
3) A pyrotechnic signaling device;

(d) Life rafts which are not deployable by remote control and which have a mass of more than 40 kg shall be equipped with some means of mechanically assisted deployment.

7.3.8 Miscellaneous Systems and Equipment

7.3.8.1 Seats, Safety Belts, and Shoulder Harnesses

Each aircraft used in passenger operations shall be equipped with the following seats, safety belts, and shoulder harnesses that meet the airworthiness requirements for type certification of that aircraft:

1) A seat or berth with safety belt for each person on board over an age of 2.

Note: A berth designed to be occupied by two persons, such as a multiple lounge or divan seat, shall be equipped with an approved safety belt for use by two occupants during en route flight only.

2) A flight deck station with a combined safety belt and shoulder harness.

3) A seat in the passenger compartment for each flight attendant.

7.3.8.2 Passenger and Pilot Compartment Doors

No person may conduct any passenger-carrying operation with aircraft excess 19 seats unless it has

1) A door between the passenger and pilot compartments with a locking means to prevent passengers from opening it without the pilot's permission;
2) A key for each door that separates a passenger compartment from another compartment that has emergency exit provisions; The key shall be readily available for each crew member
3) A means for the crew, in an emergency, to unlock each door that leads to a compartment that is normally accessible to passengers and that can be locked by passengers; and
4) A placard on each door used to access a required passenger emergency exit, indicating that such door shall be open during takeoff and landing.

7.3.8.3 Passenger Information Signs

No AOC holder may operate a passenger carrying aeroplane unless it is equipped with

1) At least one passenger information sign (using either letters or symbols) notifying when smoking is prohibited and one sign (using either letters or symbols) notifying when safety belts should be fastened shall, when illuminated, be legible to each person seated in the passenger cabin under all probable conditions of cabin illumination;
2) Signs which notify when safety belts should be fastened and when smoking is prohibited shall be so constructed that the crew can turn them on and off;
3) A sign or placard affixed to each forward bulkhead and each passenger seat back that reads "Fasten Seat Belt While Seated."

7.3.8.4 Public Address System

No AOC holder may operate a passenger carrying aeroplane with a maximum approved passenger seating configuration of more than 19 unless a public address system is installed that

1) Operates independently of the interphone systems except for handsets, headsets, microphones, selector switches and signaling devices;
2) For each required floor level passenger emergency exit which has an adjacent cabin crew seat, has a microphone which is readily accessible to the seated cabin crew member, except that one microphone may serve more than one exit, provided the proximity of the exits allows unassisted verbal communication between seated cabin crew members; and
3) Is capable of operation within 10 seconds by a cabin crew member at each of those stations in the compartment from which its use is accessible; and
4) Is audible and intelligible at all passenger seats, toilets, and cabin crew seats and workstations.

7.3.8.5 Materials for Cabin Interiors

(a) Upon the first major overhaul of an aeroplane cabin or refurbishing of the cabin interior, all materials in each compartment used by the crew or passengers that do not meet the current airworthiness requirements pertaining to materials used in the interior of the cabin for type certification in the transport

category as cited by the Authority, shall be replaced with materials that meet the requirements specified by the Authority.

(b) Seat cushions, except those onflight crewmember seats, in any compartment occupied by crew or passengers shall meet requirements pertaining to fire protection as specified by the Authority.

7.3.8.6 Materials for Cargo and Baggage Compartments

Each Class C or D cargo compartment greater than 200 cubic feet in volume in a transport category aeroplane type certified after January 1, 1958 shall have ceiling and sidewall liner panels which are constructed of

1) Glass fiber reinforced resin;
2) Materials which meet the test requirements for flame resistance of cargo compartment liners as prescribed for type certification; or
3) In the case of installations approved prior to March 20, 1989, aluminum.

7.3.8.7 Power Supply, Distribution, and Indication System

(a) No AOC holder may operate an aeroplane unless it is equipped with

1) A power supply and distribution system that meets the airworthiness requirements for certification of an aeroplane in the transport category, as specified by the Authority, or
2) A power supply and distribution system that is able to produce and distribute the load for the required instruments and equipment, with use of an external power supply if any one power source or component of the power distribution system fails.
3) A means for indicating the adequacy of the power being supplied to required flight instruments.

(b) Engine-driven sources of energy, when used, shall be on separate engines.

7.3.8.8 Protective circuit fuses

No AOC holder may operate an aeroplane in which protective fuses are installed unless there are spare fuses available for use in flight equal to at least 10% of the number of fuses of each rating or three of each rating whichever is the greater.

7.3.8.9 Icing Protection Systems

No AOC holder may operate an aircraft in expected or actual icing conditions at night unless it is equipped with a means to illuminate or detect the formation of ice.

Note: Any illumination that is used shall be of a type that will not cause glare or reflection that would handicap crewmembers in the performance of their duties.

7.3.8.10 Pitot Heat-Indication Systems

No AOC holder may operate a transport category aeroplane equipped with a flight instrument pitot heating system unless the aeroplane is also equipped with an operable pitot heat indication system that complies with the following requirements:

1) The indication provided shall incorporate an amber light that is in clear view of a flight crew member.

2) The indication provided shall be designed to alert the flight crew if either the pitot heating system is switched "off," or the pitot heating system is switched "on" and any pitot tube heating element is inoperative.

7.3.8.11 Static Pressure System

No person may operate an aircraft unless two independent static pressure systems, vented to the outside atmospheric pressure so that they will be least affected by airflow variation or moisture or other foreign matter, and installed so as to be airtight except for the vent.

7.3.8.12 Windshield Wipers

No AOC holder may operate an aeroplane with a maximum certified take-off mass of more than 5700 kg unless it is equipped at each pilot station with a windshield wiper or equivalent means to maintain a clear portion of the windshield during precipitation.

7.3.8.13 Chart Holder

No AOC holder may operate an aeroplane unless a chart holder is installed in an easily readable position which can be illuminated for night operations.

7.3.8.14 Cosmic Radiation Detection Equipment

An AOC holder shall ensure that aeroplanes intended to be operated above 15000 m (49 000 ft) are equipped with an instrument to measure and indicate continuously the dose rate of total cosmic radiation being received (i.e., the total of ionising and neutron radiation of galactic and solar origin) and the cumulative dose on each flight.

CHAPTER Ⅷ - AIRCRAFT OPERATIONS

8.1 GENERAL

8.1.1 Applicability and Definitions

8.1.1.1 Applicability

A. Part 8 prescribes the requirements for:

1) Operations conducted by airman certified in Republic of Korea (Hereafter, referred as Korea) while operating aircraft registered in Korea.
2) Operations of aircraft registered in Korea or foreign state by Korean AOC holders.
3) Operations of aircraft within Korea by airman or AOC or equivalent certificate holders of a foreign state.

B. For operations outside of Korea, all Korean pilots and operators shall comply with these requirements unless compliance would result in a violation of the laws of the foreign State in which the operation is conducted.

C. Requirements described in 8.2 are applicable to all Civil Aviation Operations (Hereafter, referred as All Operations) unless especially specified not to.

D. Requirements described in 8.3 are applicable to aircraft operations conducted by AOC holders.

Note 1: Where the a particular requirement is applicable only to a particular segment of aviation operations, it will be identified by a reference to those particular operations, such as commercial air transport or small non-turbojet or turbofan aeroplanes.

Note 2: Those specific subsections not applicable to foreign operators will include the phrase "This requirement is not applicable to foreign operators".

8.1.1.2 Definitions

For the purpose of Part 8, the following definitions shall apply

Calendar day. The period of elapsed time, using Co-ordinated Universal Time or local time, that begins at midnight and ends 24 hours later in the next midnight.

Check airman (simulator). A person who is qualified and designated to conduct an evaluation and training, but only in a flight simulator or in a flight training device for a particular type aircraft, for a particular AOC holder.

Check airman (aeroplane). A person who is qualified, and designated to conduct an evaluation in an aeroplane, in a flight simulator, or in a flight training device for a particular type aeroplane, for a particular AOC holder.

Aerobatic flight. Manoeuvres intentionally performed by an aircraft involving an abrupt change in its attitude, an abnormal attitude, or an abnormal variation in speed.

Altenate airport. An Airport at which an aircraft may land if a landing at the intended airport becomes inadvisable. Regular, refueling and provisional airport can be designated as alternate airport. However, the airport designated solely as an alternate airport can not be use as the initial destination of flight planning.

Note ; In this regulation, alternate aerodrome is considered same as alternate airport.

Line operating flight time. Flight time recorded by the Flight Crew while in revenue service for an AOC holder.

Flight plan. Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

Flight Duty Period. The total time from the moment a flight crew reported at the place, which an AOC holder designated, to commence flight duty, to the moment of debriefing when the flight crew member is relieved from all duties having completed a flight or an series of flights. This includes all the time of flight preparation, flight duty, rest time on ground or in an aircraft but transportation time from home (or rest place) to the reporting place which an AOC holder designated..

Aerodrome operating minima The limits of usability of an aerodrome for:

1) take-off, expressed in terms of runway visual range and/or visibility and, if necessary, cloud conditions;
2) landing in precision approach and landing operations, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H) as appropriate to the category of the operation;
3) landing in approach and landing operations with vertical guidance, expressed in terms of visibility and/or runway visual range and decision altitude/height(DA/A); and
4) Landing in non-precision approach and landing operations, expressed in terms of visibility and/or runway visual range, minimum descent altitude/height (MDA/H) and, if necessary, cloud conditions.

Critical phases of flight. Those portions of operations involving taxiing, takeoff and landing, and all flight operations below 10,000 feet, except cruise flight.

Passenger exit seats. Those seats having direct access to an exit, and those seats in a row of seats through which passengers would have to pass to gain access to an exit, from the first seat inboard of the exit to the first aisle inboard of the exit. A passenger seat having "direct access" means a seat from which a passenger can proceed directly to the exit without entering an aisle or passing around an obstruction.

Flight time. The total time elapsed from the moment an aircraft first moves for the purpose of takeoff with the flight crew aboard to do flight duty until the moment the aircraft comes to the rest at the end of the flight. (block to block, chock to chock.

Crew Member. Persons (Flight crew and Flight attendant) assigned by an AOC holder to do flight duty aboard the aircraft during flight time period.

Deadhead Transportation. Traveling of a non-operating crew member on board the aircraft as a passenger prior to or after duty flight at the insistence of the AOC holder.

Configuration deviation list A list established by the organization responsible for the type design with the approval of the State of Design which identifies any external parts of an aircraft type which may be missing at the commencement of a flight, and which contains, where necessary, any information on associated operating limitations and performance correction.

Operational flight plan. The operator's flight plan for the safe conduct of the flight based on

considerations of aircraft performance, other operating limitations, and relevant expected conditions on the route to be followed and at the aerodromes or heliports concerned.

Flight crewmember. A licensed crewmember (Pilot, Flight Engineer, Navigator) charged with duties essential to the operation of an aircraft during flight duty period.

Refueling airport. An airport authorized solely for the purpose of refueling, and it may be used as the first intended landing point in flight planning

Provisional airport. An airport designated provisionally to be used for the same purpose as a regular airport when a regular airport is not usable, it may be used as the first intended landing point in flight planning

Effective length of the runway. The distance for landing from the point at which the obstruction clearance plane associated with the approach end of the runway intersects the centreline of the runway to the far end.

Takeoff decision point. The point used in determining takeoff performance of a Class 1 helicopter from which, an engine failure occurring at this point, either a rejected takeoff may be made or a takeoff safely continued.

Take-off & initial climb phase That part of the flight from the start of take-off to 300m(1,000ft) above the elevation of the FATO, if the flight is planned to exceed this height, or to the end of the climb in the other cases.

Defined point after takeoff. The point, within the takeoff and initial climb phase, before which the Class 2 helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required.

General aviation operation. An aircraft operation other than a commercial air transport operation or an aerial work operation.

Extended overwater operation. With respect to aircraft other than helicopters, an operation over water at a horizontal distance of more than 50 nm from the nearest shoreline; and to helicopters, an operation over water at a horizontal distance of more than 50 nm from the nearest shoreline and more than 50 nm from an offshore heliport structure.

Obstruction clearance plane. A plane sloping upward from the runway at a slope of 1:20 to the horizontal, and tangent to or clearing all obstructions within a specified area surrounding the runway as shown in a profile view of that area. In the plane view, the centreline of the specified area coincides with the centreline of the runway, beginning at the point where the obstruction clearance plane intersects the centreline of the runway and proceeding to a point at least 1,500 feet from the beginning point. Thereafter, the centreline coincides with the takeoff path over the ground for the runway (in the case of takeoffs) or with the instrument approach counterpart (for landings), or where the applicable one of these paths has not been established, it proceeds consistent with turns of at least 4,000 foot radius until a point is reached beyond which the obstruction clearance plane clears all obstructions. This area extends laterally 200 feet on each side of the centreline at the point where the obstruction clearance plane intersects the runway and continues at this width to the end of the runway; then it increases uniformly to 500 feet on each side of the centreline at a point 1,500 feet from the intersection of the obstruction clearance plane with the runway; thereafter, it extends laterally 500 feet on each side of the centreline.

Advisory airspace. An airspace of defined dimensions, or designated route, within which air traffic advisory service is available.

Regular airport. An airport used as an originating point, an intermediate stop, or an arriving point

on an approved route and it may be used as the first intended landing point in flight planning.
Critical engine. The engine whose failure would most adversely affect the performance or handling qualities of an aircraft.
Landing decision point. The point used in determining landing performance from which, an engine failure occurring at this point, the landing may be safely continued or a balked landing initiated.
Defined point before landing. The point, within the approach and landing phase, after which the Class 2 helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required.
Minimum equipment list A list which provided for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the MMEL established for the aircraft type.
Final approach and take-off area (FATO) A defined area over which the final phase of the approach manoeuvre to hover or landing is completed and from which the take-off manoeuvre is commenced. Where the FATO is to be used by performance Class 1 helicopters, the defined area includes the rejected take-off area available.
Journey log. A form signed by the PIC of each flight that records the aeroplane's registration, crew member names and duty assignments, the type of flight, and the date, place, and time of arrival and departure.
Master minimum equipment list (MMEL). A list established for a particular aircraft type by the manufacturer with the approval of the State of Manufacture containing items, one or more of which is permitted to be unserviceable at the commencement of a flight. The MMEL may be associated with special operating conditions, limitations or procedures. The MMEL provides the basis for development, review, and approval by the Authority of an individual operator's MEL.
Aerial work. An aircraft operation in which an aircraft is used for specialised services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial advertisement, etc.
Safety-sensitive functions in aviation. Duties charged on Flight crew, flight attendant, Flight Operations Officer, Aircraft Mechanic and Air Traffic Controller.
Safety-sensitive Personnel in aviation. Licensed Flight crew, flight attendant, Flight instructor, Flight Operations Officer, Aircraft Mechanic and Air Traffic Controller (but not include who belongs to Civil Aviation Safety Administration and Military Air Traffic Control Authority)
Approach and landing phase-helicopter That part of the flight from 300m (1,000ft) above the elevation of the FATO, if the flight is planned to exceed this height, or from the commencement of the descent in the other cases, to landing or to the balked landing point.
Helideck. A heliport located on a floating or fixed offshore structure.
Heliport. An aerodrome or defined area on a structure intended to be used wholly or in part for the arrival, departure, and surface movement of helicopters.
Rest period. A period free of all restraint, duty or responsibility for an AOC holder.

8.1.1.3 Acronyms

The following acronyms are used in Part 8:

1) AFM Aeroplane Flight Manual
2) AGL Above Ground Level
3) AOC Air Operator Certificate

4) AOM Aircraft Operating Manual
5) APU Auxiliary Power Unit
6) ATC Air Traffic Control
7) CAT Category
8) CDL Configuration Deviation List
9) CRM Crew Resource Management
10) DH Decision Height
11) ETA Estimated Time of Arrival
12) ETOPS Extended Twin-engine Operations
13) FE Flight Engineer
14) FL Flight Level
15) GPS Global Positioning System
16) IMC Instrument Meteorological Conditions
17) INS Inertial Navigation System
18) LDA Localizer-type Directional Aid
19) LOC Localizer
20) LORAN Long-range Navigation
21) LVTO Low Visibility Take Off
22) MDA Minimum Decent Altitude
23) MEA Minimum En Route Altitude
24) MEL Minimum Equipment List (Part 1)
25) MMEL Master Minimum Equipment List
26) MOCA Minimum Obstruction Clearance Altitude
27) MSL Mean Sea Level
28) NOTAM Notice to Airmen
29) PBE Protective Breathing Equipment
30) PIC Pilot In Command
31) RFM Rotorcraft Flight Manual
32) RVR Runway Visibility Range
33) RVSM Reduced Vertical Separation Minimum
34) SCA Senior Cabin Attendant
35) SM Statute Miles
36) TACAN Tactical Air Navigation System
37) VMC Visual Meteorological Conditions
38) VSM Vertical Separation Minimum
39) V1. Takeoff decision speed.
40) Vmo. Maximum operating speed.
41) Vso. Stalling speed or the minimum steady flight speed in the landing configuration.

8.2 GENERAL OPERATIONS REQUIREMENTS

8.2.1 Aircraft Requirements

8.2.1.1 Registration Markings

No person may operate a aircraft registered in Republic of Korea unless it displays the proper markings prescribed in Aviation Act, Enforcement Rule 117, 121 and FSR 4.3

8.2.1.2 Civil Aircraft Airworthiness

A. No person may operate a civil aircraft unless it is in an airworthy condition.
B. Each PIC shall determine whether an aircraft is in a condition for safe flight.
C. The PIC shall discontinue a flight as soon as practicable when an unairworthy mechanical, electrical or structural condition occurs.

8.2.1.3 Special Airworthiness Certificate Operational Restrictions

No person may operate an aircraft with a special airworthiness certificate except as provided in the limitations issued with that certificate under the Aviation Act 15. 3 and Enforcement Rule 20.

8.2.1.4 Aircraft Instruments and Equipment

No person may operate an aircraft unless it is equipped with the required instruments and navigation equipment appropriate to type of flight operation conducted and the route being flown.

Note: The instrument and equipment required for specific operations are listed in Part 7.

8.2.1.5 Inoperative Instruments and Equipments

A. No person may takeoff an aircraft with inoperative instruments or equipment installed, except as authorized by the Authority.
B. An AOC Holder shall not operate a multi-engine aircraft with inoperative instruments and equipment installed unless the following conditions are met:
   1) An approved Minimum Equipment List exists for that aircraft.
   2) The Authority has issued the AOC Holder specific operating provisions authorizing operations in accordance with an approved Minimum Equipment List.
   3) The flight crew shall have direct access at all times prior to flight to all of the information contained in the approved Minimum Equipment List through printed or other means approved by the Authority in the AOC Holders specific operating provisions.
   4) An approved Minimum Equipment List, as authorized by the specific operating provisions, constitutes an approved change to the type design without requiring recertification.
   5) The approved Minimum Equipment List must be prepared in accordance with the limitations specified in paragraph (c) of this section.
   6) The approved Minimum Equipment List must provide for the operation of the aircraft with certain instruments and equipment in an inoperative condition.
   7) Records identifying the inoperative instruments and equipment and the information required by paragraph 6) of this section must be available to the pilot.
   8) The aircraft is operated under all applicable conditions and limitations contained in the Minimum Equipment List and the specific operating provisions authorizing use of the Minimum Equipment List.

C. The following instruments and equipment may not be included in the Minimum Equipment List:
   1) Instruments and equipment that are either specifically or otherwise required by the airworthiness requirements under which the aircraft is type certificated and which are essential for safe operations under all operating conditions.
   2) Instruments and equipment required by an airworthiness directive to be in operable condition unless the airworthiness directive provides otherwise.
   3) Instruments and equipment required for specific operations under Part 7, Part 8 and/or Part 9 of these regulations.
D. Notwithstanding paragraphs c.(1)and c.(3) of this section, an aircraft with inoperative instruments or equipment may be operated under a special flight permit under
E. Implementing Standard: See 8.2.1.5 for specific limitation on inoperative instruments and equipment

8.2.1.6 Civil Aircraft Flight Manual, Marking and Placard Requirements

A. No person may operate a civil aircraft registered in Republic of Korea unless there is available in the aircraft
   1) A current, approved AFM or RFM; or AOM, POM accepted by Authority for the AOC holder
   2) If no AFM or RFM exists, approved manual material, markings and placards, or any combination thereof which provide the PIC with the necessary limitations for safe operation.
B. No person may operate a civil aircraft within or over Repulic of Korea without complying with the operating limitations specified in the approved AFM or RFM, markings and placards, or as otherwise prescribed by the certifying authority for the aircraft's State of Registry
C. Each operator shall display in the aircraft all placards, listings, instrument markings or combination thereof, containing those operating limitations prescribed by the certifying authority for the aircraft's State of Registry for visual presentation.
D. Documents or the manual (prescribed in 8.2.1.6 and 8.2.1.8) carried by and used by flight crew member shall be regarded same as embarkation of those in the aircraft.

8.2.1.7 Required Aircraft and Equipment Inspections

A. Unless otherwise authorized by the Authority, no person may operate a civil aircraft unless it has had the following inspections
   1) An annual inspection within the past 12 calendar months;
   2) For remuneration or hire operations, a 100-hour inspection;
   3) For IFR operations, an altimeter and pitot-static system inspection in the past 24 calendar months;
   4) For transponder equipped aircraft, a transponder check within the past 12 calendar months; and
   5) For ELT-equipped aircraft, an ELT check within the past 12 calendar months.
B. Aircraft maintained under an alternate maintenance and inspection program approved by the Authority, as specified in 5.7.1.3 A, may not have current annual or 100-hour inspections in their maintenance records.

Note1: An "alternate maintenance and inspection program" may include a manufacturer's recommended program, instructions for continued airworthiness, or a program designed by the operator and approved by the Authority.

Note2: The requirements of these inspections are provided in Part 5.

8.2.1.8 Documents to be Carried on Aircraft: All Operations

Documents to be Carried on Aircraft: All Operations

A. Except as provided in 8.2.1.6, no person may operate a civil aircraft unless it has within it the following current and approved documents

1) Registration Certificate issued to the owner.
2) Airworthiness Certificate.
3) Aeroplane Technical & Journey Log.
4) Aircraft Radio License.
5) List of passenger names and points of embarkation and destination, if applicable.
6) Cargo manifest including special loads information.
7) Air Operator Certificate, if required.
8) Noise Certificate, if required.
9) AFM or RFM.
10) Part(s) of the Operations Manual relevant to operation(s) conducted, if required.
11) MEL.
12) Category II or III Manual, as applicable.
13) Operational Flight Plan.
14) Filed ATS flight plan.
15) NOTAMS briefing documentation.
16) Meteorological information.
17) Mass and balance documentation.
18) Roster of special situation passengers.
19) Maps and charts for routes of proposed flight or possibly diverted flights.
20) Forms for complying with the reporting requirements of the Authority and the AOC holder.
21) For international flights, a general declaration for customs.
22) Any documentation which may be required by the Authority or States concerned with a proposed flight.

Note1 : "Special situation passengers" includes armed security personnel, deportees, persons in custody, and persons with special medical needs.

Note2 : The noise certificate shall state the standards in ICAO Annex 16, Volume 1. The statement may be contained in any document, carried on board, approved by the Authority.

8.2.2 Aircraft Maintenance Requirement

8.2.2.1 Applicability

A. This subchapter prescribes the rules governing the inspection of civil aircraft registered in

Republic of Korea and operating within or outside Korea.

B. Subsections 8.2.2.3 and 8.2.2.4 do not apply to aircraft subject to an continuous maintenance program approved by the Authority for an AOC holder.

C. This subchapter applies to all aircraft, as designated below, operated as commercial air transport in Repulic of Korea, if the operator has not been designated an AOC holder.

D. This subchapter applies to all general aviation large, complex aircraft operated in Repulic of Korea, whether or not the aircraft is registered in Republic of Korea.

E. Where any aircraft, not registered in Republic of Korea and operating under an inspection program approved or accepted by the State of Registry, does not have the equipment required by Republic of Korea for operations within Republic of Korea, the owner/operator shall ensure that such equipment is installed and inspected in accordance with the requirements of the State of Registry, acceptable to the Authority prior to operation of that aircraft in Republic of Korea

8.2.2.2 General

A. The registered owner or operator of an aircraft is primarily responsible for maintaining that aircraft in an airworthy condition, including compliance with all airworthiness directives.

B. No person may perform maintenance, preventive maintenance, or alterations on an aircraft other than as prescribed in this subchapter and other applicable regulations, including Part 5.

C. No person may operate an aircraft for which a manufacturers maintenance manual or instructions for continued airworthiness has been issued that contains an airworthiness limitations section unless the mandatory replacement times, inspection intervals and related procedures set forth in specific operating provisions approved by the Authority under Part 9 or in accordance with an inspection program approved under 8.3.1.4 c).

8.2.2.3 Maintenance Required

A. Each owner or operator of an aircraft shall

1) Have that aircraft inspected as prescribed in Part 8.3 and discrepancies repaired as prescribed in the Performance Rules of Part 5;
2) Repair, replace, remove, or inspect any inoperative instruments or items of equipment at the next required inspection, except when permitted under the provisions of an Minimum Equipment List (MEL);
3) Ensure that a placard has been installed on the aircraft when listed discrepancies include inoperative instruments or equipment; and
4) Ensure that maintenance personnel make appropriate entries in the aircraft maintenance records indicating the aircraft has been approved for return to service.

8.2.2.4 Inspections

A. Except as provided in paragraph (c), no person may operate an aircraft unless, within the preceding 12 calendar months, the aircraft has had

1) An annual inspection in accordance with Part 5 and has been approved for return to service by a person authorized by 5.6.1.7; or
2) An inspection for the issuance of an airworthiness certificate in accordance with Part 5.

B. Except as provided in paragraph (c), no person may operate an aircraft carrying any person

(other than a crew member) for hire, and no person may give flight instruction for hire in an aircraft which that person provides, unless within the preceding 100 hours of time in service the aircraft has received an annual or 100-hour inspection and been approved for return to service in accordance with Part 5 of this chapter or has received an inspection for the issuance of an airworthiness certificate in accordance with Part 5 of this chapter. The 100-hour limitation may be exceeded by not more than 10 hours while en route to reach a place where the inspection can be done. The excess time used to reach a place where the inspection can be done must be included in computing the next 100 hours of time in service.

C. Paragraphs A and B of this section do not apply to

1) An aircraft that carries a special flight permit, a current experimental certificate, or a provisional airworthiness certificate;
2) An aircraft subject to the requirements of paragraph (d) or (e) of this section; or
3) Turbine-powered rotorcraft when the operator elects to inspect that rotorcraft in accordance with paragraph (e) of this section.

D. Progressive inspection. Each registered owner or operator of an aircraft desiring to use a progressive inspection program shall submit a written request to the Authority, and shall provide

1) A licensed mechanic holding an inspection authorization in accordance with Part 2, an AMO appropriately rated in accordance with Part 6, or the manufacturer of the aircraft to supervise or conduct the progressive inspection;
2) A current inspection procedures manual available and readily understandable to pilot and maintenance personnel containing, in detail
   a) An explanation of the progressive inspection, including the continuity of inspection responsibility, the making of reports, and the keeping of records and technical reference material;
   b) An inspection schedule, specifying the intervals in hours or days when routine and detailed inspections will be performed and including instructions for exceeding an inspection interval by not more than 10 hours while en-route and for changing an inspection interval because of service experience;
   c) Sample routine and detailed inspection forms and instructions for their use; and
   d) Sample reports and records and instructions for their use;
3) Enough housing and equipment for necessary disassembly and proper inspection of the aircraft; and
4) Appropriate current technical information for the aircraft.

E. The registered owner or operator of each large aeroplane, turbojet multi-engine aeroplane, turbo propeller-powered multi-engine aeroplane, and turbine-powered rotorcraft shall select, identify in the aircraft maintenance records, and use one of the following programs for the inspection of the aircraft.

1) A current inspection program recommended by the manufacturer;
2) A continuous maintenance program that is part of a continuous maintenance program for that make and model of aircraft currently approved by the Authority for use by an AOC holder; or
3) Any other inspection program established by the registered owner or operator of that aircraft and approved by the Authority.

F. Each owner/operator shall include in the selected program the name and address of the person responsible for the scheduling of the inspections required by the program and provide a copy of the program to the person performing inspection on the aircraft

G. No aircraft shall be approved for return to service unless the replacement times for life-limited parts specified in the aircraft specification-type data sheets are complied with and the aeroplane, including airframe, engines, propellers, rotors, appliances, and survival and emergency equipment, is inspected in accordance with an inspection program selected.

H. Each person wishing to establish or change an approved inspection program shall submit the program for approval by the Authority and shall include in writing

1) Instructions and procedures for the conduct of inspection for the particular make and model aircraft, including necessary tests and checks. The instructions shall set forth in detail the parts and areas of the aeronautical products, including survival and emergency equipment required to be inspected; and

2) A schedule for the inspections that shall be performed expressed in terms of time in service, calendar time, number of system operations or any combination of these.

Note : When an operator changes from one inspection program to another, the operator shall apply the time in service, calendar times, or cycles of operation accumulated under the previous program, in determining time the inspection is due under the new program.

8.2.2.5 Changes to Aircraft Maintenance Programs

A. Whenever the Authority finds that revisions to an approved inspection program are necessary for the continued adequacy of the program, the owner or operator shall, after notification by the Authority, make any changes in the program found to be necessary.

B. The owner or operator may petition the Authority to reconsider the notice, within 30 days after receiving that notice.

C. Except in the case of an emergency requiring immediate action in the interest of safety, the filing of the petition stays the notice pending a decision by the Authority.

8.2.2.6 Inspections: All Other Aircraft

A. No person may operate any other aircraft unless within the preceding 12 calendar months it has

1) Had an inspection in accordance with Performance Rules of Part 5 and approved for return to service by an authorized person; and

2) Been issued an Airworthiness Certificate by a representative of the Authority.

B. No person may operate an aircraft for flight instruction, or for compensation or hire, unless within the preceding 100 hours of time in service the aircraft has been inspected in accordance with the Performance Rules of Part 5 and approved for return to service by an authorized person as identified in Part 5.

8.2.2.7 Content, Form, and Disposition of Maintenance, Preventive Maintenance, Rebuilding, and Modification Records

The owner/operator of an aircraft shall keep a maintenance record of

A. The entire aircraft to include
   1) Total time in service (hours, calendar time and cycles, as appropriate) of the aircraft and all life limited parts;
   2) Current inspection status of the aircraft, including the time since required or approved inspections were last performed;
   3) Current empty mass and the location of the centre of gravity when empty;
   4) Addition or removal of equipment;
   5) Type and extent of maintenance and alteration, including the time in service and date;
   6) When work was performed; and
   7) A chronological list of compliance with Airworthiness Directives, including methods of compliance.
B. Life limited products
   1) Total time in service;
   2) Date of the last overhaul;
   3) Time in service since the last overhaul; and
   4) Date of the last inspection.
C. Instruments and equipment, the serviceability and operating life of which are determined by their time in service
   1) Records of the time in service as are necessary to determine their serviceability or to compute their operating life; and
   2) Date of last inspection.

8.2.2.8 Maintenance Records Retention

A. Except for records maintained by an AOC holder, each registered owner or operator shall retain the following records until the work is repeated or superseded by other work of equivalent scope and detail, or for one year after the work is performed
   1) Records of the maintenance, preventive maintenance, minor modifications, and records of the 100-hour, annual, and other required or approved inspections, as appropriate, for each aircraft (including the airframe) and each engine, propeller, rotor, and appliance of an aircraft to include
      a) A description (or reference to data acceptable to the Authority) of the work performed,
      b) The date of completion of the work performed; and
      c) The signature and certificate number of the person approving the aircraft for return to service.
   2) Records containing the following information
      a) The total time-in-service of the airframe, each engine, each propeller, and each rotor.
      b) The current status of all life-limited aeronautical products;
      c) The time since last overhaul of all items installed on the aircraft which are required to be overhauled on a specified time basis;
      d) The current inspection status of the aircraft, including the time since the last inspection required by the inspection program under which the aircraft and its appliances are maintained.
      e) The current status of applicable Airworthiness Directives including, for each, the method of

compliance, the Airworthiness Directive number, and revision date. If the Airworthiness Directive involves recurring action, the time and date when the next action is required.

f) Copies of the forms prescribed by this chapter for each major modification to the airframe and currently installed engines, rotors, propellers, and appliances.

B. The records specified in paragraph A of this section shall be retained and transferred with the aircraft at the time the aircraft is sold or leased

C. A list of defects shall be retained until the defects are repaired and the aircraft is approved for return to service.

D. The owner or operator shall make all maintenance records required by this subsection available for inspection by the Authority.

8.2.2.9 Transfer of Maintenance Records

Any owner or operator who sells or leases a aircraft registered in Repulic of Korea shall transfer to the purchaser/lessor, at the time of sale or lease, the records of that aircraft, in plain language form or in coded form at the election of the purchaser/lessor if the coded form provides for the preservation and retrieval of information in a manner acceptable to the Authority.

8.2.3 Flight Crew Requirements

8.2.3.1 Composition of the Flight Crew

A. The number and composition of the flight crew may not be less than that specified in the flight manual or other documents associated with the airworthiness certificate.

B. A Co-Pilot is required for IFR commercial air transport operations, unless the Authority has issued a deviation.

C. The least number of pilots required to operate aeroplane for commercial air transport business is 2 and the AOC holder shall designate one pilot as a PIC among them.

8.2.3.2 Flight Crew Qualifications

A. The PIC shall ensure that the licenses of each flight crew member have been issued or rendered valid by the State of Registry, contain the proper ratings, and that all that the flight crew members have maintained recency of experience.

B. No person may operate a civil aircraft in commercial air transport or aerial work unless that person is qualified for the specific operation and in the specific type of aircraft used.

8.2.3.3 Authorization in lieu of a type rating

A. The Authority may authorize a pilot to operate an aircraft requiring a type rating without a type rating for up to 60 days, provided

1) The Authority has determined that an equivalent level of safety can be achieved through the operating limitations on the authorization;

2) The applicant shows that compliance with this subsection is impracticable for the flight or series of flights;

3) The operations

a) Involve only a ferry flight, training flight, test flight, or practical test for a pilot license or rating;
b) Are within Repulic of Korea, unless, by previous agreement with the Authority, the aircraft is flown to an adjacent contracting State for maintenance;
c) Are not for compensation or hire unless the compensation or hire involves payment for the use of the aircraft for training or taking a practical test; and
d) Involve only the carriage of flight crew members considered essential for the flight.

B. If the purpose of the authorization provided by this paragraph cannot be accomplished within the time limit of the authorization, the Authority may authorize an additional period of up to 60 days.

8.2.3.4 License Required

No person may act as PIC or in any other capacity as a required flight crew member of a civil aircraft of:

1) The Republic of Korea registry, unless he or she carries in their personal possession the appropriate and current licence for that flight crew position for that type of aircraft and a valid medical certificate.
2) Foreign registry, unless he or she carries in their personal possession a valid and current licence for that type of aircraft issued to them by the State in which the aircraft is registered.

8.2.3.5 Rating Required for IFR Operations

No person may act as PIC of a civil aircraft under IFR or in weather conditions less than the minimums prescribed for VFR flight unless

1) In the case of an aeroplane, the pilot holds an instrument rating or an ATP licence with an appropriate aeroplane category, class, and type (if required) rating for the aeroplane being flown;
2) In the case of helicopter, the pilot holds a helicopter instrument rating or an ATP licence for helicopters not limited to VFR operations.

8.2.3.6 Special Authorization Required for Category II/III Operations

A. Except as shown in paragraph B, no person may act as a pilot crew member of a civil aircraft in a Category II/III operation unless
   1) In the case of a PIC, he or she holds a current Category II or III pilot authorization for that type aircraft. The Qualification Standards may be established separately by the Authority for this purpose.
   2) In the case of an Co-Pilot, he or she is authorized by the State of Registry to act as Co-Pilot in that aircraft in Category II/III operations.

B. An authorization is not required for individual pilots of an AOC holder which has operations specifications approving Category II or III operations.

8.2.3.7 Pilot Logbooks

A. AOC holder shall log and keep the aeronautical training and experience used to meet the requirements for a licence or rating, or recency of experience of each pilot..

B. Each PIC shall carry his or her logbook on all general aviation international flights.

C. A student pilot shall carry or keep his or her logbook in easily accessible place, including the proper flight instructor endorsements, on all solo cross-country flights.

8.2.3.8 PIC Currency: Takeoff and Landings

A. No person may act as PIC of an aircraft carrying passengers, nor of an aircraft certified for more than one required pilot flight crew member unless, within the preceding 90 days that pilot has:

1) Made 3 takeoffs and landings as the sole manipulator of the flight controls in an aircraft of the same category and class and if a type rating is required, of the same type.
2) For a tailwheel aeroplane, made the 3 takeoffs and landings in a tailwheel aeroplane with each landing to a full stop.
3) For night operations, made the 3 takeoffs and landings required by paragraph A(1) at night. However, this is not applcable to the captain of Scheduled Air carrier.

B. A pilot who has not met the recency of experience for takeoffs and landings shall satisfactorily complete a requalification curriculum acceptable to the Authority.

C. Requirements of paragraphs A and B may be satisfied in a flight simulator approved by the Authority

8.2.3.9 Pilot Currency: IFR Operations

A. No person may act as PIC under IFR, nor in IMC, unless he or she has, within the past 6 calendar months

1) Logged at least 6 hours of instrument flight time in the category of aircraft or simulator ; and
2) Completed at least 6 instrument approaches.

B. A pilot who has completed an instrument competency check with an authorized representative of the Authority retains currency for IFR operations for 6 calendar months following that check

8.2.3.10 Pilot Currency

A. No person may act as PIC of an aircraft type certified for more than one pilot unless, since the beginning of the past 12 calendar months, he or she has passed a proficiency check in an aircraft requiring more than one pilot with an authorized representative of the Authority.

B. No person may act as PIC of an aircraft type certified for more than one pilot unless, since the beginning of the past 24 calendar months, he or she has passed a proficiency check in the type aircraft to be operated.

C. No person may act as PIC of an aircraft type certified for a single pilot unless, since the beginning of the 24 calendar months, he or she has passed a proficiency check with an authorized representative of the Authority.

D. The person conducting the proficiency checks shall ensure that each check duplicates the manoeuvres of the type rating practical test.

E. No person may act as Co-Pilot of an aircraft type certified for more than one pilot unless, since the beginning of the 12 calendar months, he or she has

1) Become familiar with the aircraft systems, performance, normal and emergency procedures; and
2) Logged 3 takeoff and landings as the sole manipulator of the controls.

8.2.3.11 Pilot Privileges and Limitations

A. pilot may conduct operations only within the general privileges and limitations of each licence as specified in Part 2.

8.2.4 Crew Member Duties and Responsibilities

8.2.4.1 Authority and Responsibility of the PIC

A. The PIC shall be responsible for the operations and safety of the aircraft and for the safety of all persons on board, during flight.

B. The PIC of an aircraft shall have final authority as to the operation of the aircraft while he or she is in command.

C. The PIC of an aircraft shall, whether manipulating the controls or not, be responsible for the operation of the aircraft in accordance with the rules of the air, except that the PIC may depart from these rules in emergency circumstances that render such departure absolutely necessary in the interests of safety.

8.2.4.2 Compliance with Local Regulations

A. The PIC shall comply with the relevant laws, regulations and procedures of the States in which the aircraft is operated.

B. If an emergency situation which endangers the safety of the aircraft or persons necessitates the taking of action which involves a violation of local regulations or procedures, the PIC shall

1) Notify the appropriate local authority without delay;
2) Submit a report of the circumstances, if required by the State in which the incident occurs; and
3) Submit a copy of this report to the State of Registry.

C. Each PIC shall submit reports specified in paragraph B to the Authority within 10 days in the form prescribed.

8.2.4.3 Negligent or Reckless Operations of the Aircraft

No person may operate an aircraft in a negligent or reckless manner so as to endanger life or property of others.

8.2.4.4 Fitness of Flight Crew Members

A. No person may act as PIC or in any other capacity as a required flight crew member when they are aware of any decrease in their medical fitness which might render them unable to safely exercise the privileges of his or her licence.

B. The PIC shall be responsible for ensuring that a flight is not

1) Commenced if any flight crew member is incapacitated from performing duties by any cause such as injury, sickness, fatigue, the effects of alcohol or drugs; or
2) Continued beyond the nearest suitable aerodrome if a flight crew members capacity to perform functions is significantly reduced by impairment of faculties from causes such as fatigue, sickness or lack of oxygen.

8.2.4.5 Use of Narcotics, Drug or Intoxicating Liquor

A. The Authority shall have person who has airman certificate or involved in aviation safety function not act or attempt to function in aviation safety duty and AOC holder also shall not assign any duty for following cases

1) Within 8 hours after the consumption of any alcoholic beverage;
2) While under the influence of alcohol; or
3) While using any drug that affects the persons faculties in any way contrary to safety and duty function (marihuana, morphine, pencyclin, amphetamine, cocaine, and etc.)
4) While having an alcohol concentration of 0.04 or greater.
5) When violating domestic and international law by growing, processing, producing, selling, disposing, carrying, delivering, or importing any narcotic drugs, marihuana, depressant, or stimulant.
6) When refusing to submit to a test to indicate the presence of alcohol in the blood on the request of a Aviation Safety Inspector designated officer of Authority, authorized medical doctor or to release, accept the test result requested by Authority

B. A airman conducting aviation safety function shall, up to 8 hours before or immediately after acting in aviation safety function, on the request of Aviation Safety Inspector, designated officer of Authority, authorized medical doctor etc,. submit to a test to indicate the presence of alcohol or narcotic drugs in the blood.

C. See attachment 8.2.4.5 for specific requirements pertaining to testing for alcohol or narcotics.

8.2.4.6 Crew Member Use of Seat Belts and Shoulder Harnesses

A. Each crew member shall have his or her seat belts fastened during takeoff and landing and all other times when seated at his or her station.

B. Each crew member occupying a station equipped with a shoulder harness shall fasten that harness during takeoff and landing, except that the shoulder harness may be unfastened if the crew member cannot perform the required duties with the shoulder harness fastened.

C. Each occupant of a seat equipped with a combined safety belt and shoulder harness shall have the combined safety belt and shoulder harness properly secured about that occupant during takeoff and landing and be able to properly perform assigned duties.

D. At each unoccupied seat, the safety belt and shoulder harness, if installed, shall be secured so as not to interfere with crew members in the performance of their duties or with the rapid egress of occupants in an emergency.

8.2.4.7 Flight Crew Members at Duty Stations

A. Each required flight crew member shall remain at the assigned duty station during take-off and landing and critical phases of flight.

B. Each flight crew member shall remain at his or her station during all phases of flight unless

1) Absence is necessary for the performance of his or her duties in connection with the operation;
2) Absence is necessary for physiological needs, provided one qualified pilot remains at the controls at all times; or

3) The crew member is taking a rest period and a qualified relief crew member replaces him or her at the duty station.

C. See attachment 8.2.4.7 for specific requirement pertaining to qualified relief crew members.

8.2.4.8 Required Crew Members Equipment

A. Each crew member involved in night operations shall have a flashlight at his or her station.

B. Each pilot crew member shall have at his or her station an aircraft checklist containing at least the pre-takeoff, after takeoff, before landing and emergency procedures.

C. Each pilot crew member shall have at his or her station current and suitable charts to cover the route of the proposed flight and any route along which it is reasonable to expect that the flight may be diverted.

D. Each flight crew member assessed as fit to exercise the privileges of a license subject to the use of suitable correcting lenses, shall have a spare set of the correcting lenses readily available when performing as a required crew member in commercial air transport.

8.2.4.9 Compliance with Checklists

The PIC shall ensure that the flight crew follows the approved checklist procedures when operating the aircraft.

8.2.4.10 Search and Rescue Information

For all international flights, the PIC shall have on board the aeroplane essential information concerning the search and rescue services in the areas over which they intend to operate the aircraft.

8.2.4.11 Production of Aircraft and Flight Documentation

The PIC shall, within a reasonable time of being requested to do so by a person authorized by the Authority, produce to that person the documentation required to be carried on the aircraft.

8.2.4.12 Using the Microphone

All flight crew shall communicate using boom or throat type microphone in the cockpit of the aircraft for commercial air transport during operations at or below transition level/altitude and critical flight phase.

8.2.4.13 Admission of Inspector to the Flight Deck

A. Whenever, in performing the duties of conducting an inspection, an inspector from the Authority presents Inspectors Credential and Aircraft Entry Request form of Attatchment 8 to the PIC, the PIC shall give the inspector free and uninterrupted access to the flight deck of the aircraft.

B. AOC holder shall provide the inspector with observation seat on the flightdeck during inspection duty, Except when it hinders pilot training or check.

C. For any airplane type certificated before December 20,1995, for not more than 30 passengers that does not have an observer seat on the flightdeck, the certificate holder must provide a forward passenger seat with headset or speaker for occupancy by the inspector while conducting

en route inspections.

D. Paragraph a) of this section does not limit the emergency authority of the pilot in command to exclude any person from the flight deck in the interests of safety. Whenever Pilot in Cammand has denied inspector from entrance of flight deck, he or she shall submit a report specifying reasons to the Authority within 7 days form occurance

8.2.4.14 Reporting Mechanical Irregularities

The PIC shall ensure that all mechanical irregularities occurring during flight time are

1) For general aviation operations, entered in the aircraft logbook and disposed of in accordance with the MEL or other approved or prescribed procedure.
2) For commercial air transport operations, entered in the technical log of the aeroplane at the end of that flight time.

8.2.4.15 Reporting of Facility and Navigation Aid Inadequacies

Each crew member shall report, without delay, any inadequacy or irregularity of a facility or navigational aid observed in the course of operations to the person responsible for that facility or navigational aid.

8.2.4.16 Reporting of Hazardous Conditions

The PIC shall report to the appropriate ATC facility, without delay and with enough detail to be pertinent to the safety of other aircraft, any hazardous flight conditions encountered en route, including those associated with meteorological conditions.(e.g Turbulence, Thunderstorm, Volcanic ash, Volcanic eruptions)

8.2.4.17 Reporting of Incidents

A. The PIC shall submit, without delay, an air traffic incident report whenever an aircraft in flight has been endangered by
   1) A near collision with another aircraft or object;
   2) Faulty air traffic procedures or lack of compliance with applicable procedures by ATC or by the flight crew; or
   3) A failure of ATC facilities.

B. In the event a bird constitutes an in-flight hazard or an actual bird strike the PIC shall, without delay
   1) Inform the appropriate ground station whenever a potential bird hazard is observed; and
   2) Submit a written bird strike report after landing.

C. The PIC shall inform the appropriate ATC facility, if the situation permits, when an in-flight emergency occurs involving dangerous goods on board.

D. The PIC shall submit a report to the local authorities and to the Authority, without delay, following an act of unlawful interference with the crew members on board an aircraft.

8.2.4.18 Reporting of serious Incidents

A. The PIC shall submit, without delay, a serious incident report whenever an aircraft in flight has been endangered by

1) Fires and smoke in the passenger compartment, in cargo compartments or engine fires, een thought such fires were extinguished by the use of extinguishing agents.
2) Events requiring the emergency use of oxygen by the flight crew.
3) Near collisions requiring an avoidance manoeuvre to avoid a collision or an unsafe situation or when an avoidance action would have been appropriate.
4) Controlled flight into terrain only marginally avoided.
5) Aborted take-offs on a closed or engaged runway.
6) Take-offs from a closed or engaged runway with marginal separation from obstacle(s)
7) Gross failures to achieve predicted performance during take-off or initial climb.
8) Multiple malfunctions of one or more aircraft systems seriously affecting the operation of the aircraft.
9) Flight crew incapacitation in flight
10) Aircraft structural failures or engine disintegrations not classified as an accident.
11) Fuel quantity requiring the declaration of an emergency by the pilot.
12) Take-off or landing incidents, Incidents such as undershooting, overruning or running off the side of runways.
13) System failures, weather phenomena, operations outside the approved flight envelope or other occurrences which could have caused difficulties controlling the aircraft.
14) Failures of more than one system in a redundancy system mandatory for flight guidance and navigation.

B. In the event a bird constitutes an in-flight hazard or an actual bird strike the PIC shall, without delay
1) Inform the appropriate ground station whenever a potential bird hazard is observed; and
2) Submit a written bird strike report after landing.

C. The PIC shall inform the appropriate ATC facility, if the situation permits, when an in-flight emergency occurs involving dangerous goods on board.
D. The PIC shall submit a report to the local authorities and to the Authority, without delay, following an act of unlawful interference with the crew members on board an aircraft.

8.2.4.19 Accident Notification

A. The PIC shall notify the nearest appropriate authority, by the quickest available means, of any accident prescribed in Aviation Act 50. 5 involving his or her aircraft that results in serious injury or death of any person, or substantial damage to the aircraft or property. Death from disease or Self attack is excluded.
B. The PIC shall submit a report to the Authority of any accident which occurred while he or she was responsible for the flight.

8.2.4.20 Operation of Flight Deck Voice and Flight Data Recorders

A. The PIC shall ensure that whenever an aircraft has flight recorders installed, those recorders are operated continuously from the instant
1) For a flight data recorder, the aircraft begins its takeoff roll until it has completed the landing

roll, and

2) For a flight deck voice recorder, the initiation of the pre-start checklist until the end of the securing aircraft checklist.

B. The PIC may not permit a flight data recorder or flight deck voice recorder to be disabled, switched off or erased during flight, unless necessary to preserve the data for an accident or incident investigation.

C. In event of an accident or incident, the PIC shall act to preserve the recorded data for subsequent investigation.

8.2.4.21 Crew Member Oxygen: Minimum Supply and Use

A. The PIC shall ensure that breathing oxygen and masks are available to crew members in sufficient quantities for all flights at such altitudes where a lack of oxygen might result in impairment of the faculties of crew members.

Note: The requirements for oxygen supply and use are prescribed in 7.2.5.6, Required Instruments and Equipment.

B. The aircraft flying high altitude shall be equipped supplying of oxygen on board not less than following by Aviation Act article 42-2.

1) A flight to be operated at flight altitudes at which the atmospheric pressure in personnel compartments will be less than 700 hPa(10,000ft) shall not be commenced unless sufficient stored breathing oxygen is carried to supply:

a) All crew members and 10 percent of the passenger for any period in excess of 30 minutes that the pressure in compartments occupied by them will be between 700 hPa(10,000ft) and 620 hPa(13,000ft): and

b) The crew and passengers for any period that the atmospheric pressure in compartments occupied by them will be less than 620 hPa(13,000ft).

2) A flight to be operated with a pressurized aeroplane shall not be commenced unless a sufficient quantity of stored breathing oxygen is carried to supply all the crew members and passengers, as is appropriate to the circumstances of the flight being undertaken, in the event of loss of pressurization, for any period that the atmospheric pressure in any compartment occupied by them would be less than 700 hPa(10,000ft)

3) In addition, when an aeroplane is operated at flight altitudes at which the atmospheric pressure is less than 376 hPa(25,000ft), or which, if operated at flight altitudes at which the atmospheric pressure is mor than 376 hPa(25,000ft) and cannot descend safely within four minutes to a flight altitude at which the atmospheric pressure is equal to 620 hPa(13,000ft), there shall be no less than a 10 minutes supply for the occupants of the passenger compartment.

C. One pilot at the controls of a pressurised aircraft in flight shall wear and use an oxygen mask

1) For general aviation operations, at flight levels above 350, if there is no other pilot at their duty station; and

2) For commercial air transport operations, at flight levels above 250, if there is no other pilot

at their duty station.

8.2.4.22 Portable Electronic Devices

No PIC or SCA may permit any person to use, nor may any person use a portable electronic device on board an aircraft that may adversely affect the performance of aircraft systems and equipment unless

1) For IFR operations other than commercial air transport, the PIC allows such a device prior to its use; or
2) For commercial air transport operations, the AOC holder makes a determination of acceptable devices and publishes that information in the Operations Manual for the crew members use; and
3) The PIC informs passengers of the permitted use.

8.2.4.23 Emergency Report of Aviation Safety Inspectors

A. The Aviation Safety Inspector, when he/she discovers any factors contrary to safety (which is harmful to the aviation safety seriously if immediate corrective action is not taken) or airman's violations of Aviation Act or other relevant regulations while conducting the safety inspection based on Paragraph 6 of Article 15 and Paragraph 3 and 4 of Article 153 in the Aviation Act, may take the following actions:
   1) Suspend aircraft operation until the risk factor is removed.
   2) Suspend the airman serving duties.

B. The Aviation Safety Inspector shall inform the Chief of CASA of the actions to be taken in accordance with A above immediately.

8.2.5 Flight Planning and Supervision

8.2.5.1 Submission of a Flight Plan

A. Prior to operating one of the following, a pilot shall file a VFR or IFR flight plan, as applicable, for
   1) Any flight (or portion thereof) to be provided with air traffic control service;
   2) Any IFR flight within advisory airspace;
   3) Any flight within or into designated areas, or along designated routes, when so required by the appropriate ATC authority to facilitate the provision of flight information, alerting and search and rescue services;
   4) Any flight within or into designated areas, or along designated routes, when so required by the appropriate ATC authority to facilitate co-ordination with appropriate military units or with ATC facilities in adjacent states in order to avoid the possible need for interception for the purpose of identification; and
   5) Any flight across international borders.

B. The PIC shall submit a flight plan before departure or during flight, to the appropriate ATC facility, unless arrangements have been made for submission of repetitive flight plans.

C. Unless otherwise prescribed by the appropriate ATC authority, a pilot should submit a flight plan to the appropriate ATC facility

1) At least sixty minutes before departure; or
2) If submitted during flight, at a time which will ensure its receipt by the appropriate ATC facility at least ten minutes before the aircraft is estimated to reach
   a) The intended point of entry into a control area or advisory area; or
   b) The point of crossing an airway or advisory route.

8.2.5.2 Contents of a Flight Plan

Each person filing an IFR or VFR flight plan shall include in it the following information

1) Aircraft identification;
2) Flight rules and type of flight;
3) Number and type(s) of aircraft and wake turbulence category;
4) Equipment;
5) Departure aerodrome and alternate (if required);
6) Estimated off-block time;
7) Cruising speed(s);
8) Cruising level(s);
9) Route to be followed;
10) Destination aerodrome and alternate (if required);
11) Fuel endurance;
12) Total number of persons on board;
13) Emergency and survival equipment; and
14) Other information.

Note: Whatever the purpose for which it is submitted, a flight plan shall contain information, as applicable, on relevant items up to and including alternate aerodrome(s) regarding the whole route or the portion thereof for which the flight plan is submitted.

8.2.5.3 Planned Reclearance

If during flight planning a person determines that there is a possibility, depending on fuel endurance, that a flight may be able to change destinations and still comply with minimum fuel supply planning requirements, that person shall notify the appropriate ATC facility of this possibility when the flight plan is submitted.

8.2.5.4 Changes to a Flight Plan

A. When a change occurs to a flight plan submitted for an IFR flight or a VFR flight operated as a controlled flight, the pilot shall report that change as soon as practicable to the appropriate ATC facility.

B. For VFR flights other than those operated as controlled flight, the PIC shall report significant changes to a flight plan as soon as practicable to the appropriate ATC facility.

Note: Information submitted prior to departure regarding fuel endurance or total number of persons carried on board, if incorrect at time of departure, constitutes a significant change and shall be reported.

8.2.5.5 Closing a Flight Plan

A. The PIC shall make a report of arrival either in person or by radio to the appropriate ATC facility at the earliest possible moment after landing at the destination aerodrome, unless ATC automatically closes a flight plan.

B. When a flight plan has been submitted for a portion of a flight, but not the arrival at destination, the pilot shall close that flight plan en route with the appropriate ATC facility.

C. When no ATC facility exists at the arrival aerodrome, the pilot shall contact the nearest ATC facility to close the flight plan as soon as practicable after landing and by the quickest means available.

D. Pilots shall include the following elements of information in their arrival reports

1) Aircraft identification;
2) Departure aerodrome;
3) Destination aerodrome (only in the case of a diversionary landing);
4) Arrival aerodrome; and
5) Time of arrival.

8.2.5.5 ~ 8.2.5.10 Reserved

8.2.5.11 Aircraft Airworthiness and Safety Precautions

A. The PIC may not operate a civil aircraft in flight until satisfied that

1) The aircraft is airworthy, duly registered and that appropriate certificates are aboard the aircraft;
2) The instruments and equipment installed in the aircraft are appropriate, taking into account the expected flight conditions;
3) Any necessary maintenance has been performed and a maintenance release, if applicable, has been issued in respect to the aeroplane;
4) The mass of the aeroplane and centre of gravity location are such that the flight can be conducted safely, taking tinto account the flight conditions expected; and
5) Any load carried is properly distributed and safely secured.

B. For commercial air transport operations, the PIC shall certify by signing the aircraft technical log that he or she is satisfied that the requirements of paragraph A have been met for a particular flight.

8.2.5.12 Adequacy of Operating Facilities

No person may commence a flight unless it has been determined by every reasonable means available that the ground and/or water areas and facilities available and directly required for such flight and for the safe operation of the aircraft, are adequate, including communication facilities and navigation aids.

8.2.5.13 Weather Reports and Forecasts

A. Before commencing a flight, the PIC shall be familiar with all available meteorological information appropriate to the intended flight.

B. The PIC shall include, during preparation for a flight away from the vicinity of the place of

departure, and for every flight under the instrument flight rules

1) A study of available current weather reports and forecasts; and
2) The planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned, because of weather conditions.

8.2.5.14 Weather Limitations for VFR Flights

No person will commence a flight to be conducted in accordance with VFR unless available current meteorological reports, or a combination of current reports and forecasts, indicate that the meteorological conditions along the route, or that part of the route to be flown under VFR, will, at the appropriate time, allow VFR operations.

8.2.5.15 IFR Destination Aerodromes

For IFR flight planning purposes, no person may commence an IFR flight unless the available information indicates that the weather conditions at the aerodrome of intended landing and, if required, at least one suitable alternate at the estimated time of arrival, will be at or above the

1) Minimum ceiling and visibility values for the standard instrument approach procedure to be used; or
2) Minimum operating altitude, if no instrument approach procedure is to be used, that would allow a VMC decent to the aerodrome.

Note: A partial exception is granted for commercial air transport IFR flight planning, to the effect that the weather at the destination does not have to be at or above the approach minima to release and commence a flight, as long as the designated alternate aerodrome meets the IFR weather selection criteria.

8.2.5.16 IFR Destination Alternate Requirement

A. No person may commence an IFR flight in an aeroplane without at least one destination alternate aerodrome listed in the flight plan unless

1) At least 1,500 feet above the lowest circling MDA, if a circling approach is required and authorized for that airport; or
2) At least 1,500 feet above the lowest published instrument approach minimum or 2,000 feet above the airport elevation, whichever is greater; and
3) The visibility at that airport will be at least 3 miles(4,800m), or 3,200 m more than the lowest applicable visibility minimums, whichever is greater, for the instrument approach procedures to be used at the destination airport; or

B. The ceiling and visibility requirements of paragraph A may be reduced upon approval of the Authority for

1) Helicopters; or
2) Commercial air transport where no suitable destination alternate exists.

8.2.5.17 IFR Alternate Aerodrome Selection Criteria

A. If alternate minimums are published, no PIC may designate an alternate aerodrome in an IFR flight plan unless the current available forecast indicates that the meteorological conditions at that alternate at the ETA will be at or above those published alternate minimums.

B. If alternate minimums are not published, and if there is no prohibition against using the

aerodrome as an IFR planning alternate, each PIC shall ensure that the meteorological conditions at that alternate at the ETA will be at or above

1) For a precision approach procedure, a ceiling of at least 600 feet and visibility of not less than 2 statue miles; or
2) For a non-precision approach procedure, a ceiling of at least 800 feet and visibility of not less than 2 statute miles.

C. Paragraph A and B of this subchapter does not apply if it is authorized by the Authority to apply weather minimums for the captain in command of civil aircraft used for air transportation to according to Operations Specification or Operations Manuals.

8.2.5.18 Off-Shore Alternates for Helicopter Operations

A. No person may designate an offshore alternate landing site when it is possible to carry enough fuel to have an on-shore alternate landing site.

Note: The selection of offshore alternates should be exceptional cases, the details of which have been approved by the Authority, and should not include payload enhancement in IMC.

B. Each person selecting an off-shore alternate landing site shall consider the following:

1) Until the point of no return, using an on-shore alternate. The offshore alternate may be used only after a point of no return.
2) Attaining one engine inoperative performance capability prior to arrival at the alternate.
3) Guaranteeing helideck availability.
4) The weather information at the helideck shall be available from a source approved by the Authority.
5) For IFR operations, an instrument approach procedure shall be prescribed and available.

Note: The landing technique specified in the flight manual following control system failure may preclude the selection of certain helidecks as alternate aerodromes. The mechanical reliability of critical control systems shall be taken into account when determining the suitability and necessity for an offshore alternate.

8.2.5.19 Fuel, Oil and Oxygen Planning and Contingency Factors

A. No person may commence a flight unless he or she takes into account the fuel, oil, and oxygen needed to ensure the safe completion of the flight, including any reserves to be carried for contingencies.

B. Each person computing the required minimum fuel supply shall ensure that additional fuel, oil, and oxygen are carried to provide for the increased consumption that would result from any of the following contingencies

1) Expected winds or other meteorological conditions;
2) Possible variations in ATC routings;
3) Anticipated traffic delays;
4) A complete instrument approach procedure and possible missed approach at destination;
5) Loss of pressurisation en route;
6) Loss of one power-unit en route; and

7) Any other conditions that may delay landing of the aircraft or increase fuel and oil consumption.

C. Each person computing the required minimum fuel supply shall ensure that, for flights of more than 2,000 nm, the minimum fuel supply calculation includes an additional amount of fuel equal to that necessary to fly 10% of the total time for the flight from takeoff to destination.

D. No PIC may commence a flight to an aerodrome where no suitable alternate aerodrome is available because the destination aerodrome is isolated, without enough reserve fuel for two additional hours flight at normal cruise consumption, at 1,500 feet above the aerodrome.

E. The Authority may grant specific approval for commercial air transport operations to isolated aerodromes without regard to consumption requirement of paragraph (d).

Note: If the Authority requires that fuel, in addition to any other requirement herein, is necessary on a particular route or flight operation in the interest of safety, this additional fuel will be included in the minimum fuel supply for that route.

8.2.5.20 Minimum Fuel Supply for VFR Flights

A. No person may commence a flight in an aeroplane under VFR unless, considering the wind and forecast weather conditions, there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed

1) For flights during the day, for at least 30 minutes thereafter; or
2) For flights at night, for at least 45 minutes thereafter; and
3) For international flights, for at least an additional 15% of the total flight time calculated for cruise flight.

B. No person may commence a flight in a helicopter under VFR unless (considering the wind and forecast weather conditions) there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed

1) For 20 minutes thereafter; or
2) For international flights, for at least an additional 10% of the total flight time calculated.
3) Additional fuel which calculated by authority is necessary on a particular route or emergency conditions

8.2.5.21 Minimum Fuel Supply for IFR Flights

A. No person may commence a flight under IFR unless there is enough fuel supply, considering weather reports and forecasts, to

1) Fly to the first point of intended landing;
2) Fly from that aerodrome to the planned alternate aerodrome, if required; and
3) Fly thereafter at normal cruising speed:
   a) In a propeller-driven aeroplane, for 45 minutes.
   b) In a rotorcraft, turbojet or turbofan aeroplane, for 30 minutes in a holding pattern at 450m (10,000ft) above the aerodrome, plus a reserve for contingencies specified by the operator and approved by the Authority.

B. For IFR flights to isolated aerodromes, the 2-hour minimum reserve specified in

8.2.5.22 Aircraft Loading, Mass and Balance

A. No person may operate an aircraft unless all loads carried are properly distributed and safely secured.

B. No person may operate an aircraft unless the calculations for the mass of the aeroplane and centre of gravity location indicate that the flight can be conducted safely, taking into account the flight conditions expected.

Note: When load masters, load planners or other qualified personnel are provided by the AOC holder in a commercial air transport operation, the PIC may delegate these responsibilities, but shall ascertain that proper loading procedures are followed.

C. For commercial air transport operations, no PIC may commence a flight unless the PIC is satisfied that the loading and mass and balance calculations contained in the load manifest are accurate and comply with the aircraft limitations.

8.2.5.23 Maximum Allowable Weights to be Considered on All Load Manifests

The PIC shall ensure that the maximum allowable weight for a flight does not exceed the maximum allowable takeoff weight

1) For the specific runway and conditions existing at the takeoff time; and
2) Considering anticipated fuel and oil consumption that allows compliance with applicable en route performance, landing weight, and landing distance limitations for destination and alternate aerodromes.

8.2.6 Aircraft Operating and Performance Limitations

8.2.6.1 Applicability

This Section prescribes the operating and performance limitations for all civil aircraft.

8.2.6.2 General

No person may operate an aircraft that

1) Exceeds its designed performance limitations for any operation, as established by the State of Registry; or
2) Exceeds operating limitations contained in the aircraft's flight manual, or its equivalent.

8.2.6.3 Aircraft Performance Calculations

A. Each operator shall ensure that the performance data contained in the AFM, RFM, or other authorized source is used to determine compliance with the appropriate requirements of subchapter 8.3.4

B. When applying performance data, each person performing calculations shall account for the aircraft configuration, environmental conditions, and the operation of any system or systems which may have an adverse effect on performance.

8.2.6.4 General Weight and Obstruction Clearance Limitations

A. No person may takeoff an aircraft without ensuring that the maximum allowable weight for a flight does not exceed the maximum allowable takeoff or landing weight, or any applicable en route performance or landing distance limitations considering the가.
   1) Condition of the takeoff and landing areas to be used;
   2) Gradient of runway to be used (landplanes only);
   3) Pressure altitude;
   4) Ambient temperature;
   5) Current and forecast winds; and
   6) Any know conditions (e.g., atmospheric and aircraft configuration) which may adversely affect performance.

B. No person may takeoff an aircraft at a weight that, assuming normal engine operation, cannot safely clear all obstacles during all phases of flight, including all points along the intended en route path or any planned diversions.

8.2.7 Flight Rules

8.2.7.1 Operation of Aircraft on the Ground

A. No person may taxi an aircraft on the movement area of an aerodrome unless the person at the controls
   1) Has been authorized by the owner, the lessee, or a designated agent;
   2) Is fully competent to taxi the aircraft;
   3) Is qualified to use the radio if radio communications are required; and
   4) Has received instruction from a competent person in respect of aerodrome layout, and where appropriate, information on routes, signs, marking, lights, ATC signals and instructions, phraseology and procedures, and is able to conform to the operational standards required for safe aircraft movement at the aerodrome.

B. No person shall cause a helicopter rotor to be turned under power unless there is a qualified pilot at the controls.

8.2.7.2 Takeoff Conditions

Before commencing takeoff, a PIC shall ensure that
   1) According to the available information, the weather at the aerodrome and the condition of the runway intended to be used will allow for a safe takeoff and departure; and
   2) The RVR or visibility in the takeoff direction of the aircraft is equal to or better than the applicable minimum.

8.2.7.3 Flight into Known or Expected Icing

A. No person may takeoff an aircraft or continue to operate an aircraft en route when the icing conditions are expected or encountered, without ensuring that the aircraft is certified for icing operations and has sufficient operational de-icing or anti-icing equipment.

B. No person may takeoff an aircraft when frost, ice or snow is adhering to the wings, control surfaces, propellers, engine inlets or other critical surfaces of the aircraft which might adversely affect the performance or controllability of the aircraft.

C. For commercial air transport operations, no person may takeoff an aircraft when conditions are such that frost, ice or snow may reasonably be expected to adhere to the aircraft, unless the procedures approved for the AOC holder by the Authority are followed to ensure ground de-icing and anti-icing is accomplished.

8.2.7.4 Altimeter Settings

A. Each person operating an aircraft shall maintain the cruising altitude or flight level by reference to an altimeter set

1) Below 14,000 ft MSL to

Note: This requirement does not apply when operating in airspace and on routes aircraft are required to use of 29.92 Hg below 14,000 MSL.

a) The current reported altimeter setting of a station along the route and within 100 nautical miles of the aircraft;
b) The current report altimeter setting of a nearby station, if there is not a station along the route; or
c) In the case of an aircraft not equipped with a radio, the elevation of the departure aerodrome or an appropriate altimeter setting available before departure; or

2) At or above 14,000 feet MSL to 29.92 Hg.

B. See attachment 8.2.7.4 for a table to determine the lowest usable flight level

8.2.7.5 Minimum Safe Altitudes: General

Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:

1) Anywhere. An altitude allowing, if a power unit fails, continuation of flight or an emergency landing without undue hazard to persons or property on the surface.
2) Over congested areas. Over any congested area of a city, town, or settlement, or over any open-air assembly of persons, an altitude of 300m (1,000 feet) above the highest obstacle within a horizontal radius of 600m (2,000 feet) of the aircraft.
3) Over other than congested areas. An altitude of 150m (500 feet) above the surface, except over open water or sparsely populated areas where the aircraft may not be operated closer than 150m (500 feet) to any person, vessel, vehicle, or structure.
4) Helicopters. Pilots of helicopters are not subject to the proximity restrictions provided they are operate in a manner that is not hazardous to persons and property on the surface. The PIC of a helicopter shall comply with any routes or altitudes for the area that are prescribed for helicopters by the Authority.

8.2.7.6 Instrument Approach Operating Minima

No person may operate to or from an aerodrome using operating minima lower than those which may be established for that aerodrome by the State in which it is located, unless that State specifically approves that operation.

8.2.7.7 Category II and III Operations: General Operating Rules

A. No person may operate a civil aircraft in a Category II or III operation unless
   1) The PIC and Co-Pilot of the aircraft hold the appropriate authorizations and ratings
   2) Each flight crew member has adequate knowledge of, and familiarity with, the aircraft and the procedures to be used; and
   3) The instrument panel in front of the pilot who is controlling the aircraft has appropriate instrumentation for the type of flight control guidance system that is being used.

B. Unless otherwise authorized by the Authority, no person may operate a civil aircraft in a Category II or Category III operation unless each ground component required for that operation and the related airborne equipment is installed and operating.

C. When the approach procedure being used provides for and requires the use of a DH, the authorized DH is the highest of the following:
   1) The DH prescribed by the approach procedure.
   2) The DH prescribed for the PIC.
   3) The DH for which the aircraft is equipped.

D. Unless otherwise authorized by the Authority, no pilot operating an aircraft in a Category II or Category III approach that provides and requires use of a DH may continue the approach below the authorized decision height unless the following conditions are met:
   1) The aircraft is in a position from which a descent to a landing on the intended runway can be made at a normal rate of descent using normal manoeuvres, and where that descent rate will allow touchdown to occur within the touchdown zone of the runway of intended landing.
   2) At least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:
      a) The approach light system, except that the pilot may not descend below 100 feet above the touchdown zone elevation using the approach lights as a reference unless the red terminating bars or the red side row bars are also distinctly visible and identifiable.
      b) The threshold.
      c) The threshold markings.
      d) The threshold lights.
      e) The touchdown zone or touchdown zone markings.
      f) The touchdown zone lights.
      g) Unless otherwise authorized by the Authority, each pilot operating an aircraft shall immediately execute an appropriate missed approach whenever, prior to touchdown, the requirements of paragraph (d) of this section are not met.
      h) No person operating an aircraft using a Category III approach without DH may land that aircraft except in accordance with the provisions of the letter of authorization issued by the Authority.
      i) Paragraphs A through (f) of this section do not apply to operations conducted by AOC holders issued a certificate under Part 9. No person may operate a civil aircraft in a Category II or Category III operation conducted by an AOC holder unless the operation is conducted in accordance with that AOC holder's operations specifications.

8.2.7.8 Category II and Category III Manual

A. Except as provided in paragraph (c) of this section, no person may operate a civil aircraft in a Category II or a Category III operation unless
   1) There is available in the aircraft a current and approved Category II or Category III manual, as appropriate, for that aircraft;
   2) The operation is conducted in accordance with the procedures, instructions, and limitations in the appropriate manual; and
   3) The instruments and equipment listed in the manual that are required for a particular Category II or Category III operation have been inspected and maintained in accordance with the maintenance program contained in the manual.
B. Each operator must keep a current copy of each approved manual at its principal base of operations and must make each manual available for inspection upon request by the Authority.
C. Paragraphs A and B do not apply to operations conducted by an AOC holder issued a certificate under Part 9
D. See attachment 8.2.7.8 for specific Category II manual requirements.

8.2.7.9 Authorization for Deviation from Certain Category II Operations

The Authority may authorize deviations from the requirements of 8.2.7.7 and 8.2.7.8 for the operation of small aircraft in Category II operations if the Authority finds that the proposed operation can be safely conducted.

Note: Such authorization does not permit operation of the aircraft carrying persons or property for compensation or hire.

8.2.7.10 Operating Near Other Aircraft

A. No person may operate an aircraft so close to another aircraft as to create a collision hazard.
B. No person may operate an aircraft in formation flight except by arrangement with the PIC of each aircraft in the formation.
C. No person may operate an aircraft, carrying passengers for hire, in formation flight.

8.2.7.11 Right-of-Way Rules: Except Water Operations

A. General.
   1) Each pilot shall maintain vigilance so as to see and avoid other aircraft; and
   2) When a rule of this subsection gives another aircraft the right-of-way, the pilot shall give way to that aircraft and may not pass over, under, or ahead of it unless well clear.
B. In distress. An aircraft in distress has the right-of-way over all other air traffic.
C. Converging.
   1) When aircraft of the same category are converging at approximately the same altitude (except head-on, or nearly so), the aircraft to the other's right has the right-of-way.
   2) If the converging aircraft are of different categories
      a) A balloon has the right-of-way over any other category of aircraft;
      b) A glider has the right-of-way over an airship, aeroplane, or rotorcraft; and
      c)An airship has the right-of-way over an aeroplane or rotorcraft.
D. Towing or refuelling. An aircraft towing or refuelling other aircraft has the right-of- way over

all other engine-driven aircraft, except aircraft in distress.

E. *Approaching head-on*. When aircraft are approaching each other head-on, or nearly so, each pilot of each aircraft shall alter course to the right.

F. *Overtaking*. Each aircraft that is being overtaken has the right-of-way and each pilot of an overtaking aircraft shall alter course to the right to pass well clear.

G. *Landing*. Aircraft, while on final approach to land or while landing, have the right-of-way over other aircraft in flight or operating on the surface.

Note: The PIC may not take advantage of this rule to force an aircraft off the runway surface which has already landed and is attempting to make way for an aircraft on final approach

H. *More than one landing aircraft*. When two or more aircraft are approaching an aerodrome for the purpose of landing, the aircraft at the lower altitude has the right-of-way.

Note: The PIC will not take advantage of this rule to cut in front of another which is on final approach to land or to overtake that aircraft.

8.2.7.12 Right-of-Way Rules: Water Operations

A. *General*. Each person operating an aircraft on the water shall, insofar as possible, keep clear of all vessels and avoid impeding their navigation, and shall give way to any vessel or other aircraft that is given the right-of-way by any rule of this subsection.

B. *Crossing*. When aircraft, or an aircraft and a vessel, are on crossing courses, the aircraft or vessel to the other's right has the right-of-way.

C. *Approaching head-on*. When aircraft, or an aircraft and a vessel, are approaching head-on, or nearly so, each shall alter its course to the right to keep well clear.

D. *Overtaking*. Each aircraft or vessel that is being overtaken has the right-of-way, and the one overtaking shall alter course to keep well clear.

E. *Special circumstances*. When aircraft, or an aircraft and a vessel, approach so as to involve risk of collision, each aircraft or vessel shall proceed with careful regard to existing circumstances, including the limitations of the respective craft.

8.2.7.13 Use of Aircraft Lights

A. If an aircraft has red rotating beacon lights installed, the pilot shall switch those lights on prior to starting engines and display those lights at all times the engines are running.

B. No person may operate an aircraft between the period from sunset to sunrise unless
   1) It has lighted navigation lights; and
   2) If anticollision lights are installed, those lights are lighted.

Note: A pilot is permitted to switch off or reduce the intensity of any flashing lights if they do or are likely to adversely affect the satisfactory performance of duties or to subject an outside observer to harmful dazzle.

C. No person may park or move an aircraft at night in, or in a dangerous proximity to, a movement area of an aerodrome, unless the aircraft
   1) Is clearly illuminated;
   2) Has lighted navigation lights, or
   3) Is in an area that is marked by obstruction lights.
D. No person may anchor an aircraft unless that aircraft
   1) Has lighted anchor lights; or
   2) Is in an area where anchor lights are not required on vessels.

8.2.7.14 Simulated Instrument Flight

A. No person may operate an aircraft in simulated instrument flight unless
   1) That aircraft has fully functioning dual controls;
   2) The other control seat is occupied by a safety pilot who holds at least a private pilot licence with category and class ratings appropriate to the aircraft being flown, and
   3) The safety pilot has adequate vision forward and to each side of the aircraft, or a competent observer in the aircraft adequately supplements the vision of the safety pilot.
B. No person may engage in simulated instrument flight conditions during commercial air transport operations.

8.2.7.15 Dropping, Spraying, Towing

Except under conditions prescribed by the Authority, no pilot may take the following actions
   1) Dropping, dusting or spraying from an aircraft;
   2) Towing of aircraft or other objects; or
   3) Allowing parachute descents.

8.2.7.16 Aerobatic Flight

A. No person may operate an aircraft in aerobatic flight
   1) Over any city, town or settlement;
   2) Over an open air assembly of persons;
   3) Within the lateral boundaries of the surface areas of Class B, C, D or E airspace designated for an aerodrome;
   4) Below an altitude of 1,500 feet above the surface; or
   5) When the flight visibility is less than 3 statute miles.
B. No person may operate an aircraft in manoeuvres exceeding a bank of 60 degrees or pitch of 30 degrees from level flight attitude unless all occupants of the aircraft are wearing parachutes packed by a qualified parachute rigger in the past 12 calendar months.

8.2.7.17 Flight Test Areas

No person may flight-test an aircraft except over open water, or sparsely populated areas having light traffic.

8.2.7.18 Prohibited Areas and Restricted Areas

No person may operate an aircraft in a prohibited area, or in a restricted areas, the particulars of

which have been duly published, except in accordance with the conditions of the restrictions or by permission of the State over whose territory the areas are established.

8.2.7.19 Operations in MNPS or RVSM Airspace

A. No person may operate a civil aircraft of [STATE] registry in the North Atlantic airspace designated as MNPS airspace or in airspace designated as RVSM without a written authorization issued by the Authority.

B. No person may operate an aircraft in MNPS or RVSM airspace, except in accordance with the conditions of the procedures and restrictions required for this airspace.

8.2.7.20 Operations on or in the Vicinity of an Uncontrolled Aerodrome

A. When approaching to land at an aerodrome without an operating control tower, each pilot of
   1) An aeroplane shall make all turns of that aeroplane to the left; or to the right, if appropriately indicated by the authorities having jurisdiction over that aerodrome;
   2) A helicopter shall avoid the flow of aeroplanes.

B. When departing an aerodrome without an operating control tower, each pilot of an aircraft shall comply with any traffic patterns established by the authorities having jurisdiction over that aerodrome.

C. Each pilot of an aircraft shall land and takeoff into the wind unless safety, the runway configurations, or traffic considerations determine that a different direction is preferable.

D. See attachment 8.2.7.41 for the appropriate displays of light signals or visual markings.

8.2.7.21 Aerodrome Traffic Pattern Altitudes: Turbojet, turbofan, or Large Aircraft

A. When arriving at an aerodrome, the PIC of a turbojet, turbofan, or large aircraft shall enter the traffic pattern at least 1,500 feet AGL until further descent is required for landing.

B. When departing, the PIC of a turbojet, turbofan, or large aircraft shall climb to 1,500 AGL as rapidly as practicable.

8.2.7.22 Compliance with Visual and Electronic Glide Slopes

A. The PIC of an aeroplane approaching to land on a runway served by a visual approach slope indicator shall maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.

B. The PIC of a turbojet, turbofan, or large aeroplane approaching to land on a runway served by an ILS shall fly that aeroplane at or above the glide slope from the point of interception to the middle marker.

8.2.7.23 Interception

A. When intercepted by a military or government aircraft, each PIC shall comply with the international standards when interpreting and responding to visual signals as specified in the implementing standards.

B. See attachment 8.2.7.41 for signals applicable to interception.

8.2.7.24 ~ 8.2.7.30 (Reserved)

8.2.7.31 ATC Clearances

A. Each PIC shall obtain an ATC clearance prior to operating a controlled flight, or a portion of a flight as a controlled flight.

B. Each PIC shall request an ATC clearance through the submission of a flight plan to an ATC facility.

C. Whenever an aircraft has requested a clearance involving priority, each PIC shall submit a report explaining the necessity for such priority, if requested by the appropriate ATC facility.

D. No person operating an aircraft on a controlled aerodrome may taxi on the manoeuvring area or any runway without clearance from the aerodrome control tower.

8.2.7.32 Adherence to ATC Clearances

A. When an ATC clearance has been obtained, no PIC may deviate from the clearance, except in an emergency, unless he or she obtains an amended clearance.

Note1: A flight plan may cover only part of a flight, as necessary, to describe that portion of the flight or those manoeuvres which are subject to air traffic control. A clearance may cover only part of a current flight plan, as indicated in a clearance limit or by reference to specific manoeuvres such as taxiing, landing or taking off.

Note2: Paragraph A does not prohibit a pilot from cancelling an IFR clearance when operating in VMC conditions or cancelling a controlled flight clearance when operating in airspace that does not required controlled flight.

B. When operating in airspace requiring controlled flight, no PIC may operate contrary to ATC instructions, except in an emergency.

C. Each PIC who deviates from an ATC clearance or instructions in an emergency, shall notify ATC of that deviation as soon as possible.

8.2.7.33 Communications

Each person operating an aircraft on a controlled flight shall maintain a continuous listening watch on the appropriate radio frequency of, and establish two-way communication as required with, the appropriate ATC facility.

Note1: More specific procedures may be prescribed by the appropriate ATC authority in respect of aircraft forming part of aerodrome traffic at a controlled aerodrome.

Note2: Automatic signalling devices may be used to satisfy the requirement to maintain a continuous listening watch, if authorized by the Authority

8.2.7.34 Route to be Flown

A. Unless otherwise authorized or directed by the appropriate ATC facility, the PIC of a controlled flight shall, in so far as practicable

1) When on an established ATC route, operate along the defined centre line of that route; or

2) When on any other route, operate directly between the navigation facilities and/or points defining that route.

B. The PIC of a controlled flight operating along an ATC route defined by reference to VORs shall change over for primary navigation guidance from the facility behind the aircraft to that ahead of it at, or as close as operationally feasible to, the change-over point, where established.

Note: These requirements do not prohibit manoeuvring the aircraft to pass well clear of other air traffic or the manoeuvring of the aircraft in VFR conditions to clear the intended flight path both before and during climb or descent.

8.2.7.35 Inadvertent Changes

A. PIC shall take the following action in the event that a controlled flight inadvertently deviates from its current flight plan:

1) *Deviation from track.* If the aircraft is off track, the PIC shall adjust the heading of the aircraft to regain track as soon as practicable.
2) *Variation in true airspeed.* Each PIC shall inform the appropriate ATC facility if the average true airspeed at cruising level between reporting points varies from that given in the flight plan or is expected to vary by plus or minus 5 per cent of the true airspeed.
3) *Change in time estimate.* Each PIC shall notify the appropriate ATC facility and give a revised estimated time given as soon as possible if the time estimate for a reporting point, flight information region boundary, or destination aerodrome, whichever comes first, is found to be in excess of three minutes from that notified to ATC, or such other period of time as is prescribed by the appropriate ATC authority or on the basis of air navigation regional agreements.

8.2.7.36 ATC Clearance: Intended Changes

Requests for flight plan changes shall include the following information:

1) *Change of cruising level.* Aircraft identification, requested new cruising level and cruising speed at this level, and revised time estimates, when applicable, at subsequent flight information region boundaries.
2) *Change of route*
   a) *Destination unchanged.* Aircraft identification, flight rules; description of new route of flight including related flight plan data beginning with the position from which requested change of route is to commence; revised time estimates, and any other pertinent information.
   b) *Destination change.* Aircraft identification; flight rules; description of revised route of flight to revised destination aerodrome including related flight plan data, beginning with the position from which requested change of route is to commence; revised time estimates; alternate aerodrome(s); any other pertinent information.

8.2.7.37 Position Reports

A. Each pilot of a controlled flight shall report to the appropriate ATC facility, as soon as possible, the time and level of passing each designated compulsory reporting point, together with any

other required information, unless exempted from this requirement by the appropriate ATC authority.

B. Each pilot of a controlled flight shall make position reports in relation to additional points or intervals when requested by the appropriate ATC facility

8.2.7.38 Operations on or in the Vicinity of a Controlled Aerodrome

A. No person may operate an aircraft to, from, through, or on an aerodrome having an operational control tower unless two-way communications are maintained between that aircraft and the control tower.

B. On arrival, each PIC shall establish communications required by paragraph A prior to 4 nautical miles from the aerodrome when operating from the surface up to and including 2,500 feet.

C. On departure, each PIC shall establish communications with the control tower prior to taxi.

D. Takeoff, landing, taxi clearance. No person may, at any aerodrome with an operating control tower, operate an aircraft on a runway or taxiway or takeoff or land an aircraft, unless an appropriate clearance has been received by ATC.

Note: A clearance to taxi to the takeoff runway is not a clearance to cross or taxi on to that runway. It does authorize the PIC to cross other runways during the taxi to the assigned runway. A clearance to taxi to any other point on the aerodrome is a clearance to cross all runways that intersect the taxi route to the assigned point.

E. Communications failure. If the radio fails or two-way communication is lost, a PIC may continue a VFR flight operation and land if

1) The weather conditions are at or above basic VFR minimums; and
2) Clearance to land is received by light signals.

Note: During IFR operations, the two-way communications failure procedures will apply.

8.2.7.39 Unlawful Interference

A. PIC shall, when and if possible, notify the appropriate ATC facility when an aircraft is being subjected to unlawful interference, including

1) Any significant circumstances associated with the unlawful interference, and
2) Any deviation from the current flight plan necessitated by the circumstances.

8.2.7.40 Time Checks

A. Each PIC shall use Co-ordinated Universal Time (UTC), expressed in hours and minutes of the 24-hour day beginning at midnight, in flight operations.

B. Each PIC shall obtain a time check prior to operating a controlled flight and at such other times during the flight as may be necessary.

8.2.7.41 Universal Signals

A. Upon observing or receiving any of the designated universal aviation signals, each person operating an aircraft shall take such action as may be required by the interpretation of the

signal.

B. Universal signals shall have only the meanings designated.

C. Each person using universal signals in the movement of aircraft shall only use them for the purpose indicated.

D. No person may use signals likely to cause confusion with universal aviation signals.

E. See attachment 8.2.7.41 for a list of universal aviation signals.

8.2.7.42 ~ 8.2.7.50 (Reserved)

8.2.7.51 Visual Meteorological Conditions

No person may operate an aircraft under VFR when the flight visibility is less than, or at a distance from the clouds that is less than that prescribed, or the corresponding altitude and class of airspace in the following table

Airspace and VMC Minimums			
Airspace Class		Flight visibility	Distance from cloud
A		N/A	N/A
B		3SM(5 Km)	Clear of cloud
C		3SM(5 Km)	500ft Below 1000ft Above 2000ft Horizontal
D		3SM(5 Km)	500ft Below 1000ft Above 2000ft Horizontal
E	Below 1o,oooft MSL	3SM(5 Km)	500ft Below 1000ft Above 2000ft Horizontal
	At or Above 1o,oooft MSL	5SM(8 Km)	Below 1000ft Above 1000ft 1SM Horizontal
G	Day time	1SM(1.6 Km)	Clear of cloud and in sight of the surface
	Night time	3SM(5 Km)	500ft Below 1000ft Above 2000ft Horizontal

8.2.7.52 VFR Weather Minimums for Takeoff and Landing

A. No person may enter the traffic pattern, land or takeoff an aircraft under VFR from an aerodrome located in Class C, Class D or Class A, Class C, Class D airspace unless the

1) Reported ceiling is at least 1,000 feet; and

2) Reported ground visibility is at least 3 statute miles, if reported.

B. If the ground visibility is not reported, the pilot shall maintain 3 statute miles flight visibility.

C. Class G Airspace. No person may enter the traffic pattern, land or takeoff an aeroplane under VFR from an aerodrome located in Class G airspace below 1,200 AGL unless

1) For aeroplanes. The visibility is at least 1 statute mile and the aircraft can be operated clear of clouds within one-half mile of the runway; or

2) For helicopters. The helicopter can be operated clear of clouds at a speed that allows the pilot adequate opportunity to see any air traffic or obstruction in time to avoid a collision.

Note: The only exception to the required weather minimums of this subsection is during a Special VFR operation.

8.2.7.53 Unauthorized for VFR Flight

Aviation Act Enforcement rule 201 shall be applied, However, air traffic control may clear out of 1000 ft separation vertically in the airspace not less than 29000 ft.

8.2.7.54 Special VFR Operations

A. No person may conduct a Special VFR flight operation to enter the traffic pattern, land or takeoff an aeroplane under Special VFR from an aerodrome located in Class C, Class D, Class E or Class C, Class D, Class E airspace unless

1) authorized by an ATC clearance;
2) The aircraft remains clear of clouds; and
3) The flight visibility is at least 1 statute mile.
4) Ground surface is visually recognised continuously during flight

B. No person may conduct a Special VFR flight operation in an aeroplane between sunset and sunrise unless the

1) The PIC is current and qualified for IFR operations; and
2) The aircraft is qualified to be operated for IFR flight.

8.2.7.55 VFR Cruising Altitude

Each person operating an aircraft in level cruising flight under VFR at altitudes above 900 m (3,000 ft) from the ground or water, shall maintain:

1) For magnetic courses from zero degrees to 179 degrees, any odd thousand MSL altitude or flight level plus 500 feet (such as 3,500, 5,500 or FL 215).
2) For magnetic courses from 180 degrees to 359 degrees, any even thousand MSL altitude or flight level plus 500 feet (such as 4,500, 6,500 or FL 225).

Note : Paragraph A does not apply when otherwise authorized by ATC, when operating in a holding pattern, or during manoeuvring in turns.

8.2.7.56 ATC Clearance for VFR Flight

Each pilot of a VFR flight shall obtain and comply with ATC clearances and maintain a listening watch before and during operations

1) Within Classes B, C and D airspace;

2) As part of aerodrome traffic at controlled aerodromes; and
3) Under Special VFR.

8.2.7.57 VFR Flights Requiring ATC Authorization

Unless authorized by the appropriate ATC authority, no pilot may operate in VFR flight

1) Above FL 200; or
2) At transonic and supersonic speeds.

8.2.7.58 Weather Deterioration Below VMC

Each pilot of a VFR flight operated as a controlled flight shall, when he or she finds it is not practical or possible to maintain flight in VMC in accordance with the ATC flight plan

1) Request an amended clearance enabling the aircraft to continue in VMC to its destination or to an alternative aerodrome, or to leave the airspace within which an ATC clearance is required;
2) If no clearance can be obtained, continue to operate in VMC and notify the appropriate ATC facility of the action being taken either to leave the airspace concerned or to land at the nearest suitable aerodrome;
3) Operating within a control zone, request authorization to operate as a special VFR flight; or
4) Request clearance to operate in IFR, if currently rated for IFR operations.

8.2.7.59 Changing from VFR to IFR

Each pilot operating in VFR who wishes to change to IFR shall

1) If a flight plan was submitted, communicate the necessary changes to be effected to its current flight plan; or
2) Submit a flight plan to the appropriate ATC facility and obtain a clearance prior to proceeding IFR when in controlled airspace.

8.2.7.60 Two-way Radio Communication Failure in VFR

If radio failure occurs in VFR while under ATC control, or if VFR conditions are encountered after the failure, each pilot shall

1) Continue the flight under VFR;
2) Land at the nearest suitable aerodrome; and
3) Report arrival to ATC by the most expeditious means possible.

8.2.7.61 ~ 8.2.7.70 (Reserved)

8.2.7.71 IFR in Controlled Airspace

No person may operate an aircraft in controlled airspace under IFR unless that person has

1) Filed an IFR flight plan; and
2) Received an appropriate ATC clearance.

8.2.7.72 IFR Flights Outside Controlled Airspace

A. Each PIC of an IFR flight operating outside controlled airspace but within or into areas, or

along routes, designated by the appropriate ATC authority, shall maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the ATC facility providing flight information service.

B. Each PIC of an IFR flight operating outside controlled airspace for which the appropriate ATC authority requires a flight plan, a listening watch on the appropriate radio frequency and establishment of two-way communication, as necessary, with the ATC facility providing flight information service, shall report position as specified for controlled flights.

8.2.7.73 Minimum Altitudes for IFR Operations

A. Operation of aircraft at minimum altitudes. Except when necessary for takeoff or landing, no person may operate an aircraft under IFR below

1) The applicable minimum altitudes prescribed by the authorities having jurisdiction over the airspace being overflown; or
2) If no applicable minimum altitude is prescribed by the authorities
   a) Over high terrain or in mountainous areas, at a level which is at least 600 in (2,000 ft) above the highest obstacle located within 8 km of the estimated position of the aircraft; and
   b) Elsewhere than as specified in paragraph A, at a level which is at least 300 in (I,000 ft) above the highest obstacle located within 8 km of the estimated position of the aircraft.
3) If an MEA and a MOCA are prescribed for a particular route or route segment, a person may operate an aircraft below the MEA down to, but not below, the MOCA, when within 22 nautical miles of the VOR concerned.

B. Climb for obstacle clearance.

1) If unable to communicate with ATC, each pilot shall climb to a higher minimum IFR altitude immediately after passing the point beyond which that minimum altitude applies
2) If ground obstructions intervene, each pilot shall climb to a point beyond which that higher minimum altitude applies, at or above the applicable MCA.

8.2.7.74 Minimum Altitudes for Use of an Autopilot

A. For en route operations, no person may use an autopilot at an altitude above the terrain that is less than 500 feet.

Note: If the maximum altitude loss specified in the AFM for a malfunction under cruise conditions when multiplied by two is more than 500 feet, then it becomes the controlling minimum altitude for use of the autopilot.

B. For instrument approach operations, no person may use an autopilot at an altitude above the terrain that is less than 50 feet below the MDA or DH.

Note: If the maximum altitude loss specified in the AFM for a malfunction under approach conditions when multiplied by two is more than 50 feet, then it becomes the controlling minimum altitude for use of the autopilot.

C. Notwithstanding paragraph A or B of this section, the Authority issues operations specifications

to allow the use, to touchdown, of an approved flight control guidance system with automatic capability, in any case in which --

1) The system does not contain any altitude loss (above zero) specified in the Airplane Flight Manual for malfunction of the autopilot with approach coupler; and
2) He finds that the use of the system to touchdown will not otherwise affect the safety standards required by this section.

D. Notwithstanding paragraph A of this section, the Authority issues operations specifications to allow the use of an approved autopilot system with automatic capability below the altitude specified in paragraph A of this section during the takeoff and initial climb phase of flight provided:

1) The Airplane Flight Manual specifies a minimum altitude engagement certification restriction;
2) The system is not engaged prior to the minimum engagement certification restriction specified in the Airplane Flight Manual or an altitude specified by the Head, whichever is higher; and
3) The Head finds that the use of the system will not otherwise affect the safety standards required by this section.

8.2.7.75 IFR Cruising Altitude or Flight Level in Controlled Airspace

A. Each person operating an aircraft under IFR in level cruising flight in controlled airspace shall maintain the altitude or flight level assigned that aircraft by ATC.

B. If the ATC clearance assigns VFR conditions on-top, each person shall maintain a VFR cruising altitude in VMC.

8.2.7.76 IFR Cruising Altitude or Flight Level in Uncontrolled Airspace

A. Each person operating an aircraft in level cruising flight under IMC at altitudes above 900 m (3,000 ft) from the ground or water, shall maintain

1) For magnetic courses from zero degrees to 179 degrees, any odd thousand MSL altitude or flight level, such as 5,000, 7,000, or FL 210; and
2) For magnetic courses from 180 degrees to 359 degrees, any even thousand MSL altitude or flight level, such as 4,000, 6,000 or FL 220.

B. A person may deviate from the cruising altitudes specified in paragraph A only when

1) authorized by ATC;
2) Operating in a holding pattern; or
3) Manoeuvring in turns.

8.2.7.77 IFR Radio Communications

Each PIC of an aircraft operated under IFR in controlled airspace shall have a continuous watch maintained on the appropriate frequency and shall report by radio as soon as possible

1) The time and altitude of passing each designated reporting point, or the reporting points specified by ATC, except that while the aircraft is under radar control, only the passing of those reporting points specifically requested by ATC need be reported;
2) Any unforecast weather conditions encountered; and
3) Any other information relating to the safety of flight, such as hazardous weather or abnormal radio station indications.

8.2.7.78 Operation Under IFR in Controlled Airspace : Malfunction Reports

A. The PIC of each aircraft operated in controlled airspace under IFR shall report as soon as practical to ATC any malfunctions of navigational, approach, or communication equipment occurring in flight.

B. In each report specified in paragraph A, the PIC shall include the
   1) Aircraft identification;
   2) Equipment affected;
   3) Degree to which the capability of the pilot to operate under IFR in the ATC system is impaired; and
   4) Nature and extent of assistance desired from ATC.

8.2.7.79 Continuation of IFR Flight Toward a Destination

No pilot may continue an IFR flight toward an aerodrome or heliport of intended landing, unless the latest available meteorological information indicates that the conditions at that aerodrome, or at least one destination alternate aerodrome will, at the expected time of arrival, be at or above the specified instrument approach minima.

8.2.7.80 Instrument Approaches to Civil Aerodromes

A. Each person operating an civil aircraft shall use a standard instrument approach procedure prescribed by the authorities having jurisdiction over the aerodrome, unless otherwise authorized by the Authority.

B. authorized DH or MDA. For the purpose of this section, when the approach procedure being used provides for and requires the use of a DH or MDA, the authorized DH or MDA is the highest of the following:
   1) The DH or MDA prescribed by the approach procedure.
   2) The DH or MDA prescribed for the PIC.
   3) The DH or MDA for which the aircraft is equipped.

8.2.7.81 Operation Below DH or MDA

A. Where a DH or MDA is applicable, no pilot may operate a civil aircraft at any aerodrome or heliport below the authorized MDA, or continue an approach below the authorized DH unless
   1) The aircraft is continuously in a position from which a descent to a landing on the intended runway can be made at a normal rate of descent using normal manoeuvres;
   2) For commercial air transport operations, a descent rate will allow touchdown to occur within the touchdown zone of the runway of intended landing;
   3) The flight visibility is not less than the visibility prescribed in the standard instrument approach being used; and
   4) At least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot
      a) The approach light system, except that the pilot may not descend below 100 feet above the touchdown zone elevation using the approach lights as a reference unless the red terminating bars or the red side row bars are also distinctly visible and identifiable.

b) The threshold;
c) The threshold markings;
d) Threshold lights;
e) The runway end identifier lights;
f) The visual approach slope indicator;
g) The touchdown zone or touchdown zone markings;
h) The touchdown zone lights;
i) The runway or runway markings; or
j) The runway lights.

Note: These visual references do not apply to Category II and III operations. The required visual references under Category II and III operations are provided in the AOC holders operations specifications or a special authorization prescribed by the Authority

8.2.7.82 Landing During Instrument Meteorological Conditions

No pilot operating a civil aircraft may land that aircraft when the flight visibility is less than the visibility prescribed in the standard instrument approach procedure being used.

8.2.7.83 Execution of a Missed Approach Procedure

Each pilot operating a civil aircraft shall immediately execute an appropriate missed approach procedure when either of the following conditions exist:

1) Whenever the required visual reference criteria is not met in the following situations:
   a) When the aircraft is being operated below MDA; or
   b) Upon arrival at the missed approach point, including a DH where a DH is specified and its use is required, and at any time after that until touchdown.
2) Whenever an identifiable part of the aerodrome is not distinctly visible to the pilot during a circling manoeuvre at or above MDA, unless the inability to see an identifiable part of the aerodrome results only from a normal bank of the aircraft during the circling approach.

8.2.7.84 Change from IFR Flight to VFR Flight

A. An pilot electing to change from IFR flight to VFR flight shall notify the appropriate ATC facility specifically that the IFR flight is cancelled and then communicate the changes to be made to his or her current flight plan.
B. When a pilot operating under IFR encounters VMC, he or she may not cancel the IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted VMC.

8.2.7.85 Two-Way Radio Communications Failure in IFR

A. If two-way radio communication failure occurs in IFR conditions, or if continued flight in VFR is judged not feasible, each pilot shall continue the flight according to the following:
   1) Route
      a) By the route assigned in the last ATC clearance received;
      b) If being radar vectored, by the direct route from the point of radio failure to the fix,

route, or airway specified in the vector clearance;

c) In the absence of an assigned route, by the route that ATC has advised may be expected in a further clearance; or

d) In the absence of an assigned route or a route that ATC has advised may be expected in a further clearance, by the route filed in the flight plan.

2) Altitude. At the highest of the following altitudes or flight levels for the route segment being flown

a) The altitude or flight level assigned in the last ATC clearance received;

b) The minimum altitude (converted, if appropriate, to minimum flight level for IFR operations); or

c) The altitude or flight level ATC advised may be expected in a further clearance.

3) Leave clearance limit.

a) When the clearance limit is at a fix from which an approach begins, commence descent or descent and approach

① As close as possible to the expect-further-clearance time if one has been received, or

② If one has not been received, as close as possible to the estimated time of arrival as calculated from the filed or amended (with ATC) estimated time en route.

b) If the clearance limit is not a fix from which an approach begins

① Leave the clearance limit at the expect-further-clearance time if one has been received, or if none has been received, upon arrival over the clearance limit,

② Proceed to a fix from which an approach begins, and

c) Commence descent or descent and approach as close as possible to the ETA as calculated from the filed or amended with ATC estimated time en route.

8.2.8 Passengers and Passenger Handling : All Passenger Carrying Operations

8.2.8.1 Unacceptable Conduct

A. No person on board may interfere with a crew member in the perform of his or her duties.

B. Each passenger shall fasten his or her seat belt and keep it fastened while the seat belt sign is lighted.

C. No person on board an aircraft shall recklessly or negligently act or omit to act in such a manner as to endanger the aircraft or persons and property therein.

D. No person may secrete himself or herself nor secrete cargo on board an aircraft.

E. No person may smoke while the no-smoking sign is lighted.

F. No person may smoke in any aeroplane lavatory.

G. No person may tamper with, disable or destroy any smoke detector installed in any aeroplane lavatory.

8.2.8.2 Refuelling with Passengers on Board

A. No PIC may allow an aircraft to be refuelled when passengers are embarking, on board or disembarking unless

1) The aircraft is manned by qualified personnel ready to initiate and direct an evacuation; and

2) Two-way communication is maintained between the qualified personnel in the aircraft and the

ground crew supervising the refuelling.

B. Helicopters. Unless specifically authorized by the Authority, no person will allow a helicopter to be refuelled when

1) Passengers are embarking, on board, or disembarking; or
2) The rotors are turning.

8.2.8.3 Passenger Seats, Safety Belts and Shoulder Harnesses

A. The PIC shall ensure that each person on onboard occupies an approved seat or berth with their own individual safety belt and shoulder harness (if installed) properly secured about them during takeoff and landing.

B. Each passenger shall have his or her seatbelt securely fastened at any other time the PIC determines it is necessary for safety.

C. A safety belt provided for the occupant of a seat may not be used during takeoff and landing by more than one person who has reached his or her second birthday.

Note: When cabin attendants are required in a commercial air transport operation, the PIC may delegate this responsibility, but shall ascertain that the proper briefing has been conducted prior to takeoff.

8.2.8.4 Passenger Briefing

A. The PIC shall ensure that crew members and passengers are made familiar, by means of an oral briefing or by other means, with the location and use of the following items, if appropriate

1) Seat belts;
2) Emergency exits;
3) Life jackets;
4) Oxygen dispensing equipment; and
5) Other emergency equipment provided for individual use, including passenger emergency briefing cards.

B. The PIC shall ensure that all persons on board are aware of the locations and general manner of use of the principal emergency equipment carried for collective use.

Note1 : For commercial air transport operations, the briefing shall contain all subjects approved by the Authority for the specific operations conducted as included in the pertinent Operations Manual.

Note2 : When cabin attendants are required in a commercial air transport operation, the PIC may delegate this responsibility, but shall ascertain that the proper briefing has been conducted prior to takeoff.

8.2.8.5 Inflight Emergency Instruction

In an emergency during flight, the PIC shall ensure that all persons on board are instructed in such emergency action as may be appropriate to the circumstances.

Note: When cabin attendants are required in a commercial air transport operation, the PIC may

delegate this responsibility, but shall ascertain that the proper briefing has been conducted.

8.2.8.6 Passenger Oxygen: Minimum Supply and Use

A. The PIC shall ensure that breathing oxygen and masks are available to passengers in sufficient quantities for all flights at such altitudes where a lack of oxygen might harmfully effect passengers.

B. The PIC shall ensure that the minimum supply of oxygen prescribed by the Authority is on board the aircraft.

Note: The requirements for oxygen storage and dispensing apparatus are prescribed in 7.3.7.8

C. The PIC shall require all passengers to use oxygen continuously at cabin pressure altitudes above 15,000 feet.

8.2.8.7 Alcohol or Drugs

A. No person may permit the boarding or serving of any person who appears to be intoxicated or who demonstrates, by manner or physical indications, that that person is under the influence of drugs (except a medical patient under proper care).

B. No AOC holder may serve any alcoholic beverage to any person aboard any of its aircraft who
   1) Appears to be intoxicated;
   2) Is escorting a person or being escorted; or
   3) Has a deadly or dangerous weapon accessible to him while aboard the aircraft.

C. Each AOC holder shall, within five days after the incident, report to the appropriate the Regional Aviation Authority the refusal of any person, or any disturbance caused by a person who appears to be intoxicated aboard any of its aircraft.

8.2.9 Parachutes and Parachute Jumping

8.2.9.1 Applicability

A. This paragraph prescribes use, maintenance requirements of parachute and regulation related to parachute jumping in Republic of Korea except the parachute jumping for emergency evacuation.

B. paragraph 8.2.9.2, 8.2.9.4, 8.2.9.5, 8.2.9.6, 8.2.9.7, 8.2.9.7, 8.2.9.8, 8.2.9.8, 8.2.9.9, 8.2.9.10, 8.2.9.11, 8.2.9.12, 8.2.9.13, 8.2.9.14 except items B, (c) will described related regulation of parachute jump for the implementing this section.

C. This section does not apply to a parachute jump for the emergency on ground (fire fighting or rescue)

D. Sections 8.2.9.2, 8.2.9.6, 8.2.9.10 - 8.2.9.14 of this part do not apply to a parachute jump made by a member of an Armed Force
   1) Over or within a restricted area controlled by an Armed Force.
   2) Military operation area in uncontrolled airspace.

E. Sections 8.2.9.8 of this part do not apply to a parachute jump conducted by a member of an Armed Force in an airspace extended from the surface and controlled by Armed Force.

8.2.9.2 General

No person may made a parachute jump or no pilot in command of an aircraft may allow a parachute jump to be made from that aircraft, if that parachute jump creates a hazard to air traffic, persons or property on the surface.

8.2.9.3 Parachutes and parachuting

A. No pilot in command of civil aircraft may allow use of parachute in an emergency unless it is approved type and meets the requirements below

1) For chair type (with canopy), the parachute must have been packed by a licensed and appropriately rated person, within 120days before the date of its use; or
2) For other types, the parachute must have been packed by a licensed and properly evaluated person;
   a) Within the preceding 120 days, if its canopy, shrouds and harness are composed exclusively of nylon, rayon or other similar synthetic fiber or materials that are substantially resistant to damage from mold, mildew or other fungi and other rotting agents propagated in a moist environment, or,
   b) Within the preceding 60 days, if any part of the parachute is composed of silk, pongee or other natural fiber, or materials not specified in paragraph A (2) (i) of this section.

B. Except in an emergency, no pilot in command may allow, and no person may make a parachute jump from an aircraft within the Republic of Korea except in accordance with this subchapter.

C. Unless each occupant of the aircraft is wearing an approved parachute, no pilot of a civil aircraft carrying any person (other than a crewmember) may execute any intentional maneuver that exceeds:

1) A bank of 60 degrees relative to the horizon, or,
2) A nose up or nose down attitude of 30 degrees relative to the horizon.

D. Paragraph (c) of this section does not apply to:

1) Flight tests for pilots for pilot licensing or rating, or,
2) Spins and other flight maneuvers required by the regulations for any license or rating when given by-
   a) A licensed flight instructor, or,
   b) An airline transport pilot instructing in accordance with Part 3 and 9.

8.2.9.4 Radio equipment and use requirements

A. Except when otherwise authorized by ATC:

1) No person may make a parachute jump, and no pilot in command of an aircraft may allow a parachute jump to be made from that aircraft, in or into controlled airspace unless, during that flight
   a) The aircraft is equipped with a functioning two-way radio communications system appropriate to the ATC facilities to be used;
   b) Radio communications have been established between the aircraft and the nearest air traffic control facility at least 5 minutes before the jumping activity is to begin, for the purpose of receiving information in the aircraft about known air traffic in the vicinity of the

jumping activity; and

c) The information described in paragraph A (1) (ii) of this section has been received by the pilot in command and the jumpers in that flight; and

2) The pilot in command of an aircraft used for any jumping activity in or into controlled airspace shall, during each flight

a) Maintain or have maintained a continuous watch on the appropriate frequency of the aircraft radio communications system from the time radio communications are first established between the aircraft and ATC, until the pilot advises ATC that the jumping activity is ended from that flight, and

b) Advise ATC that the jumping activity is ended for that flight when the last parachute jumper from the aircraft reaches the ground.

B. If, during any flight, the required radio communications system is or becomes inoperative, any jumping activity from the aircraft the aircraft in or into controlled airspace shall be abandoned. However, if the communications system becomes inoperative in flight after receipt of a required ATC authorization, the jumping activity from that flight may be continued.

8.2.9.5 Jumps over or into Congested Areas or Open-air Assembly of Persons

A. No person may made a parachute jump, and no pilot in command of an aircraft may allow a parachute jump to be made from that aircraft, over or into a congested area of a city, town, or settlement, or an open-air assembly of persons unless a certificate of authorization for that jump has been issued under this section. However a parachutist may drift over that congested area or open-air assembly with a fully deployed and properly functioning parachute if the parachutist is at a sufficient altitude to avoid creating a hazard to persons and property on the ground.

B. An application for a certificate of authorization issued under this section is made in a form and in a manner prescribed by the Authority and must be submitted to the Chief of provincial authority at least 4 days before the day of that jump.

C. Each holder of a certificate of authorization issued under this section shall present that certificate for inspection upon the request of the Authority or chief of provincial authority.

8.2.9.6 Jumps over or onto airports

A. Unless airport management has given prior approval, no person may made a parachute jump, and no pilot in command of an aircraft may allow a parachute jump to be made from that aircraft;

1) Over an airport that does not have a functioning control tower operated by the Authority; or

2) Onto any airport.

B. However, a parachutist may drift over that airport with fully deployed and properly functioning parachute if the parachutist is at least 600 meters/2,000 feet above that airport's traffic pattern, and avoids creating a hazard to air traffic or to persons and property on the ground.

8.2.9.7 Parachute Jumps in or into Class A, B, C, and D airspace

A. No person may make a parachute jump, and no pilot in command of an aircraft may allow a parachute jump to be made from that aircraft within or into a Class A, B, C, D airspace without, or in violation of the terms of an air traffic control authorization issued under this

section.

B. Each request for an authorization under this section must be submitted to the nearest air traffic control facility and must include the information prescribed by 8.2.9.9 of this part.

8.2.9.8 Jumps in or into Other Airspace

A. No person may make a parachute jump or no pilot in command of an aircraft may allow to parachute jump form that aircraft in or into airspace unless the nearest air traffic control facility was notified of that jump at least 1hour before the jump is to be made, but not more than 24 hours before the jumping is to be completed, and the notice contained the information prescribed in 8.2.9.9 A.

B. Notwithstanding paragraph A this section, air traffic control facilities may accept from a parachute jumping organization a written notification of a scheduled series of parachute jumps to be made over a stated period of time not longer than 12 calendar months. The notification must contain the information prescribed in 8.2.9.9 A of this part, identify the responsible persons associated with that jumping activity, and be submitted at least 15 days, but not more than 30 days, before the jumping is to begin. The ATC may revoke the acceptance of the notification for any failure of the jumping organization to comply with its requirements.

C. This section does not apply to a parachute jumps in or into any airspace or place described in 8.2.9.5 or 8.2.9.7

8.2.9.9 Information Required, and Notice of Cancellation or Postponement of Jump

A. Each person requesting an authorization under §§ 105.21B and 105.25A(2) of this part and each person submitting a notice under § 105.25A(3) of this part must include the following information (on an individual or group basis) in that request:

1) The date and time jumping will begin will begin.
2) The size of the jump zone expressed in nautical-mile radius around the target
3) The location of the center of the drop zone in relation to --
   a) The nearest VOR facility in terms of the VOR radial on which it is located and its distance in nautical miles from the VOR facility when that facility is 30 nautical miles or less from the drop zone target; or
   b) the nearest airport, town, or city depicted on the appropriate Coast and Geodetic Survey World Aeronautical Chart or Sectional Aeronautical Chart, when the nearest VOR facility is more than 30 nautical miles from the drop zone target.
4) Altitude above mean sea level at which jumping will take place
5) The duration of the intended jump.
6) The name, address, and telephone number of the person requesting the authorization or giving notice.
7) The registration number of the aircraft to be used.
8) The radio frequency, if any, available in the aircraft.

B. Each person requesting an authorization under 8.2.9.7 of this part and each person submitting a notice under 8.2.9.8 of this part must promptly notify the air traffic control facility having

jurisdiction over the affected airspace if the proposed or scheduled jumping activity is canceled or postponed.

8.2.9.10 Jumps over within Restricted or Prohibited Areas

No person may make a parachute jump or no pilot in command may allow a parachute jump to be made from that aircraft over or within the restricted or prohibited area unless the controlling agency of the area concerned has authorized that jump.

8.2.9.11 Flight Visibility and Clearance from Clouds Requirements

No person may make a parachute jump, and no pilot in command of an aircraft may allow a parachute jump to be conducted from that aircraft --

A. Into or through a cloud, or

B. When the flight visibility or the distance from any cloud is less than that prescribed in the following table:

Altitude	Flight visibility Altitude (statute miles)	Distance from clouds
350m/1,200 feet or less above the surface regardless of the MSL altitude.	5Km/3SM	150m/500ft, below 300m/1,000ft above 600m/2,000ft horizontal
More than 350m/1,200 feet above the surface but less than 3,000m/10,000ft MSL.	5Km/3SM	150m/500ft, below 300m/1,000ft above 600m/2,000ft horizontal
More than 350m/1,200 feet above the surface and at or above 3,000m/10,000ft MSL.	5Km/5SM	300m/1,000ft below 300m/1,000ft above 2Km/1 Mile horizontal

8.2.9.12 Parachute Jumps between Sunset and Sunrise

A. No person may make a parachute jump, and no pilot in command of an aircraft may allow a person to make a parachute jump from that aircraft between sunset and sunrise, unless that person is equipped with a means of producing a light visible for at least 3 statute miles.

B. Each person making a parachute jump between sunset and sunrise shall display the light required by paragraph A this section from the time that person exits the aircraft until that person reaches the surface.

8.2.9.13 Alcohol and Drugs

No person may make a parachute jump, and no pilot in command of an aircraft may allow a person to make a parachute jump from that aircraft, if that person is or appears to be

A. under the influence of intoxicating Alcohol, or

B. Using any drug that affects that person's faculties in any way contrary to safety.

8.2.9.14 Inspections

The Authority may inspect any parachute jump operation to which this part applies (including inspections at the jump site) to determine compliance with the regulations of this part.

8.2.9.15 Applicability of Parachute Equipment

Except 8.2.9.16 B, this subchapter prescribed rules governing parachute equipment used in civil parachute jump operations.

8.2.9.16 Parachute Equipment and Packing Requirements

A. This section does not apply to a parachute jump made by a member of an Armed Force using parachute equipment of an Armed Force.

B. No person may make a parachute jump and no pilot in command of an aircraft may allow any person to make a parachute jump form that aircraft, unless that person is wearing a single harness, dual parachute pack or a dual-harness dual-parachute pack having at least one main parachute and one approved auxiliary parachute that are packed as follows;

1) The main parachute must have been packed by a licensed parachute rigger, or by a person making the jump, within 120days before the date of its use.
2) the auxiliary must have been packed by a licensed and appropriately rated parachute rigger.
   a) Within 120 days before the date of use, if its canopy, shroud and harness are composed exclusively of nylon, rayon or other similar synthetic fiber or material that is substantially resistant to damage from mold, mildew or other fungi and other rotting agents propagated in a moist environment; or
   b) With in 60 days before the date of use, if it is composed in any amount of silk, pongee or other natural fiber, or material not specified in paragraph A (2) (i) of this section.

C. No person may make a parachute jump using static line attached to the aircraft and the main parachute unless an assist device, described and attached as follows, is used to aid the pilot chute in performing its function, or if no pilot chute is used to aid in the direct deployment of the main parachute canopy.

1) the assist device must be long enough to allow the container to open before a load is placed on the device.
2) The assist device must have static load strength of ;
   a) At least 12.72kilograms/28pounds but no more than 72.7 kilograms/160 pounds, if it is used to aid the pilot chute in performing it function; or
   b) At least 25.5kilograms/56pounds but no more than 145.5 kilograms/320 pounds, if it is used to aid in the direct deployment of the main parachute canopy.
3) If the parachute is of the dual-harness, dual-parachute pack type, the dual parachute harness, hardware, main canopy, deployment slider, suspension and steering lines shall be inspected each 25 jumps.
4) the assist device must be attached

a) At one end, to the static line above the static line pin or if static pins are not used, above the static-line ties to the parachute cone; and
b) At the other end, to the parachute apex, bridle cord or bridle loop, or if no pilot chute is used, to the main parachute canopy.

C. No person may attach an assist device required by paragraph B of this section to any main parachute unless that person has a current parachute rigger license issued under part 2 or is the person who makes the jump with that parachute.

8.3 OPERATIONS REQUIREMENTS: COMMERCIAL AIR TRANSPORT

8.3.1 Flight Crew Requirements

8.3.1.1 Airman: Limitations on Use of Services for Commercial Air Transport

A. No person may serve as an airman in commercial air transport unless he or she is not qualified for the operations for which they are to be used

B. No AOC holder use an airman in commercial air transport unless that person is otherwise qualified for the operations for which they are to be used.

Note: The qualifications for airman engaged in commercial air transport are provided in subchapter

8.3.1.2 Second in Command Currency : Takeoff and Landings

An operator shall not assign a co-pilot to operate at the flight controls during take-off and landing unless, on the same type of aeroplane within the preceding 90 days, that co-pilot has operated the flight controls, as pilot-in-command or as co-pilot, during three take-offs and landings or has otherwise demonstrated competence to act as co-pilot on a flight simulator approved for the purpose.

Note: The foregoing take-off and landing implies it does not include all steps of flight control for completed take off and landing in each phases of flight

8.3.2 Crew Member Duties and Responsibilities

8.3.2.1 Locking of Flight Deck Compartment Door : Commercial Air Transport

The PIC shall ensure that the flight deck compartment door (if installed) is locked at all times during passenger-carrying commercial air transport operations, except as necessary to accomplish approved operations or to provide for emergency evacuation

8.3.2.2 Admission to the Flight Deck : Commercial Air Transport

A. No person may admit any person to the flight deck of an aircraft engaged in commercial air transport operations unless the person being admitted is
1) An operating crew member;
2) A representative of the authority responsible for certification, licensing or inspection, if this is required for the performance of his or her official duties; or

3) Permitted by and carried out in accordance with instructions contained in the Operations Manual.

B. The PIC shall ensure that

1) In the interest of safety, admission on the flight deck does not cause distraction and/or interference with the flights operations; and

2) All persons carried on the flight deck are made familiar with the relevant safety procedures.

8.3.2.3 Duties During Critical Phases of Flight : Commercial Air Transport

A. No flight crew member may perform any duties during a critical phase of flight except those required for the safe operation of the aircraft. Those duties has no relations with safety, which include ordering cabin food, checking interline flight for passengers, broadcasting airline commercials, guidance to interesting landscape, and documentation for payroll or related papers

B. No PIC may permit a flight crew member to engage in any activity during a critical phase of flight which could distract or interfere with the performance of their assigned duties. Those activities include cooking, unnecessary conversation within flight deck or between flight deck and cabin, reading publication not related with flight.

8.3.2.4 Manipulation of the Control : Commercial Air Transport

A. No PIC may allow an unqualified person to manipulate the controls of an aircraft during commercial air transport operations.

B. No person may manipulate the controls of an aircraft during commercial air transport operations unless he or she is qualified to perform the applicable crew member functions and is authorized by the AOC holder.

8.3.2.5 Simulated Abnormal Situations in Flight : Commercial Air Transport

No person may cause or engage in simulated abnormal or emergency situations or the simulation of IMC by artificial means during commercial air transport operations.

8.3.2.6 Completion of the Technical Logbook : Commercial Air Transport

The PIC shall ensure that all portions of the technical logbook are completed at the appropriate points before, during and after flight operations.

8.3.3 Flight Planning and Supervision

8.3.3.1 Air Traffic Control Flight Plan : Commercial Air Transport

No person may takeoff an aircraft in commercial air transport if an ATC flight plan has not been filed, except as authorized by the Authority.

8.3.3.2 ~ 8.3.3.10 Reserved

8.3.3.11 Takeoff Alternate Aerodromes: Commercial Air Transport Operations

A. No person may release or takeoff an aircraft without a suitable takeoff alternate specified in the

flight release if it would not be possible to return to the aerodrome of departure.

B. Each operator shall ensure that each takeoff alternate specified shall be located within
   1) For two-engine aircraft, one hour flight time at single-engine cruise speed unless the aircraft and crews are authorized for ETOPS; or
   2) For three or four-engine aircraft, two hours flight time at single-engine cruise speed.

Note: All calculations are based on the one-engine-inoperative cruising speed according to the AFM in still air conditions based on the actual takeoff mass.

8.3.3.12 Maximum Distance from an Adequate Aerodrome for Two-engined Aeroplanes Without an ETOPS Approval

A. Unless specifically approved by the Authority (ETOPS Approval), an AOC holder shall not operate a two-engined aeroplane over a route which contains a point further from an adequate aerodrome than, in the case of
   1) Large, turbine engine powered aeroplanes the distance flown in 60 minutes at the one-engine-inoperative cruise speed determined in accordance with paragraph B with either:
      a) A maximum approved passenger seating configuration *of 20 or* more; or
      b) A maximum take-off mass of 45,360kg or more,
   2) Reciprocating engine powered aeroplanes:
      a) The distance flown in 120 minutes at the one-engine-inoperative cruise speed determined in accordance with paragraph B; or
      b) 300 nautical miles, whichever is less.

B. An AOC holder shall determine a speed for the calculation of the maximum distance to an adequate aerodrome for each two-engined aeroplane type or variant operated, not exceeding Vmo based upon the true airspeed that the aeroplane can maintain with one-engine-inoperative under the following conditions:
   1) International Standard Atmosphere;
   2) Level flight:
      a) For turbine engined powered aeroplanes at:
         ① FL 170; or
         ② At the maximum flight level to which the aeroplane, with one engine inoperative, can climb, and maintain, using the gross rate of climb specified in the AFM, whichever is less.
      b) For propeller driven aeroplanes
         ① FL 80; or
         ② At the maximum flight level to which the aeroplane, with one engine inoperative, can climb, and maintain, using the gross rate of climb specified in the AFM, whichever is less.
   3) Maximum continuous thrust or power on the remaining operating engine;
   4) An aeroplane mass not less than that resulting from:
      a) Take-off at sea-level at maximum take-off mass until the time elapsed since take-off is equal to the applicable threshold prescribed in paragraph A;
      b) All engines climb to the optimum long range cruise altitude until the time elapsed since take-off is equal to the applicable threshold prescribed in subparagraph A; and

c) All engines cruise at the long range cruise speed at this altitude until the time elapsed since take-off is equal to the applicable threshold prescribed in paragraph A.

C. An AOC holder shall ensure that the following data, specific to each type or variant, is included in the Operations Manual:

1) The one-engine-inoperative cruise speed determined in accordance with paragraph B; and
2) The maximum distance from an adequate aerodrome determined in accordance with paragraphs A and B.

Note: The speeds and altitudes (flight levels) specified above are only intended to be used for establishing the maximum distance from an adequate aerodrome.

8.3.3.13 Extended Range Operations with Two-Engined Aeroplanes

A. An AOC holder shall not conduct operations beyond the threshold distance determined in accordance with 8.3.3.12 unless approved to do so by the Authority.

B. Prior to conducting an ETOPS flight, an AOC holder shall ensure that a suitable ETOPS enroute alternate is available, within either the approved diversion time or a diversion time based on MEL generated serviceability status of the aeroplane, whichever is shorter.

8.3.3.14 En Route Alternate Aerodromes: ETOPS Operations

A. The PIC shall ensure that the required en route alternates for ETOPS are selected and specified in ATC flight plans in accordance with the ETOPS diversion time approved by the Authority.

B. No person shall select an aerodrome as an ETOPS en-route Adequate alternate aerodrome unless the appropriate weather reports or forecasts, or any combination thereof, indicate that during a period commencing 1 hour before and ending 1 hour after the expected time of arrival at the aerodrome, the weather conditions will be at or above the planning minima prescribed in the table below, or ETOPS weather minima approved for the AOC holder.

Note: The forecast weather criteria used in the selection of alternate aerodromes for IFR flight will also be used for the selection of ETOPS alternates.

Type of Approach	Planning Minima	
(RVR/visibility required & ceiling, if applicable)		
	Aerodome with	
	at least 2 separate approach procedures based on 2 separate aids serving 2 separate runways (See note 1)	at least 2 separate approach procedures based on 2 separate aids serving 1 runway or, at least 1 approach procedure based on 1 aid serving 1 runway
Precision Approach Cat II, III (ILS, MLS)	Precision Approach Cat I Minima	Non-Precision Approach Minima
Precision Approach Cat 1(ILS, MLS)	Non-Precision Approach Minima	Circling minima or, if not available, non-precision approach minima plus 200 ft/1000m
Non-Precision Approach	The lower of non-precision approach minima plus 200 ft/1000 m or circling minima	The higher of non-precision approach minima plus 200 ft/1000 m or circling minima
Circling Approach	Circling Minima	

Note 1: Runways on the same aerodrome are considered to be separate runways when they are separate landing surfaces which may overlay or cross such that if one of the runways is blocked, it will not prevent the planned type of operations on the other runway and each of the landing surfaces has a separate approach based on a separate aid.

8.3.3.15 Flight Planning Document Distribution and Retention: Commercial Air Transport

A. For commercial air transport operations, the PIC shall complete and sign the following flight preparation documents prior to departure:

1) An operational flight plan, including NOTAMs and weather pertinent to the flight planning decisions regarding minimum fuel supply, en route performance, and destination and alternate aerodromes.
2) A load manifest, showing the distribution of the load, centre of gravity, takeoff and landing weights and compliance with maximum operating weight limitations, and performance analysis.
3) An applicable technical log page, if mechanical irregularities were entered after a previous flight, maintenance or inspection functions were performed or a maintenance release was issued at the departure aerodrome.

B. No person may takeoff an aircraft in commercial air transport unless all flight release documents, signed by the PIC, are retained and available at the point of departure.

C. The PIC shall carry a copy of the documents specified in paragraph A on the aircraft to the destination aerodrome.

Note 1 : These documents are in addition to those specified in subchapter 8.2 for all aircraft operations

Note 2 : The Authority may approve a different retention location where all documents can be available for subsequent review.

8.3.3.16 Flight Release Required: Commercial Air Transport

A. No person may start a flight under a flight following system without specific authority from the person authorized by the AOC holder to exercise operational control over the flight.

B. No person may commence a passenger-carrying flight in commercial air transport for which there is a published schedule, unless a qualified person authorized by the AOC holder to perform operational control functions has issued a flight release for that specific operation or series of operations.

8.3.3.17 Operational Flight Plan: Commercial Air Transport

A. No person may commence a flight unless the operational flight plan has been signed by the PIC.

B. A PIC may sign the operational flight plan only when the PIC and the person authorized by the operator to exercise operational control have determined that the flight can be safely completed.

Note: The operational flight plan shall include the routing and fuel calculations, with respect to the meteorological and other factors expected, to complete the flight to the destination and all required alternates.

C. The PIC signing the operational flight plan shall have access to the applicable flight planning information for fuel supply, alternate aerodromes, weather reports and forecasts and NOTAMs for the routing and aerodrome.

D. No person may continue a flight from an intermediate aerodrome without a new operational flight plan if the aircraft has been on the ground more than 6 hours.

8.3.4 Aircraft Operating and Performance Limitations: Commercial Air Transport

8.3.4.1 Applicability

This Section prescribes aircraft performance and operating limitations for aircraft used in commercial air transport operations, except those aircraft holding a special authority or waiver by the Authority which exempt them from specific operating and performance limitations.

8.3.4.2. General

A Each person operating an aircraft engaged in commercial air transport shall comply with the provisions of this Section

B The Authority may authorize deviations from the requirements of this Section if special circumstances make a literal observance of a requirement unnecessary for safety

C. Where full compliance with the requirements of this Section cannot be shown due to specific design characteristics (e.g., seaplanes, airships, or supersonic aircraft), the operator shall apply

approved performance standards that ensure a level of safety not less restrictive than those of relevant requirements of this Section.

D. No person may operate a single-engine aircraft used for revenue passenger carrying operations unless that aircraft is continually operated in daylight, VFR, excluding over the top.

E. No person may operate a multiengine aircraft used for revenue passengers carrying operations that is unable to comply with any of the performance limitations of subsections 8.3.4.4 through 8.3.4.8 unless that aircraft is continually operated

1) In daylight;
2) In VFR, excluding over the top operations; and
3) At a weight that will allow it to climb, with the critical engine inoperative, at least 50 feet a minute when operating at the MEAs of the intended route or any planned diversion, or at 5,000 feet MSL, whichever is higher.

F. Multiengine aircraft that are unable to comply with paragraph (e)(3) are, for the purpose of this Section, considered to be a single engine aircraft and shall comply with the requirements of paragraph (d).

8.3.4.3 Aircraft Performance Calculations

A. No person may takeoff an aircraft used in commercial air transport without ensuring that the applicable operating and performance limitations required for this Section can be accurately computed based on the AFM, RFM, or other data source approved by the Authority.

B. Each person calculating performance and operating limitations for aircraft used in commercial air transport shall ensure that performance data used to determine compliance with this Section can, during any phase of flight, accurately account for

a) Any reasonably expected adverse operating conditions that may affect aircraft performance;
f) One engine failure for aircraft having two engines, if applicable; and
g) Two engine failure for aircraft having three or more engines, if applicable.

C. When calculating the performance and limitation requirements of subsections 8.3.4.3 through 8.3.4.8, each person performing the calculation shall, for all engines operating and for inoperative engines, accurately account for

1) In all phases of flight
   a) The effect of fuel and oil consumption on aircraft weight;
   b) The effect of fuel consumption on fuel reserves resulting from changes in flight paths, winds, and aircraft configuration;
   c) The effect of fuel jettisoning on aircraft weight and fuel reserves, if applicable and approved;
   d) The effect of any ice protection system, if applicable and weather conditions require its use;
   e) Ambient temperatures and winds along intended route and any planned diversion;
   f) Flight paths and minimum altitudes required to remain clear of obstacles.
2) During takeoff and landing
   a) The condition of the takeoff runway or area to be used, including any contaminates (e.g., water, slush, snow, ice);
   b) The gradient of runway to be used;
   c) The runway length including clearways and stopways, if applicable;

d) Pressure altitudes at takeoff and landing sites;
e) Current ambient temperatures and winds at takeoff;
f) Forecast ambient temperatures and winds at each destination and planned alternate landing site;
g) The ground handling characteristics (e.g., braking action) of the type of aircraft; and
h) Landing aids and terrain that may affect the takeoff path, landing path, and landing roll.

Note 1 : Where conditions are different from those on which the performance is based, compliance may be determined by interpolation or by computing the effects of changes in the specific variables, if the results of the interpolation or computations are substantially as accurate as the results of direct tests.

Note 2 : To allow for wind effect, takeoff data based on still air may be corrected by taking into account not more than 50 percent of any reported headwind component and not less than 150 percent of any reported tailwind component, and landing data based on.

8.3.4.4 Takeoff limitations

A. Aeroplanes. No person may takeoff an aeroplane used in commercial air transport unless the following requirements are met when determining the maximum permitted take-off mass:

1) The takeoff run shall not be greater than the length of the runway.
2) For turbine engine powered aeroplanes
   a) The takeoff distance shall not exceed the length of the runway plus the length of any clearway, except that the length of any clearway included in the calculation shall not be greater than 1/2 the length of the runway; and
   b) The accelerate-stop distance shall not exceed the length of the runway, plus the length of any stopway, at any time during takeoff until reaching V1.
3) For reciprocating engine powered aeroplanes
   a) The accelerate-stop distance shall not exceed the length of the runway at any time during takeoff until reaching V1.
4) If the critical engine fails at any time after the aeroplane reaches V1, to continue the takeoff flight path and clear all obstacles either
   a) By a height of at least 9.1 m (35 ft) vertically for turbine engine powered aeroplanes or 15.2 m (50 ft) for reciprocating engine powered aeroplanes; and
   b) By at least 60 m (200 ft) horizontally within the aerodrome boundaries and by at least 90 meters (300 feet) horizontally after passing the boundaries, without banking more than 15 degrees at any point on the takeoff flight path.

B. Helicopters. No person may takeoff a helicopter used in commercial air transport that, in the event of a critical engine failure, cannot

1) For Class 1 helicopters
   a) At or before the takeoff decision point, discontinue the takeoff and stop within the rejected takeoff area; or
   b) After the takeoff decision point, continue the takeoff and then climb, clearing all obstacles along the flight path, until a suitable landing site is found.
2) For Class 2 helicopters

a) Before reaching a defined point after take-off, safely execute a forced landing within the rejected takeoff area, or
b) At any point after reaching a defined point after take-off, continue the takeoff and then climb, clearing all obstacles along the flight path, until a suitable landing site is found.

8.3.4.5 En Route Limitations: All Engines Operating

No person may take off a reciprocating engine powered aeroplane used in commercial air transport at a weight that does not allow a rate of climb of at least 6.9 Vso, (that is, the number of feet per minute obtained by multiplying the aircraft's minimum steady flight speed by 6.9) with all engines operating, at an altitude of at least 300 m (1,000 ft) above all terrain and obstructions within ten miles of each side of the intended track.

8.3.4.6 En Route Limitations: One Engine Inoperative

A. Aeroplane. No person may take off an aeroplane used in commercial air transport having two engines unless that aeroplane can, in the event of a power failure at the most critical point en route, continue the flight to a suitable aerodrome where a landing can be made while allowing

1) For reciprocating engine powered aeroplanes
   a) At least a rate of climb of 0.079 - (0.106/number of engines installed) Vso2 (when Vso is expressed in knots) at an altitude of 300 m (1,000 ft) above all terrain and obstructions within 9.3 km (5 sm), on each side of the intended track; and
   b) A positive slope at an altitude of at least 450 m (1,500 ft) above the aerodrome where the aeroplane is assumed to land.
2) For turbine engine powered transport category aeroplanes
   a) A positive slope at an altitude of at least 300 m (1,000 ft) above all terrain and obstructions within 9.3 km (5 sm), on each side of the intended track;
   b) A net flight path from cruising altitude to the intended landing aerodrome that allows at least 600 m (2,000 ft) clearance above all terrain and obstructions within 9.3 km (5 sm), on each side of the intended track; and
   c) A positive slope at an altitude of at least 450 m (1,500 ft) above the aerodrome where the aeroplane is assumed to land;

Note: The 9.3 km (5 sm) clearance margin stated in paragraph A shall be increased to 18.5 km (10 sm) if navigational accuracy does not meet the 95% containment level.

B. *Helicopter*. No person shall takeoff a helicopter used in commercial air transport having two engines unless that helicopter can, in the event of the critical engine failing and any point in the en route phase, continue the flight to the destination or alternate landing site without flying below the minimum flight altitude at any point and clearing all obstacles in the approach path by a safe margin.

8.3.4.7 En Route Limitations: Two Engines Inoperative

A. Aeroplane. No person may takeoff an aeroplane used in commercial air transport having three or more engines at such a weight where there is no suitable landing aerodrome within 90 minutes

at any point along the intended route (with all engines operating at cruising power), unless that aircraft can, in the event of simultaneous power failure of two critical engines at the most critical point along that route, continue to a suitable landing aerodrome while allowing

1) For turbine engine powered aeroplanes
   a) A net flight path (considering the ambient temperatures anticipated along the track) clearing vertically by at least 2,000 feet all terrain and obstructions within five statute miles (4.34 nautical miles) on each side of the intended track;
   b) A positive slope at 1,500 feet above the aerodrome of intended landing; and
   c) Enough fuel to continue to the aerodrome of intended landing, to arrive at an altitude of at least 1,500 feet directly over the aerodrome, and thereafter to fly for 15 minutes at cruise power.

   Note: The consumption of fuel and oil after the engine failure is the same as the consumption that is allowed for in the net flight path data in the AFM.

2) For reciprocating engine powered aeroplanes
   a) A rate of climb at 0.013 Vso2 feet per minute (that is, the number of feet per minute is obtained by multiplying the number of knots squared by 0.013) at an altitude of 1,000 feet above the highest ground or obstruction within 10 miles on each side of the intended track, or at an altitude of 5,000 feet, which ever is higher; and
   b) Enough fuel to continue to the aerodrome of intended landing and to arrive at an altitude of at least 300 m (1,000 ft) directly over that aerodrome.

   Note1 : When the two engines of the reciprocating aeroplane are predicted to fail at an altitude above the prescribed minimum altitude, compliance with the prescribed rate of climb need not be shown during the descent from the cruising altitude to the prescribed minimum altitude, if those requirements can be met once the prescribed minimum altitude is reached, and assuming descent to be along a net flight path and the rate of descent to be 0.013 Vso2 greater than the rate in the approved performance data.

   Note2 : If fuel jettisoning is authorized (or planned), the aeroplanes weight at the point where the two engines fail is considered to be not less than that which would include enough fuel to proceed to an aerodrome and to arrive at an altitude of at least 300 m (1,000 ft) directly over that aerodrome.

B. Helicopters. No person shall takeoff a Class 1 or Class 2 helicopter used in commercial air transport having three or more engines unless that helicopter can, in the event of two critical engines failing simultaneously at any point in the en route phase, continue the flight to a suitable landing site.

8.3.4.8 Landing Limitations

A. Aeroplane. No person may take off an aeroplane used in commercial operations unless its weight on arrival at either the intended destination aerodrome or any planned alternate aerodrome would allow a full stop landing from a point 50 feet above the intersection of the obstruction clearance

plane and the runway, and within

1) For turbine engine powered aeroplanes, 60 percent of the effective length of each runway.
2) For reciprocating engine powered aeroplanes, 70 percent of the effective length of each runway.

B. For the purpose of determining the allowable landing weight at the destination aerodrome, each person determining the landing limit shall ensure that

1) The aeroplane is landed on the most favourable runway and in the most favourable direction, in still air; or
2) The aeroplane is landed on the most suitable runway considering the probable wind velocity and direction, runway conditions, the ground handling characteristics of the aeroplane, and considering other conditions such as landing aids and terrain.

Note: If the runway at the landing destination is reported or forecast to be wet or slippery, the landing distance available shall be at least 115 percent of the required landing distance unless, based on a showing of actual operating landing techniques on wet or slippery runways, a shorter landing distance (but not less than that required by paragraph A) has been approved for a specific type and model aeroplane and this information is included in the AFM.

C. A turbine powered transport category aeroplane that would be prohibited from taking off because it could not meet the requirements of paragraph A(1), may take off if an alternate aerodrome is specified that meets all the requirements of paragraph A.

D. Helicopters. No person may take off a helicopter used in commercial air transport unless, with all engines operating on arrival at the intended destination landing site or any planned alternate landing, it can clear all obstacles on the approach path and can land and stop within the landing distance available.

E. Helicopters. No person may take off a helicopter used in commercial air transport unless, in the event of any engine becoming inoperative in the approach and landing phase on arrival at the intended destination landing site or any planned alternate landing, can

1) For Class 1 helicopters
   a) Before the landing decision point, clear all obstacles on the approach path and be able to land and stop within the landing distance available or to perform a balked landing and clear all obstacles in the flight path by an adequate margin; or
   b) After the landing decision point, land and stop within the landing distance available.
2) For Class 2 and Class 3 helicopters
   a) Before reaching a defined point before landing, safely execute a forced landing within the landing distance available.

8.3.5 Flight Rules

8.3.5.1 Minimum Safe VFR Altitudes: Commercial Air Transport Operations

A. No person may operate an aeroplane in commercial air transport during the day, under VFR, at an altitude less than 1,000 feet above the surface or within 1,000 feet of any mountain, hill, or

other obstruction to flight.

B. No person may operate an aeroplane in commercial air transport at night, under VFR, at an altitude less than 1,000 feet above the highest obstacle within a horizontal distance of five miles from the centre of the intended course, or, in designated mountainous areas, less than 2,000 feet above the highest obstacle within a horizontal distance of five miles from the centre of the intended course.

8.3.5.2 Diversion Decision

A. Except as provided in paragraph B, the PIC shall land the aircraft at the nearest suitable aerodrome at which a safe landing can be made whenever an engine of an aircraft fails or is shut down to prevent possible damage.

B. If not more than one engine of an aeroplane having three or more engines fails, or its rotation is stopped, the PIC may proceed to an aerodrome if he or she decides that proceeding to that aerodrome is as safe as landing at the nearest suitable aerodrome after considering the

1) Nature of the malfunction and the possible mechanical difficulties that may occur if flight is continued;
2) Altitude, weight, and usable fuel at the time of engine stoppage;
3) Weather conditions en route and at possible landing points;
4) Air traffic congestion;
5) Kind of terrain; and
6) Familiarity with the aerodrome to be used.

C. The pilot in command shall report each stoppage of engine stoppage to the appropriate traffic control authority as soon as practicable and shall keep that authority fully informed of progress of the flight.

D. If the pilot in command lands at an airport other than the nearest suitable airport, in point of time, he shall (upon completion of the trip) send a written report to AOC holder stating his reasons for determining that his selection of an airport, other than the nearest airport. The AOC holder shall, within 10 days after the pilot return to his home base, send a copy of this report with his comments to Authorities.

8.3.5.3 Steady Landing Approach Requirements

A. The concept of Steady Landing Approach is keeping stabilized speed, constant-rate of descent and vertical/horizontal flying-route in landing configuration. Attempt for landing should not be made unless steady landing approach is possible. Requirements of Steady Landing approach are as follows.

1) When an airplane in instrument meteorological conditions (IMC) is descending in landing configuration on final approach route above 1,000 feet above the airport ground level (HAT: Height Above Touchdown) and, if the desired speed is sustained high within the permitted speed limit speed for constant-rate of descent or high speed has been necessary for other reason, desired speed should be decreased for sustaining steady landing approach.
2) If an airplane in instrument meteorological conditions (IMC) is descending in landing configuration on final approach route at 1000 feet HAT, constant-rate of descent which does not exceed 1,000 ftm and desired speed limit and steady landing approach should be kept.

3) Steady Landing Approach prescribed in phrase 1 and 2 should be maintained until touch down and if it is not maintained properly until the airplane reaches 1000 feet HAT, a missed approach should be performed.

B. When an airplane in visual meteorological conditions (VMC) should maintain Landing Configuration for landing on final approach route at 500 feet HAT. If an airplane is descending and the desired speed is sustained high within the permitted speed limit speed for constant-rate of descent or high speed has been necessary for other reason, desired speed should be decreased for sustaining steady landing approach. Also the following criteria should be maintained while an airplane is above 500 feet above the airport ground level.

1) Rate of descent shall be kept no greater than 1,000 ftm
2) Desired speed shall be kept with the permitted speed limit.
3) Airplane must be aligned to the runway track except for the following cases.
   a) Instrumental approach or local procedure does not allow runway alignment at 500 feet HAT.
   b) Maneuver within the safe area is necessary (Change of runway etc.)
4) PIC should not maneuver an airplane at or below 500 feet HAT unless he/she decide it is safe considering the following conditions.
   a) Change of descending rate to acquire the route of descent not exceeding the limit.
   b) Deviation degree from the runway center-line.
   c) In case of changing runways, runway threshold stagger.
   d) Tailwind/Sidewind
   e) Usable length of runway

C. Steady Landing Approach in visual meteorological condition (VMC) as B above, should be maintained until touch down and if it is not maintained properly until the airplane reaches 500 feet HAT, a second approach should be initiated.

D. If the following conditions cannot be sustained by the passing over the runway threshold, a missed approach should be performed.

1) Desired speed within permitted range should be maintained until the flare for landing is commenced.
2) Airplane should be in stabilized flight route with normal maneuver.
3) Airplane should be in a position to land in the touch down zone of the runway (first 3,000 feet or one third of the runway whichever is shorter).

8.3.5.4 Inflight Simulation of Abnormal Situations

No person may simulate an abnormal or emergency situation during commercial air transport operations.

8.3.5.5 Restriction or Suspension of Operations : Commercial Air Transport

If a PIC or an AOC holder knows of conditions, including aerodrome and runway conditions, that are a hazard to safe operations, that person shall restrict or suspend all commercial air transport operations to such aerodromes and runways as necessary until those conditions are corrected.

8.3.5.6 Continuation of Flight when Destination Aerodrome is Temporarily Restricted:

Commercial Air Transport

No PIC may allow a flight to continue toward any aerodrome of intended landing where commercial air transport operations have been restricted or suspended, unless

1) In the opinion of the PIC, the conditions that are a hazard to safe operations may reasonably be expected to be corrected by the estimated time of arrival; or
2) There is no safer procedure.

8.3.5.7 ~ 8.3.5.20 (Reserved)

8.3.5.21 IFR Takeoff Minimums for Commercial Air Transport

A. Unless otherwise authorized by the Authority, no pilot operating an aircraft in commercial air transport operations may accept a clearance to take off from a civil aerodrome under IFR unless weather conditions are at or above

1) For aircraft, other than helicopters, having two engines or less1 statute mile visibility.
2) For aircraft having more than two engines1/2 statute mile visibility.
3) For helicopters1/2 statute mile visibility.

B. Despite A above, weather minima in the Operations Specification, or otherwise approved from Authority may be applied.

8.3.5.22 Instrument Approach Procedures and IFR Landing Minimums

No person may make an instrument approach at an airport except in accordance with IFR weather minimums and instrument approach procedures set forth in the AOC holder's operations specifications.

8.3.5.23 Commencing an Instrument Approach : Commercial Air Transport

A. In commercial air transport operations, no pilot may continue an approach past the final approach fix, or where a final approach fix is not used, begin the final approach segment of an instrument approach procedure, at any aerodrome unless

1) A source approved by the Authority issues a weather report for that aerodrome; and
2) The latest weather report for that aerodrome reports the visibility to be equal to or more than the visibility minimums prescribed for that procedure.

B. If a pilot begins the final approach segment of an instrument approach procedure and subsequently receives a weather report indicating below-minimum conditions, the pilot may continue the approach to DH or MDA.

Note: For the purpose of this subsection, the final approach segment begins at the final approach fix or facility prescribed in the instrument approach procedure. When a final approach fix is not prescribed for a procedure that includes a procedure turn, the final approach segment begins at the point where the procedure turn is completed and the aircraft is established inbound toward the aerodrome on the final approach course within the distance prescribed in the procedure.

8.3.6 Passengers and Passenger Handling

8.3.6.1 Passenger Compliance with Instructions

Each passenger on a commercial air transport flight shall comply with instructions given by a crew member in compliance with this section.

8.3.6.2 Denial of Transportation

An AOC holder may deny transportation because a passenger

1) Refuses to comply with the instructions regarding exit seating restrictions prescribed by the Authority; or
2) Has a handicap that can be physically accommodated only by an exit row seat.

8.3.6.3 Carriage of Persons Without Compliance with these Passenger- Carrying Requirements

A. The passenger-carrying requirements of paragraph B do not apply when carrying
   1) A crew member not required for the flight;
   2) A representative of the Authority on official duty;
   3) A person necessary to the safety or security of cargo or animals; or
   4) Any person authorized by the AOC holders Operation Manual procedures, as approved by the Authority.

B. No person may be carried without compliance to the passenger carrying requirements unless
   1) There is an approved seat with an approved seat belt for that person;
   2) That seat is located so that the occupant is not in any position to interfere with the flight crew members performing their duties;
   3) There is unobstructed access from their seat to the flight deck or a regular or emergency exit;
   4) There is a means for notifying that person when smoking is prohibited and when seat belts shall be fastened; and
   5) That person has been orally briefed by a crew member on the use of emergency equipment and exits.

8.3.6.4 Cabin Crew at Duty Stations

A. During taxi, cabin attendants shall remain at their duty stations with safety belts and shoulder harness fastened except to perform duties related to the safety of the aircraft and its occupants.

B. During takeoff and landing, cabin attendants shall be located as near as practicable to required floor level exits and shall be uniformly distributed throughout the aircraft to provide the most effective egress of passengers in event of an emergency evacuation.

C. When passengers are on board a parked aircraft, cabin attendants (or another person qualified in emergency evacuation procedures for the aircraft) will be placed in the following manner:
   1) If only one qualified person is required, that person shall be located in accordance with the AOC holders Operations Manual procedures.
   2) If more than one qualified person is required, those persons shall be spaced throughout the cabin to provide the most effective assistance for the evacuation in case of an emergency.

8.3.6.5 Evacuation Capability

The PIC, SCA and other person assigned by the AOC holder shall ensure that, when passengers are on board the aircraft prior to movement on the surface, at least one floor-level exit provides for egress of passengers through normal or emergency means.

8.3.6.6 Arming of Automatic Emergency Exits

No person may cause an aeroplane carrying passengers to be moved on the surface, takeoff or land unless each automatically deployable emergency evacuation assisting means installed on the aircraft is ready for evacuation.

8.3.6.7 Accessibility of Emergency Exits and Equipment

No person may allow carry-on baggage or other items to block access to the emergency exits when the aircraft is moving on the surface, during takeoff or landing, or while passengers remain on board.

8.3.6.8 Stops Where Passengers Remain on Board

A. At stops where passengers remain on board the aircraft, the PIC, the SCA, or both shall ensure that
   1) All engines are shut down;
   2) At least one floor level exit remains open to provide for the deplaning of passengers; and
   3) There is at least one person immediately available who is qualified in the emergency evacuation of the aircraft and who has been identified to the passengers on board as responsible for the passenger safety.

B. If refuelling with passengers on board, the PIC or a designated company representative shall ensure that the AOC holders Operations Manual procedures are followed.

8.3.6.9 Carriage of Persons with Reduced Mobility

No person may allow a person of reduced mobility to occupy seats where their presence could
   1) Impede the crew in their duties;
   2) Obstruct access to emergency equipment; or
   3) Impede the emergency evacuation of the aircraft.

8.3.6.10 Exit Row Seating

No PIC or SCA may allow a passenger to sit in an emergency exit row if the PIC or SCA determine that it is likely that the passenger would be unable to understand and perform the functions necessary to open an exit and to exit rapidly.

Note : See FSR attachment 8.3.6.10 for additional requirements pertaining to exit row seating.

8.3.6.11 Prohibition Against Carriage of Weapons

No person may, while on board an aircraft being operated in commercial air transport, carry on or about their person a deadly or dangerous weapon, either concealed or unconcealed and when any weapon is found, it should be reported to the concerned authority. This rule does not exclude the case that possession of weapon is legally approved and it should be transported by checked baggage or denied to transport. However, those of government officials (Security officer, marshals of prisoner) should be deposited in the flight deck under the jurisdiction of captain and return after arrival.

8.3.6.12 Oxygen for Medical Use by Passengers

A. An AOC holder may allow a passenger to carry and operate equipment for the storage, generation or dispensing of medical oxygen only as prescribed by the Authority.
B. No person may smoke, and no crew member may allow any person to smoke within 10 feet of oxygen storage and dispensing equipment carried for the medical use of a passenger.
C. No crew member may allow any person to connect or disconnect oxygen dispensing equipment to or from a oxygen cylinder while any other passenger is aboard the aircraft.

8.3.6.13 Carry-on Baggage

A. No person may allow the boarding of carry-on baggage unless it can be adequately and securely stowed in accordance with the AOC holders Operations Manual procedures.
B. No person may allow aircraft passenger entry doors to be closed in preparation for taxi or pushback unless at least one required crew member has verified that each article of baggage has been properly stowed in overhead racks with approved restraining devices or doors, or in approved locations aft of the bulkhead.
C. No person may allow carry-on baggage to be stowed in a location that would cause that location to be loaded beyond its maximum placard weight limitation.

Note: The stowage locations shall be capable of restraining the articles in crash impacts severe enough to induce the ultimate inertia forces specified in the emergency landing conditions under which the aircraft was type-certified

8.3.6.14 Carriage of Cargo in Passenger Compartments

A. No person may allow the carriage of cargo in the passenger compartment of an aeroplane except as prescribed by the Authority.
B. See FSR attachment 8.3.6.14 for specific requirements pertaining to carriage of cargo in passenger compartments.

8.3.6.15 Passenger Information Signs

The PIC shall turn on required passenger information signs during any movement on the surface, for each takeoff and each landing, and when otherwise considered to be necessary.

8.3.6.16 Required Passenger Briefings

A. No person may commence a takeoff unless the passengers are briefed prior to takeoff in accordance with the AOC holders Operation Manual procedures on

1) Smoking limitations and prohibitions;
2) Emergency exit location and use;
3) Use of safety belts;
4) Emergency floatation means location and use;
5) Fire extinguisher location and operation;
6) Placement of seat backs;
7) If flight is above 12,000 feet MSL, the normal and emergency use of oxygen; and
8) The passenger briefing card.

B. Immediately before or immediately after turning the seat belt sign off, the PIC or SCA shall ensure that the passengers are briefed to keep their seat belts fastened while seated, even when the seat belt sign is off.

C. Before each takeoff, the PIC or SCA shall ensure that any persons of reduced mobility are personally briefed on
1) The route to the most appropriate exit; and
2) The time to begin moving to the exit in event of an emergency.

8.3.6.17 Passenger Briefing: Extended Overwater Operations

No person may commence extended overwater operations unless all passengers have been orally briefed on the location and operations of life preservers, liferafts and other flotation means, including a demonstration of the method of donning and inflating a life preserver.

8.3.6.18 Passenger Seat Belts

A. Each passenger occupying a seat or berth shall fasten his or her safety belt and keep it fastened while the "Fasten Seat Belt" sign is lighted or, in aircraft not equipped with such a sign, whenever instructed by the PIC.

B. No passenger safety belt may be used by more than one occupant during takeoff and landing.

C. At each unoccupied seat, the safety belt and shoulder harness, if installed, shall be secured so as not to interfere with crew members in the performance of their duties or with the rapid egress of occupants in an emergency.

Note 1: A person who has not reached his or her second birthday may be held by an adult who is occupying a seat or berth.

Note 2: A berth, such as a multiple lounge or divan seat, may be occupied by two persons provided it is equipped with an approved safety belt for each person and is used during en route flight only.

8.3.6.19 Passenger Seat Backs

No PIC or SCA may allow the takeoff or landing of an aircraft unless each passenger seat back is in the upright position.

Note: Exceptions may only be made in accordance with procedures in the AOC holders Operations Manual provided the seat back does not obstruct any passengers access to the aisle or to any emergency exit.

8.3.6.20 Stowage of Food, Beverage and Passenger Service

No PIC or SCA may allow the movement of an aircraft on the surface, takeoff or land

1) When any food, beverage or tableware furnished by the AOC holder is located at any passenger seat; and
2) Unless each food and beverage tray and seat back tray table is in the stowed position.

8.3.6.21 Securing of Items of Mass in Passenger Compartment

A. No person may allow the takeoff or landing of an aircraft unless each item of mass in the passenger cabin is properly secured to prevent it from becoming a hazard during taxi, takeoff and landing and during turbulent weather conditions.

B. No person may allow an aircraft to move on the surface, takeoff or land unless each passenger serving cart is secured in its stowed position.

8.3.7 Crew Member and Flight Operations Officer Qualifications

8.3.7.1 Age 60 Restriction

A. No person may serve nor may any AOC holder use a person as a required pilot flight crew member on an aeroplane engaged in international commercial air transport operations if that person has reached their 60th birthday.

B. Check airmen who have reached their 60th birthday or who do not hold an appropriate medical certificate may continue their check airman functions, but may not serve as or occupy the position of a required pilot flight crew member on an aeroplane engaged in international commercial air transport operations.

8.3.7.2 PIC License Requirements: Turbojet, Turbofan or Large Aircraft

No pilot may act as PIC of a turbojet, turbofan, or large aircraft in commercial air transportation operations unless he or she holds an ATP licence and a type rating for that aircraft.

8.3.7.3 PIC Licence Requirements: Non Turbojet or turbofan Small Aeroplanes

No pilot may act as PIC of a non-turbojet or turbofan small aircraft in commercial air transport during

1) IFR operations unless he or she holds a commercial pilot licence with appropriate category and class ratings for the aircraft operated, and an instrument rating and meets the experience requirements for the operation, or
2) Day VFR operations unless he or she holds a commercial pilot licence with appropriate category and class ratings for the aircraft operated.

8.3.7.4 PIC Aeronautical Experience: Small Aeroplanes

No pilot may act as PIC of a small aeroplane in commercial air transport during

1) IFR operations unless he or she meets the minimum aeronautical experience requirements necessary to qualify for the ATP licence, or

2) VFR operations unless he or she has logged a minimum of 500 hours of time as a pilot, including at least 100 hours of cross-country flight time including 25 hours of which were at night.

8.3.7.5 Co-pilot Licence Requirements

No pilot may act as Co-Pilot of an aircraft in commercial air transport operations unless he or she

1) Holds a commercial pilot licence with appropriate category and class ratings for the aircraft operated; and
2) Holds an instrument rating.

8.3.7.6 FE Licence Requirements

No person may act as the flight engineer of an aircraft unless he or she holds a flight engineer licence with the appropriate class rating.

8.3.7.7 One Pilot Qualified to Perform FE Functions

A. The AOC holder shall ensure that, on all flights requiring a flight engineer, there is assigned at least one other flight crew member qualified to perform the FE duties in the event the FE becomes incapacitated.

B. To carry out of flight engineer duties and functions instead of a flight engineer, he or she must successfully complete training of initial and transition or rating upgrade training for flight engineer including required courses and practice procedures.

Note : See attachment 8.3.7.7 for course curriculum requirements to perform FE duties.

8.3.7.8 Persons Qualified to Flight Release

No person may act as a flight operations officer in releasing a scheduled passenger-carrying commercial air transport operation unless that person

1) Holds a flight operations officer licence or an ATP rating; and
2) Is currently qualified with the AOC holder for the operation and type of aircraft used.

8.3.7.9 Company Procedures Indoctrination

A. No person may serve nor may any AOC holder use a person as a crew member or flight operations officer/flight dispatcher unless that person has completed the company procedures indoctrination curriculum approved by the Authority, which shall include a complete review of operations manual procedures pertinent to the crew member or flight operation officers duties.

B. See attachment 8.3.7.9 for knowledge area and programme hour requirements

8.3.7.10 Initial Dangerous Goods Training

A. No person may serve nor may any AOC holder use a person as a crew member unless he or she has completed the appropriate initial dangerous goods curriculum approved by the Authority.

B. See attachment 8.3.7.10 for specific course curriculum requirements.

8.3.7.11 Initial Security Training

No person may serve nor may any AOC holder use a person as a crew member unless he or she has completed the initial security curriculum approved by the Authority.

8.3.7.12 Initial Crew/ Flight Operations Officer Resource Management

A. No person may serve nor may any AOC holder use a person as a flight operations officer or crew member unless that person has completed the initial CRM curriculum approved by the Authority.

B. See attachment 8.3.7.12 for course curriculum topics.

8.3.7.13 Initial Emergency Equipment Drills

A. No person may serve nor may any AOC holder use a person as a crew member unless that person has completed the appropriate initial emergency equipment curriculum and drills for the crew member position approved by the Authority for the emergency equipment available on the aircraft to be operated.

B. See attachment 8.3.7.13 *for course curriculum requirements.*

8.3.7.14 Initial Aircraft Ground Training

A. No person may serve nor may any AOC holder use a person as a crew member or flight operations officer unless he or she has completed the initial ground training approved by the Authority for the aircraft type.

B. Initial aircraft ground training for flight crew members shall include the pertinent portions of the operations manuals relating to aircraft-specific performance, mass and balance, operational policies, systems, limitations, normal, abnormal and emergency procedures on the aircraft type to be used.

1) Turbo jet aircraft; 120 hours
2) Other aircraft
   a) Reciprocating powered engine : 64 hours
   b) Turbo propeller powered engine: 80 hours

Note 1 : See attachment 8.3.7.14A for specific course curriculum requirements for flight crew members.

Note 2 : The AOC holder may have separate initial aircraft ground training curricula of varying lengths and subject emphasis which recognise the experience levels of flight crew members approved by the Authority.

C. For cabin attendants, initial aircraft ground training shall include the pertinent portions of the operations manuals relating to aircraft-specific configuration, equipment, normal and emergency procedures for the aircraft types within the fleet.

1) Turbo jet aircraft; 16 hours
2) Other aircraft
   a) Reciprocating powered engine : 8 hours
   b) Turbo propeller powered engine: 8 hours

Note: See attachment 8.3.7.14B for specific course curriculum requirements for cabin attendants

D. For flight operations officers, aircraft initial ground training shall include the pertinent portions of the operations manuals relating to aircraft-specific flight preparation procedures, performance, mass and balance, systems, limitations for the aircraft types within the fleet.
   1) Turbo jet aircraft; 40 hours
   (2) Other aircraft
      a) Reciprocating powered engine : 30 hours
      b) Turbo propeller powered engine: 40 hours

Note: See attahment 8.3.7.14C for specific course curriculum requirements for flight operations officers.

E. The required courses and practice procedures for transition or rating upgrade training can be accomplished equivalent to initial training. The AOC holder shall specify approved flight training time by the Authorities.

8.3.7.15 Initial Aircraft Flight Training

A. No person may serve nor may any AOC holder use a person as a flight crew member unless he or she has completed the initial flight training approved by the Authority for the aircraft type.
B. Initial flight training shall focus on the manoeuvring and safe operation of the aircraft in accordance with AOC holders normal, abnormal and emergency procedures.
C. An AOC holder may have separate initial flight training curriculum which recognise the experience levels of flight crew members approved by the Authority.
D. The flight training can be completed using flight simulator devices approved by the Regional Aviation Authorities. The minimum requirement for initial flight training time is as follows;
   1) Turbo jet Aircraft: PIC- 20 hours, SIC and flight engineer 10-hours
   2) Other Aircraft:
      a) Reciprocating powered engine, PIC- 10hours and SIC and flight engineer-6 hours
      b) Turbo propeller powered engine: PIC-15 hours, SIC and flight engineer-7 hours.
E. The required courses and practice procedures for transition or rating upgrade training can be accomplished equivalent to initial training. The AOC holder shall specify approved flight training time by the Authorities.
F. See attahment 8.3.7.15 for specific flight curriculum.

8.3.7.16 Initial Specialized Operations Training

A. No person may serve nor may any AOC holder use a person as a flight crew member unless he or she has completed the appropriate initial specialised operations training curriculum approved by the Authority.
B. Specialized operations for which initial training curricula shall be developed include

1) Low minimums operations, including low visibility takeoffs and Category II and III operations;
2) Extended range operations;
3) Specialized navigation; and
4) PIC right seat qualification.

C. See attachment 8.3.7.16 for specific initial specialised operations training curriculum.

8.3.7.17 Aircraft Differences

A. No person may serve nor may any AOC holder use a person as a flight operations officer or crew member on an aircraft of a type for which a differences curriculum is included in the AOC holders approved training program, unless that person has satisfactorily completed that curriculum, with respect to both the crew member position and the particular variant of that aircraft.

B. The training program for differences between airplanes of the same type operated by AOC holder shall insure that each flight crew members and dispatcher is adequately trained to perform his assigned duties.
   1) Each training program must provide the differences training including each adequate subjects and/or parts specified for initial ground training except the Authority finds that additional training is not necessary
   2) Each training program must provide the differences training including each adequate maneuvers and/or procedures specified for initial ground training except the Authorities finds that additional training is not necessary
   3) Each training program must also provide ground and flight training which the Authority finds necessary for each flight crew members and dispatcher relating to aircraft and aircraft operation.

C. Each difference training include initial, transition and upgrade training for all type of aircraft.

D. See attachment 8.3.7.17 for aircraft differences training pertaining to flight operations officers.

8.3.7.18 Use of Simulators

A. Each aeroplane simulator and other training device that is used for flight crew member qualification shall
   1) Be specifically approved by the Authority for
      a) The AOC holder;
      b) The type aeroplane, including type variations, for which the training or check is being conducted;
      c) The particular manoeuvre, procedure, or crew member function involved;
   2) Maintain the performance, functional, and other characteristics that are required for approval;
   3) Be modified to conform with any modification to the aeroplane being simulated that results in changes to performance, functional, or other characteristics required for approval;
   4) Be given a daily functional pre-flight check before use; and
   5) Have a daily discrepancy log kept by the appropriate instructor or check airman at the end of each training or check flight.

8.3.7.19 Introduction of New Equipment or Procedures

No person may serve nor may any AOC holder use a person as a flight crew member when that service would require expertise in the use of new equipment or procedures for which a curriculum is included in the AOC holders approved training program, unless that person has satisfactorily completed that curriculum, with respect to both the crew member position and the particular variant of that aircraft.

8.3.7.20 Aircraft Proficiency Checks: PILOT

A. No person may serve nor may any AOC holder use a person as a pilot flight crew member unless, since the beginning of the 12th calendar month before that service, that person has passed the proficiency check twice prescribed by Authority in the make, and model aircraft on which their services are required. But the same proficiency check shall not be repeated preceding 4 calendar months and, among two proficiency check, one can be conducted using flight simulator devices.

B. Flight checks shall include manoeuvre and procedures to ensure competence to conduct the evaluations required by attachment 8.3.7.20 and this check may be accomplished in a flight simulator or in a flight training device.

C. If the pilot being checked fails any of the required manoeuvres, the government official or designated inspector conducting the proficiency check may give additional training to the pilot during the course of the proficiency check. In addition to repeating the manoeuvres failed the government official or designated inspector conducting the proficiency check may required the pilot being checked to repeat any other manoeuvres he finds are necessary to determine the pilots proficiency. If the pilot being checked is unable to demonstrate satisfactorily performance to the government official or designated inspector conducting the check, the AOC holder may not use him nor may he serve in operations until he has satisfactorily completed a proficiency check.

8.3.7.21 Instrument Proficiency Checks

A. No person may serve nor may any AOC holder use a person as a pilot in IFR operations unless, since the beginning of the 6th calendar month before that service, that pilot has passed the instrument competency check prescribed by the Authority. However, regular proficiency check has the equivalency for the pilot serving the aircraft of scheduled commercial air transport.

B. A pilot may complete the requirements of aircraft and instrument proficiency checks simultaneously in a specific aircraft type.

8.3.7.22 Re-establishing Recent of Experience: Pilot

A. In addition to meeting all applicable training and checking requirements, a required pilot flight crew member who, in the preceding 90 days has not made at least three takeoffs and landings in the type aeroplane in which that person is to serve, shall, under the supervision of a check airman, re-establish recency of experience as follows:

   1) Make at least three takeoffs and landings in the type aeroplane in which that person is to serve or in a qualified simulator.

2) Make at least one takeoff with a simulated failure of the most critical powerplant, one landing from the minimum ILS authorized for the AOC holder, and one landing to a full stop.

B. When using a simulator to accomplish any of the takeoff and landing training requirements necessary to re-establish recency of experience, each required flight crew member position shall be occupied by an appropriately qualified person and the simulator shall be operated as if in a normal in-flight environment without use of the repositioning features of the simulator.

C. A check airman who observes the takeoffs and landings of a pilot flight crew member shall certify that the person being observed is proficient and qualified to perform flight duty in operations and may require any additional manoeuvres that are determined necessary to make this certifying statement.

8.3.7.23 Pairing of Low Experience Crew Members

A. If an Co-Pilot has fewer than 100 hours of flight time in the type aeroplane being flown in commercial air transport, and the PIC is not an appropriately qualified check pilot or instructor, the PIC shall make all takeoffs and landings in situations designated as critical by the Authority.

B. No PIC or Co-Pilot may conduct operations for a type aeroplane in commercial air transport unless either pilot has at least 75 hours of line operating flight time, either as PIC or Co-Pilot.

C. The Authority may, upon application by the AOC holder, authorize deviations from paragraph B by an appropriate amendment to the operations specifications in any of the circumstances identified in attachment 8.3.7.23.

8.3.7.24 Flight Engineer Proficiency Checks

A. No person may serve nor may any AOC holder use a person as a flight engineer on an aeroplane unless within the preceding 6 calendar months he or she had a proficiency check in accordance with the requirements prescribed by the Authority; or had 50 hours flight time with an AOC holder as flight engineer in the type aeroplane.

B. See attachment 8.3.7.24 for specific procedures used in FE proficiency checks.

8.3.7.25 Competence Checks: Cabin Crew

A. No person may serve nor may any AOC holder use a person as a cabin attendant unless, since the beginning of the 12th calendar month before that service, that person has passed the competency check prescribed by the Authority performing the emergency duties appropriate to that persons assignment.

B. See attachment 8.3.7.25 for specific procedures used in cabin attendant competence checks.

8.3.7.26 Competence Checks: Flight Operations Officers

A. No person may serve nor may any AOC holder use a person as a flight operations officer unless, since the beginning of the 12th calendar month before that service, that person has passed the competency check, prescribed by the Authority, performing the flight preparation and subsequent duties appropriate to that persons assignment.

B. See FSR attachment 8.3.7.26 for specific procedures used in flight operation officer competence checks.

8.3.7.27 Supervised Line Flying/Operating Experience : Pilots

A. Each pilot initially qualifying as PIC shall perform a minimum of 60 flights for takeoffs and landings, or 100 hours flights including 20 flights takeoffs and landings for the duties of a PIC under the supervision of a check airman or instructor .

B. Each PIC transitioning to a new aircraft type shall perform a minimum of 20 flights takeoffs and landings, or 60 hours flights including 10 flights takeoffs and landings for the duties of a PIC under the supervision of a check airman or instructor.

C. Each pilot qualifying for duties other than PIC shall perform a minimum of 20 flights takeoffs and landings, or 60 hours flights including 10 flights takeoffs and landings for the duties of a PIC under the supervision of a check airman or instructor.

D. During the time that a qualifying PIC is acquiring operating experience, a check pilot or instructor who is also serving as the PIC shall occupy a pilot station.

E. In the case of a transitioning PIC, the check pilot or instructor serving as PIC may occupy the observer's seat if the transitioning pilot has made at least 10 flights takeoffs and landings in the type aeroplane used, and has satisfactorily demonstrated to the check pilot that he is qualified to perform the duties of a PIC for that type of aeroplane.

F. Each pilot initially qualifying as SIC shall complete a minimum of 40 flights for takeoffs and landings performing, or 100 hours flights performing the duties of a SIC.

8.3.7.28 Supervised Line Flying: Flight Engineers

Each person qualifying as a flight engineer for an aircraft type shall perform those functions for a minimum of 60 hours flights including 10 flights takeoffs and landings under the supervision of a check airman or a qualified flight engineer.

8.3.7.29 Supervised Line Experience: Cabin Crew

Each person qualifying as a cabin attendant shall perform those functions for a minimum of two flights under the supervision of a senior cabin attendant.

No person may serve nor may any AOC holder use a person as a cabin crew unless, since the beginning of the 12th calendar month before that service, that person has passed competency check approved by Authority to observed whether he or she conduct the duties in an emergency situation satisfactorily.

Note: While qualifying, this person may not be a required crew member.

8.3.7.30 Line Observations: Flight Operations Officers

No person may serve nor may any AOC holder use a person as a flight operations officer unless, since the beginning of the 12th calendar month before that service, that person has observed, on the flight deck, the conduct of two complete flights or a minimum of 5 hours flights over routes representative of those for which that person is assigned duties and he or she shall remain in the flight deck for the satisfying period of requirement.

8.3.7.31 Pilot knowledge requirements for route and area check: PIC

A. PIC of commercial air transport aircraft shall has adequate knowledge concerning the following

subjects pertinent to the areas over which that person is to serve, and to each airport and terminal area into which that person is to operate, referring to route Manual, flight operation plan, NOTAM and meteorological information, which the AOC holder has provided that person, before flight.

1) the terrain and minimum safe altitudes;
2) the seasonal meteorological conditions;
3) the meteorological, communication and air traffic facilities, services and procedures;
4) the search and rescue procedures;
5) the navigational facilities and procedures, including any long-range navigation procedures, associated with the route along which the flight is to take place;
6) procedures applicable to flight paths over heavily populated areas and areas of high air traffic density;
7) obstructions, physical layout, lighting, approach aids;
8) arrival, departure, holding and instrument approach procedures;
9) applicable operating minima
10) Notice to Airmen
11) Flight Manual and Operations Manual
12) Jeppesen Manual (Airway and Terminal procedure)

B. No person may serve nor may any AOC holder use a person as a PIC for commercial air transport aircraft unless, since the beginning of the 12th calendar month before that service, that person has completed the knowledge check regarding the requirement above paragraph A approved by the official of Authority or designated pilot check airman.

8.3.7.32 Route and Area Checks: Pilot Qualification

A. The classification and operational requirement for airports which the PIC hired by AOC holder are prescribed as follows;

1) The requirement to fly to designated special "A" category airports are as follows;
   a) An entry into that airport, including a takeoff or a landing, is being made if the ceiling at that airport is at least 1,000 feet above the lowest MEA or MOCA or minimum approach altitude of instrument approach procedure of that airport and the visibility at that airport is at least 3 miles.
   b) No PIC may not fly to that airport unless he has made a takeoffs and a landing as observatory flight crew, within the preceding 12 calendar months.
   c) No PIC may not fly to that airport unless he complete the visual material training or Special Airport Qualification Manual approved by the Authority and being qualified, within the preceding 12 calendar months.
2) The requirement to fly to designated special "B" category airport are as follows;
   a) No PIC which operate for the first time may not fly to that airport unless he complete the visual material training using pictorial means or Special Airport Qualification Manual approved by the Authority, and takeoff, land under supervision of check aircraft inspection crew or flight instruction crew.
   b) PIC who wants to maintain or reacquire the qualification shall observe the requirement for "A" category airport described above.

3) The requirement to fly to designated special “C” category airport are as follows;

a) No PIC which operate for the first time, may fly to that airport unless he complete the visual material training using pictorial means or Special Airport Qualification Manual approved by the Authority, and takeoff, land under supervision of check aircraft inspection crew or flight instruction crew.

b) No PIC may operate nor AOC holder may have PIC operate at that airport unless he made takeoff or landing within the preceding 12 calendar months.

B. No PIC who are to fly international routes using aircraft of AOC holder may operate in below regions unless he made single flight or more to at least one route among below regions, within the preceding 12 calendar months.

1) Japan
2) China and Mongo (including Far East)
3) Southeast Asia
4) South Pacific
5) Oceania
6) Middle East and Africa(including Southwest Asia)
7) Artic Area(transition route over 70of north latitude)
8) Russsia
9) Europe
10) North America(W090 Eastern)
11) North America(W090 Western)
12) South America

C. No PIC who are to fly domestic routes using aircraft of AOC holder may operate in domestic region unless he made single flight or more to domestic roure or at least one route among regions of B above, within the preceding 12 calendar months.

D. Above B an C. are waved for the Designated check airman and the PIC who has 1000 flight time or more as a captain in the aircraft type using for the Commercial air transportation, when that person is to operate to the routes scheduled newly. Requirements for the airport classification is applied for other captain.

E. No AOC holder can operate any special airport prescribed in B and attachment 8.3.7.32 unless he specify it on Operation Specifications and get an approval from the Authority.

8.3.7.33 Pilot Operations Qualifications : Route checks/Line checks

A. No person may serve nor may any AOC holder use a person as a flight operations officer unless, since the beginning of the 12 calendar month, that person has passed a route check by a government official or an entrusted inspector in which he or she satisfactorily performed their assigned duties in one of the types of airplanes they are to fly.

B. Route checks shall be carried out during the flight which is operating on the route and airports and the same type of airplanes they are to fly, including pre-flight preparation, post-flight de-briefing, takeoff and landing in consideration of flight plan of AOC holder.

8.3.7.34 PIC Low Minimums Authorization

A. Until a PIC has 15 flights (Takeoff and Landing) or 100 hours of flight time performing PIC

duties in the aircraft type (which included 5 approaches to landing using Category I or II procedures), he or she may not plan for or initiate an instrument approach when the ceiling is less than 300 feet and the visibility less than 1 mile.

B. Until a PIC has 20 flights (takeoff and landing) or 100 hours of flight time performing PIC duties in the aircraft type (which included 5 approach and landing using Category III procedures), he or she may not plan for or initiate an approach when the ceiling is less than 100 feet or the visibility is less than 1200 RVR.

C. Despite with the regulation prescribed in above a) and b), The AOC holder may be able to specify and apply low minimums authorized by the Authority in its Operations Specifications.

8.3.7.35 Designated Special Aerodromes

Standards of Special Aerodromes designated by the Authority are as follows.

1) Airport that is interrupted by mountains, hindrances or other restrictions when airplane is attempting take-off, landing or go-around.
2) Airport where special departure or arrival procedure is needed
3) Airport with insufficient facilities and giving out limited information for flight operation.
4) Airport with special attention required while take-off and landing.

8.3.7.36 Recurrent Training: Flight Crew Members

A. No person may serve nor may any AOC holder use a person as a flight crew member unless within the preceding 12 calendar months that person has completed the recurrent ground and flight training curricula approved by with the Authority.

B. The recurrent ground training shall include training on
   1) Aircraft systems and limitations and normal, abnormal and emergency procedures;
   2) Emergency equipment and drills;
   3) Crew resource management;
   4) Recognition or transportation of dangerous goods; and
   5) Security training.

C. The recurrent ground training requirements according to aircraft types are as follows
   1) Turbo jet Aircraft : 25 hours
   2) Other Aircraft
      a) Reciprocating powered engine: 16 hours
      b) Turbo propeller powered engine : 20 hours

D. The recurrent flight training curriculum shall include
   1) Manoeuvring and safe operation of the aircraft in accordance with AOC holders normal, abnormal and emergency procedures;
   2) Manoeuvres and procedures necessary for avoidance of in-flight hazards; and
   3) For authorized pilots, at least one low visibility takeoff to the lowest applicable minimum LVTO and two approaches to the lowest approved minimums for the AOC holder, one of which is to be a missed approach.

E. See attachment 8.3.7.36 for detailed recurrent training requirements.

Note: Satisfactory completion of a proficiency check with the AOC holder for the type aircraft

and operation to be conducted may be used in lieu of recurrent flight training.

8.3.7.37 Recurrent Training: Cabin Crew

A. No person may serve nor may any AOC holder use a person as a cabin attendant unless within the preceding 12 calendar months that person has completed the recurrent ground curricula approved by the Authority.

B. The recurrent ground training shall include training on
   1) Aircraft-specific configuration, equipment and procedures;
   2) Emergency and first aid equipment and drills;
   3) Crew resource management;
   4) Recognition or transportation of dangerous goods; and
   5) Security training.

C. The recurrent ground training requirements according to aircraft types are as follows
   1) Turbo jet Aircraft : 12 hours
   2) Other Aircraft
      a) Reciprocating powered engine: 4 hours
      b) Turbo propeller powered engine : 5 hours

D. See attachment 8.3.7.37 for specific emergency program training requirements for cabin attendants.

8.3.7.38 Recurrent Training: Flight Operations Officers

A. No person may serve nor may any AOC holder use a person as a flight operations officer unless within the preceding 12 calendar months that person has completed the recurrent ground curricula approved by the Authority.

B. The recurrent ground training shall include training on
   1) Aircraft-specific flight preparation;
   2) Crew resource management; and
   3) Recognition or transportation of dangerous goods.

C. The recurrent ground training requirements according to aircraft types are as follows.
   1) Turbo jet Aircraft : 20 hours
   2) Other Aircraft
      a) Reciprocating powered engine: 8 hours
      b) Turbo propeller powered engine : 10 hours

D. See attachment 8.3.3.38 for specific program training requirements for flight operations officers.

8.3.7.39 Check Airman Training

A. No person may serve nor may any AOC holder use a person as a check airman unless he or she has completed the curricula approved by the Authority for those functions for which they are to serve.

B. See attachment 8.3.7.39 for specific training program requirements for check airmen.

8.3.7.40 Flight Instructor Training

A. No person may serve nor may any AOC holder use a person as an instructor unless he or she

has completed the curricula approved by the Authority for those functions for which they are to serve.

B. See attachment 8.3.7.40 for specific training program requirements for instructor.

8.3.7.41 Flight Instructor Qualifications

No AOC holder may use a person nor may any person serve as a flight instructor in an established training program unless, with respect to the aeroplane type involved, that person

1) Holds the airman licences and rating required to serve as a PIC, a flight engineer, or a flight navigator, as applicable;
2) Has satisfactorily completed the appropriate training phases for the aeroplane, including recurrent training, that are required to serve as a PIC, flight engineer, or flight navigator, as applicable;
3) Has satisfactorily completed the appropriate proficiency, competency and recency of experience checks that are required to serve as a PIC, flight engineer, or flight navigator, as applicable;
4) Has satisfactorily completed the applicable initial or transitional training requirements and the Authority-observed in-flight competency check; and
5) Holds at least a Class III medical certificate unless serving as a required crew member, in which case holds a Class I or a Class II medical certificate as appropriate.

8.3.7.42 Check Airman Pilot Qualifications

No AOC holder may use a person, nor may any person serve as a check airman in an established training program unless, with respect to the aeroplane type involved, that person

1) Holds the airman licences and ratings required to serve as a PIC, a flight engineer, or a flight navigator, as applicable;
2) Has satisfactorily completed the appropriate training phases for the aeroplane, including recurrent training, that are required to serve as a PIC, flight engineer, or flight navigator, as applicable;
3) Has satisfactorily completed the appropriate proficiency, competency and recency of experience checks that are required to serve as a PIC, flight engineer, or flight navigator, as applicable; But recency requirements is not applicable to the check airman who is not involved in flight duty.
4) Has satisfactorily completed the applicable initial or transitional training requirements and the Authority-observed in-flight competency check;
5) Holds at least a Class III medical certificate unless serving as a required crew member, in which case holds a Class I or Class II medical certificate as appropriate; and
6) Has been approved by the Authority for the check airman duties involved.

8.3.7.43 Check Airman Designation

No person may serve nor may any AOC holder use a person as a check airman for any flight check unless that person has been designated by name and approved function by the Authority within the preceding 12 calendar months.

8.3.7.44 Check Airman Limitations

No person may serve nor may any AOC holder use a person as a check airman for any check

1) In an aircraft as a required pilot flight crew member unless that person holds the required airman licences and ratings and has completed for the AOC holder all applicable training, qualification and currency requirements of this Part applicable to the crew position and the flight operations being checked;
2) In an aircraft as an observer check airman unless that person holds the airman licences and ratings and has completed all applicable training, qualification and line observation requirements of this Part applicable to the position and the flight operations being checked; or
3) In a simulator unless that person has completed or observed with the AOC holder all training, qualification and line observation requirements of this Part applicable to the position and flight operations being checked.

8.3.7.45 Substitution of Simulator Experience

A. No AOC holder may use a simulator for training or checking unless that simulator has been specifically approved for the AOC holder in writing by the Authority. Training program and simulator approved by Foreign state's Authority, which belongs to the foreign AOC holder, training facility may be used, If related documents and request is accepted and approved by Authority. B No AOC holder may use a simulator for any purpose other than that specified in the Authoritys approval.

8.3.7.46 Line Qualification: Check Airman and Instructor

No person may serve nor may any AOC holder use a person as a check airman or simulator instructor unless, since the beginning of the 12th calendar month before that service, that person has

1) Flown at least 5 flights as a required crew member for the type of aircraft involved; or
2) Observed, on the flight deck, the conduct of 2 complete flights in the aircraft type to which the person is assigned.

8.3.7.47 Termination of a Proficiency, Competence or Line Check

If it is necessary to terminate a check for any reason, the AOC holder may not use the crew member or flight operations officer in commercial air transport operations until the completion of a satisfactory recheck.

8.3.7.48 Recording of Crew Member Qualifications

A. The AOC holder shall record in its records maintained for each crew member and flight operations officer, the completion of each of the qualifications required by this Part.

B. A pilot may complete the curricula required by this Part concurrently or intermixed with other required curricula, but completion of each of these curricula shall be recorded separately.

8.3.7.49 Monitoring of Training and Checking Activities

A. To enable adequate supervision of its training and checking activities, the AOC holder shall forward to the Authority at least 24 hours prior to the scheduled activity the dates, report times and report location of all가.

1) Training for which a curriculum is approved in the AOC holders training program; and

2) Proficiency, competence and line checks.

B. Failure to provide the information required by paragraph A may invalidate the training or check and the Authority may require that it be repeated for observation purposes.

8.3.7.50 Eligibility Period

A. Crew members who are required to take a proficiency check, a test or competency check, or recurrent training (except Ground School) or experiece (Area and Airport) to maintain qualification required in Aviation Act 51.2 and this part may complete those requirements at any time during the eligibility period.

B. The eligibility period is defined as the three calendar month period including the month-prior, the month-due, and the month-after any due date specified by this subsection.

C. Completion of the requirement at any time during the period shall be considered as completed in the month-due for calculation of the next due date.

8.3.7.51 Reductions in Requirements

A. The Authority may authorize reductions in, or waive, certain portions of the training requirements of this subchapter, taking into account the previous experience of the crew members.

B. Any AOC holder request for reduction or waiver shall be made in writing and outline the basis under which the request is made.

C. If the request was for a specific crew member, the correspondence from the Authority authorizing the reduction and the basis for it shall be filed in the record the AOC holder maintains for that crew member.

D. A person who progresses successfully through flight training, is recommended by their instructor or a check airman, and successfully completes the appropriate flight check for a check airman, or is permitted by the Authority, to complete a course in less than programmed time, need not complete the programmed hours of flight training for the particular aeroplane.

Note: Whenever the Authority finds that 20 percent of the flight checks given at a particular training base during the previous 6 months are unsuccessful, this method of approval will not be used by the AOC holder at that base until the Authority finds that the effectiveness of the flight training there has improved.

8.3.8 Rest Periods, Duty And Flight Time: Commercial Air Transport

8.3.8.1 Applicability

This section is applicable to the rest, duty and flight time of critical personnel engaged in commercial air transport flight operations.

8.3.8.2 Compliance with Scheduling Requirements

A. The Authority will consider a person in compliance with prescribed standards if he or she exceeds the prescribed flight duty limitations when

1) The flight is scheduled and normally terminates within the prescribed limitations; but

2) Due to circumstances beyond the control of the AOC holder (such as adverse weather conditions, maintenance, air traffic congestion, natural calamity, emergency, urgency etc) are not expected at the time of departure to reach the destination within the scheduled time.

B. The Authority will consider a person in compliance with prescribed duty limitations, if he or she exceeds those limitations during an emergency or adverse situations beyond the control of the AOC holder.

8.3.8.3 Duty and Rest Periods

A. With respect to duty periods, no AOC holder may schedule:

1) A flight crew member, prescribed in attachment 8.3.8.3 standards
2) A cabin attendant, prescribed in attachment 8.3.8.3 standards
3) A dispatcher for more than 10 consecutive hours of duty within a 24 consecutive hour period, unless he or she is given an intervening rest period.

Note: A person is considered to be on duty if they are performing any tasks on behalf of the AOC holder, whether scheduled, requested or self initiated.

B. AOC holder, flight crews, cabin crews, flight operations officers should follow the standard for minimum rest time required as follows.

1) No person may perform duties in commercial air transport unless that person has had at least the minimum rest period applicable to those duties as prescribed in attachment 8.3.8.3; or
2) No person may accept an assignment to any duty with the AOC holder during any required rest period.
3) Flight crew, Cabin crew and flight operations officer shall have at least 8 hours of rest period prior to the duties and AOC holder shall implement this rule.

C. The AOC holder may exercise the option to reduce a crew members rest period as provided in the implementing standards, which will require that the crew members next rest period be longer.

D. The AOC holder shall relieve the flight crew member, flight operations officer, or cabin attendant from all duties for 24 consecutive hours during any 7 consecutive day period

Note 1 : Time spent in transportation, not local in character, that is required by the AOC holder to position crew members to or from flights is not considered part of a rest period that described in attachment 8.3.8.3.

Note 2 : Time spent in transportation on aircraft (at the insistence of the AOC holder) to or from a crew members home station is not considered part of a rest period that described in attachment 8.3.8.3.

8.3.8.4 Maximum Number of Flight Time Hours

A. No AOC holder may schedule any crew members and no crew members may accept an assignment for flight time in commercial air transport, if that crew members total flight time or duty time in commercial flying will exceed the limitations prescribed in the 8.3.8.4.

B. All time spent on an aircraft as a duty flight crew member will be consider as flight duty

period, whether resting or performing tasks to be duty aloft.

C. Each AOC holder shall provide adequate sleeping quarters, including a berth, on the aeroplane whenever a flight crew member is scheduled to be aloft for more than 12 hours during any 24 consecutive hours.

8.3.8.5 Special Flight Duty Schemes

The Authority may approve a special flight duty scheme for an AOC holder.

8.3.9 Flight Release: Commercial Air Transport

8.3.9.1 Applicability

This subchapter is applicable to an AOC holder and the person designated by the AOC holder to issue a flight release.

8.3.9.2 Qualified Persons Required for Operational Control Functions

A. A qualified person shall be designated by the AOC holder to exercise the functions and responsibilities for operational control of each flight in commercial air transport.

B. For passenger-carrying flights conducted on a published schedule, a licensed and qualified flight operations officer or equivalently qualified person shall be on-duty at an operations base to perform the operational control functions.

C. For all other flights, the qualified person exercising operational control responsibilities shall be available for consultation prior to, during and immediately following the flight operation.

D. For all flights, the PIC shares in the responsibility for operational control of the aircraft and has the situational authority to make decisions regarding operational control issues in-flight.

Note : Where a decision of the PIC differs from that recommended, the person making the recommendation shall make a record of the associated facts.

8.3.9.3 Functions Associated with Operational Control

The person exercising responsibility for operational control for an AOC holder shall

1) authorize the specific flight operation;
2) Ensure that qualified personnel and adequate facilities are available to support and conduct the flight;
3) Ensure that proper flight planning and preparation is made;
4) Ensure that flight locating and flight following procedures are followed; and
5) For scheduled, passenger-carrying flights, ensure the monitoring of the progress of the flight and the provision of information that may be necessary to safety.

8.3.9.4 Operational Control Duties

A. For passenger-carrying flights conducted on a published schedule, the qualified person performing the duties of a flight operations officer shall

1) Assist the PIC in flight preparation and provide the relevant information required;

2) Decide whether the aircraft flight omitted or delayed and change flight plan on consultation with PIC.
3) Furnish the PIC while in flight, by appropriate means, with information which may be necessary for the safe conduct of the flight; and
4) In the event of an emergency, initiate the applicable procedures contained in the AOC holders operations manual.

B. A qualified person performing the operational control duties shall avoid taking any action that would conflict with the procedures established by
1) Air traffic control;
2) The meteorological service;
3) The communications service; or
4) AOC holder.

8.3.9.5 Contents of a Flight Release/ Operational Flight Plan

The flight release/operational flight plan must contain at least the following information concerning each flight:
1) Company or organization name.
2) Make, model, and registration number of the aircraft being used.
3) Flight or trip number, and date of flight.
4) Name of each flight crew member, cabin attendant, and PIC.
5) Departure aerodrome, destination aerodromes, alternate aerodromes, and route.
6) Minimum fuel supply (in gallons or pounds).
7) A statement of the type of operation (e.g., IFR, VFR).
8) The latest available weather reports, and forecasts for the destination aerodrome and alternate aerodromes.
9) Any additional available weather information that the PIC considers necessary.

8.3.9.6 Flight Release: Aircraft Requirements

A. No person may issue a flight release for a commercial air transport operation unless the aircraft is airworthy and properly equipped for the intended flight operation.

B. No person may issue a flight release for a commercial air transport operation using an aircraft with inoperative instruments and equipment installed, except as specified in the Minimum Equipment List approved for the AOC holder for that type aircraft.

8.3.9.7 Flight Release: Facilities and NOTAMs

A. No person may release an aircraft over any route or route segment unless there are adequate communications and navigational facilities in satisfactory operating condition as necessary to conduct the flight safely.

B. The flight operations officer shall ensure that the PIC is provided all available current reports or information on aerodrome conditions and irregularities of navigation facilities that may effect the safety of the flight.

Note: For their review of the operational flight plan, the PIC will be provided with all

available NOTAMs with respect to the routing, facilities and aerodromes.

8.3.9.8 Flight Release: Weather Reports and Forecasts

A. No person may release a flight unless he or she is thoroughly familiar with reported and forecast weather conditions on the route to be flown.

B. No person may release a flight unless he or she has communicated all information and reservations they may have regarding weather reports and forecasts to the PIC.

8.3.9.9 Flight Release in Icing Conditions

A. No person may release an aircraft, when in their opinion or that of the PIC, the icing conditions that may be expected or are met exceed that for which the aircraft is certified and has sufficient operational de-icing or anti-icing equipment.

B. No person may release an aircraft any time conditions are such that frost, ice or snow may reasonably be expected to adhere to the aircraft, unless there is the available to the PIC at the aerodrome of departure adequate facilities and equipment to accomplish the procedures approved for the AOC holder by the Authority for ground de-icing and anti-icing.

8.3.9.10 Flight Release under VFR or IFR

No person may release a flight under VFR or IFR unless the weather reports and forecasts indicated that the flight can reasonably be expected to be completed as specified in the release.

8.3.9.11 Flight Release: Minimum Fuel Supply

No person may issue a flight release for a commercial air transport operation unless the fuel supply specified in the release is equivalent to or greater than the minimum flight planning requirements of this Part, including anticipated contingencies.

8.3.9.12 Flight Release: Aircraft Loading and Performance

No person may issue a flight release unless he or she is familiar with the anticipated loading of the aircraft and is reasonably certain that the proposed operation will not exceed the

1) Centre of gravity limits;
2) Aircraft operating limitations; and
3) Minimum performance requirements.

8.3.9.13 Flight Release: Amendment or Re-release En Route

A. Each person who amends a flight release while the flight is en route shall record that amendment.

B. No person may amend the original flight release to change the destination or alternate aerodrome while the aircraft is en route unless the flight preparation requirements for routing, aerodrome selection and minimum fuel supply are met at the time of amendment or re-release.

C. No person may allow a flight to continue to an aerodrome to which it has been released if the weather reports and forecasts indicate changes which would render that aerodrome unsuitable for the original flight release.

8.3.9.14 Flight Release with Airborne Weather Radar Equipment

No person may release a large aeroplane carrying passengers under IFR or night VFR conditions when current weather reports indicate that thunderstorms, or other potentially hazardous weather conditions that can be detected with airborne weather radar, may reasonably be expected along the route to be flown, unless the airborne weather radar equipment is in satisfactory operating condition.

CHAPTER Ⅸ - AIR OPERATOR CERTIFICATION AND ADMINISTRATION

9.1 AIR OPERATOR CERTIFICATES

9.1.1.1 Applicability

A. In accordance with Aviation Act 115-2 and its Enforcement Regulation 280 through 280-3, this part of the regulations prescribes requirements for the original certification and continued validity of Air Operator Certificates (AOC) issued by the Authority

B. Except where specifically noted, this Part applies to all commercial air transport operations and Aerial work by AOC holders.

9.1.1.2 Definitions

For the purpose of Part 9, the following definitions shall apply

1) **Acceptance checklist**. A document used to assist in carrying out a check on the external appearance of packages of dangerous goods and their associated documents to determine that all appropriate requirements have been met.

2) **Aircraft Technical & Journey Log**. A document attached to an aircraft for recording defects and malfunctions discovered during operation and for recording details of all maintenance carried out whilst the aircraft is operating between scheduled visits to the base maintenance facility. It also contains operating information relevant to flight safety and maintenance data that the operating crew need to know.

3) **Airworthiness Release**. The air operator's aircraft are released for service following maintenance by a person specifically authorized by the air operator rather than by an individual or maintenance organization on their own behalf. In effect, the person signing the release acts in the capacity of an authorized agent for the operator and is certifying that the maintenance covered by the release was accomplished according to the air operator's continuous maintenance program. Responsibility for each step of the accomplished maintenance is borne by the person signing for that step and the airworthiness release certifies the entire maintenance work package. This arrangement in no way reduces the responsibility of licensed aircraft maintenance technicians (AMT) or maintenance organizations for maintenance functions or tasks they perform or supervise. The air operator is obligated to designate, by name or occupational title, each licensed AMT or maintenance organization authorized to execute the airworthiness release. In addition, the air operator should designate when a release is required. Normally, a release is required following inspections prescribed by the air operations specifications maintenance activities involving inspections, and any other significant maintenance.

4) **Cargo aircraft**. Any aircraft carrying goods or property but not passengers. In this context the following are not considered to be passengers:
   a) A crewmember.
   b) An operator's employee permitted by, and carried in accordance with, the instructions contained in the Operations Manual.
   c) Inspector or An authorized representative of an Authority.
   d) A person with duties in respect of a particular shipment on board.

5) **Dangerous goods accident**. An occurrence associated with and related to the transport of

dangerous goods which results in fatal or serious injury to a person or major property damage.

6) **Dangerous goods incident**. An occurrence, other than a dangerous goods accident, associated with and related to the transport of dangerous goods, not necessarily occurring on board an aircraft, which results in injury to a person, property damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods which seriously jeopardises an aircraft or its occupants is deemed to constitute a dangerous goods incident.

7) **Dangerous goods transport document**. A document specified by the ICAO Technical Instructions for the Safe Transportation of Dangerous Goods by Air. It is completed by the person who offers dangerous goods for air transport and contains information about those dangerous goods. The document bears a signed declaration indicating that the dangerous goods are fully and accurately described by their proper shipping names and UN numbers (if assigned) and that they are correctly classified, packed, marked, labelled and in a proper condition for transport.

8) **Directly in Charge**. A person assigned to a position in which he or she is responsible for the work of a shop or station that performed maintenance, preventive maintenance, or modifications, or other functions affecting aircraft airworthiness.

9) **Equivalent system of maintenance**. An AOC holder may conduct maintenance activities through an arrangement with an AMO or may conduct its own maintenance, preventive maintenance, or alterations, so long as the AOC holder's maintenance system is approved by the Authority and is equivalent to that of an AMO, except that the approval for return to service of an aircraft/aeronautical product shall be made by an appropriately licensed aviation maintenance technician or aviation repair specialists in accordance with Part 2, as appropriate.

10) **Freight container**. A freight container is an article of transport equipment for radioactive materials, designed to facilitate the transport of such materials, either packaged or unpackaged, by one or more modes of transport.

11) **Handling agent**. An agency which performs on behalf of the operator some or all of the latter's functions including receiving, loading, unloading, transferring or other processing of passengers or cargo.

12) **Holdover time**. The estimated time de-icing/anti-icing fluid will prevent the formation of frost or ice and the accumulation of snow on the protected surfaces of an aircraft. Holdover time begins when the final application of de-icing or anti-icing fluid commences and expires when the de-icing or anti-icing fluid applied to the aircraft loses its effectiveness.

13) **Interchange agreement**. A leasing agreement which permits an air carrier to dry lease and take or relinquish operational control of an aircraft at an airport.

14) **Maintenance Control Manual**. A manual containing procedures, instructions and guidance for use by maintenance and concerned operational personnel in the execution of their duties.

15) **Operations manual**. A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties, which is approved or accepted by Authority in accordance with Aviation Act 116 and Enforcement regulation 282, 283.2.

16) **Overpack**. An enclosure used by a single shipper to contain one or more packages and to form one handling unit for convenience of handling and stowage.

17) **Package**. The complete product of the packing operation consisting of the packaging and its contents prepared for transport.

18) **Packaging**. Receptacles and any other components or materials necessary for the receptacle to perform its containment function and to ensure compliance with the packing requirements.

19) **Proper shipping name**. The name to be used to describe a particular article or substance in all shipping documents and notifications and, where appropriate, on packaging.

20) **Serious injury**. An injury which is sustained by a person in an accident and which :
   a) Requires hospitalisation for more than 48 hours, commencing within seven days from the date the injury was received;
   b) Results in a fracture of any bone (except simple fractures of fingers, toes or nose); or
   c) Involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or
   d) Involves injury to any internal organ; or
   e) Involves second or third degree burns, or any burns affecting more than 5% of the body surface; or
   f) Involves verified exposure to infectious substances or injurious radiation.

21) **State of Origin**. The state in which dangerous goods were first loaded on an aircraft.

22) **Technical instructions**. The latest effective edition of the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc. 9284-AN/905), including the supplement and any addendum, approved and published by decision of the Council of the ICAO. The term "Technical Instructions" is used in this Part.

23) **Training to proficiency**. The process of the check airman administering each prescribed manoeuvre and procedure to a pilot as necessary so that it is performed successfully during the Proficiency check.

24) **UN number**. The four-digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods to identify a substance or a particular group of substances.

25) **Unit load device**. Any type of aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo.

9.1.1.3 Acronyms

The following acronyms are used in Part 9.

1) AOC - Air Operator Certificate
2) AMO - Approved Maintenance Organization
3) CDL - Configuration Deviation List
4) MEL - Minimum Equipment List
5) UN - United Nations

9.1.1.4 Compliance with an Air Operator Certificate

A. No operator may operate an aircraft in commercial air transport unless that operator holds an AOC for the operations being conducted that authorized by the CASA.

B. No person may operate an aircraft in commercial air transport operations unless Operations Specification is authorized by the CASA., which prescribes the terms and conditions of its AOC.

C. Changing of Operations Specification authorized by paragraph B. will require a submission of the application to the CASA in accordance with Enforcement Regulation 280.4.

D. Each AOC holder shall, at all times, continue in compliance with the terms and conditions of Operations Specifications.

9.1.1.5 Application for an Air Operator Certificate

A. The operator applying to the CASA for an AOC shall submit an application
   1) In a form and manner prescribed by the Enforcement Regulation 280; and
   2) All documents specified in Enforcement Regulation, Attachment 30-3 shall be attached to application.

B. Each applicant shall make the application for an initial issue of an AOC at least 90 days before the date of intended operation.

9.1.1.6 Issuance or Denial of Air Operator Certificate

A. The Authority may issue an AOC if, after investigation, the Authority finds that the applicant
   1) Meet the requirement of commercial Air-transport Entity prescribed in Aviation Act 114;
   2) Has its principle place of business and its registered office, if any, located in Republic of Korea;
   3) Meets the Enforcement Regulation Article 280.2 and standards of this part;
   4) Holds Certificate of Scheduled commercial Air-Transport in accordance with Aviation Act 112 or Registration of Non-scheduled commercial air-transport in accordance with Aviation Act 132 or Registration of Aerial Work in accordance with Aviation Act 134 (In this case limited to the Business specified)

B. The Authority may deny application for an AOC if the Authority finds that the applicant is not properly or adequately equipped to the A. above or is not able to conduct safe operations in commercial air transport;

9.1.1.7 Contents of Air Operator Certificate

A. The AOC will consist of two documents
   1) A one-page certificate for public display signed by the Authority, and
   2) Multi-page AOC specific operating provisions containing the terms and conditions applicable to the AOC holders certificate.

B. The Authority will issue an AOC which will contain
   1) The name and location (main place of business) of the AOC holder;
   2) The date of issue and period of validity for each page issued;
   3) A description of the type of operations authorized;
   4) The type(s) of aircraft(s) authorized for use;
   5) The authorized areas of operations; and
   6) Operations Specification which prescribes the terms and conditions of Operation.

9.1.1.8 Duration of an Air Operator Certificate

An AOC, or any portion of the AOC, issued by the Authority is effective until
   1) The Authority amends, suspends, revokes or otherwise terminates the certificate;
   2) The AOC holder surrenders it to the Authority; or
   3) The AOC holder suspends operations for more than 60 days.

9.1.1.9 Amendment of an Air Operator Certificate

A. The Authority may amend any AOC if
   1) The Authority determines that safety in commercial air transport and the public interest require the amendment; or
   2) The AOC holder applies for an amendment, and the Authority determines that safety in commercial air transport and the public interest allows the amendment.
B. If the Authority stipulates in writing that an emergency exists requiring immediate amendment in the public interest with respect to safety in commercial air transportation, such an amendment is effective without stay on the date the AOC holder receives notice.
C. An AOC holder may appeal the amendment, but shall operate in accordance with it, unless it is subsequently withdrawn.
D. Amendments proposed by the Authority, other than emergency amendments, become effective 30 days after notice to the AOC holder, unless the AOC holder appeals the proposal in writing prior to the effective date. The filing of an appeal stays the effective date until the appeal process is completed.
E. Amendments proposed by the AOC holder shall be made at least 25 days prior to the intended date of any operation under that amendment.
F. No person may perform a commercial air transport operation for which the AOC amendment in accordance with paragraph(e) is required, unless it has received notice of the approval from the Authority.

9.1.1.10 Access for Inspection

A. To determine continued compliance with the applicable regulations, safe operation system by Authority in accordance with Aviation Act 115.2. paragraph 6, the AOC holder shall
   1) Grant the government official authorized by the CASA access to and co-operation with any of its organizations, facilities and aircraft;
   2) Ensure that the Authority is granted access to and co-operation with any organization or facilities that it has contracted for services associated with commercial air transport operations and maintenance for services; and
   3) Grant the government official authorized by the CASA free and uninterrupted access to the flight deck of the aircraft during flight operations.
B. Each AOC holder shall provide to the government official authorized by the CASA a forward observers seat on each of the AOC holders aircraft from which the flight crews actions and conversations may be easily observed.

Note: The suitability of the seat location and the ability to monitor crew member actions, conversations and radio communications is determined by the Authority.

9.1.1.11 Conducting Tests and Inspections

A. The AOC holder shall allow the government official authorized by the CASA to conduct tests and inspections, at any time or place, to determine whether an AOC holder is complying with the applicable laws, regulations and AOC terms and conditions.
B. The AOC holder shall make available at its principal base of operations
   1) All portions of its current Air Operator Certificate (includes OPSPECs);

2) All portions of its Operations and Maintenance Manuals; and
3) A current listing that includes the location and individual positions responsible for each record, document and report required to be kept by the AOC holder under the applicable aviation law, regulations or standards.

C. The AOC holder shall make available all portions of the AOC, Operations and Maintenance Manuals and any required record, document or report which are required by the government official authorized by the CASA.

9.1.1.12 Certificate Holders Duty To Maintain Operation Specifications

A. Each certificate holder shall maintain a complete and separate set of its operations specifications at its principal base of operations.

B. Each certificate holder shall insert pertinent excerpts of its operations specifications, or references thereto, in its Operations manual or Maintenance manual and shall state that compliance with each operations specifications requirement is mandatory.

C. Each certificate holder shall keep each of its employees and other persons used in its operations informed of the provisions of its operations specifications that apply to that employee's or person's duties and responsibilities.

9.1.1.13 Contents of Operations specifications

A. Each certificate holder conducting commercial and aerial work operations must obtain operations specifications from Authority.

B. The content of operations specifications must follow Enforcement Regulation 280.3 paragraph 2.

9.1.1.14 Amending Operations specifications

A. In accordance with Aviation Act 115.2 paragraph 3, the Head may amend any operations specifications issued under this part if
   1) The Head determines that safety in air commerce and the public interest require the amendment; or
   2) The certificate holder applies for the amendment, and the Head determines that safety in air commerce and the public interest allows the amendment.

B. The Application of amendment, issue, effective date shall be in accordance with Enforcement Regulation 280.4

9.2 AIR OPERATOR CERTIFICATION AND CONTINUED VALIDITY

9.2.1.1 Applicability

subchapter 9.2 provides requirements applicable to the certification and continued validity of all AOC holders.

9.2.2 Administration

9.2.2.1 Base of Operations

A. Each AOC holder that is not authorized to conduct maintenance under its AOC certificate shall maintain a principal base of operations.

B. Each AOC holder that is authorized to conduct maintenance under its AOC certificate shall maintain a principal base of operations and maintenance.

C. An AOC holder may establish a main operations base and a main maintenance base at the same location or at separate locations.

D. Each AOC holder shall provide written notification of intent to the Authority at least 25 days before it proposes to establish or change the location of either base.

9.2.2.2 Management Personnel Required for Commercial Air Transport Operations

A. Each AOC holder shall have an accountable manager who has corporate authority for ensuring that all flight operations and maintenance activities can be carried out to the highest degree of safety standards required by Aviation Act and provision.

B. According to paragraph A., when conducting commercial air transport operations, the AOC holder shall have qualified personnel, with proven competency in civil aviation, available and serving in the following positions or their equivalent:

1) Director of Operations.
2) Chief Pilot.
3) Director of Safety.
4) Director of Maintenance
5) Quality Manager.

Note: Competency in civil aviation means that an individual shall have a technical qualification and management experience to resolve the situation that Aviation act and provision specifies.

C. The Authority may approve positions or numbers of positions, other than those listed, if the AOC holder is able to show that it can perform the operation with the highest degree of safety under the direction of fewer or different categories of management personnel due to the

1) The kind of operations involved;
2) The number of aircraft used; and
3) The area of operation.

9.2.2.3 Quality System

A. Each AOC holder shall establish a quality system and designate a quality manager to monitor compliance with procedures required to ensure safe operational practices and airworthy aircraft.

B. To implement corrective action results found by quality system, the participation of top responsibility is necessary.

C. Each AOC holder shall ensure that each quality system includes a quality assurance programme that contains procedures designed to verify that all operations are being conducted in accordance with all applicable requirements, standards and procedures.

D. Each AOC holder shall describe the quality system in relevant documentation.

E. Notwithstanding A. above, the Authority may accept the nomination of two Quality Managers, one for operations and one for maintenance, provided that the operator has designated one Quality Management Unit to ensure that the Quality System is applied uniformly throughout the entire operation.

9.2.2.4 Submission and Revision of Policy and Procedure Manuals

A. In accordance with Aviation Act 116 and its Enforcement Regulation 282 through 283-2, each manual required by this part must:
   1) Include instructions and information necessary to allow the personnel concerned to perform their duties and responsibilities with a high degree of safety;
   2) Be in a form that is easy to revise and contains a system which allows personnel to determine the current revision status of each manual;
   3) Have a date of the last revision on each page concerned;
   4) Not be contrary to any applicable regulation and the AOC holders specific operating provisions; and
   5) Each manual will include a reference to appropriate civil aviation regulations.

B. No person may cause the use of any policy and procedure for flight operations or airworthiness function of Operations or Maintenance Manual prior to approval or acceptance of Authority.

C. Each AOC holder shall submit the proposed policy or procedure for establishment or amendment of Operations Manual or Maintenance Manual to the CASA at least 17 days prior to the date of intended implementation.

9.2.2.5 Retention and Maintenance of Personnel Records

A. Each AOC holder shall maintain current records which detail the qualifications and training of all its employees involved in the operational control, flight operations, ground operations and maintenance of the air operator.

B. Each AOC holder shall maintain records for those employees performing crew member or flight operations officer duties in sufficient detail to determine whether the employee meets the experience and qualification for duties in commercial air transport operations.

C. Each AOC holder shall retain records for prescribed period for following personnel in accordance A. B. above,
   1) Flight crew records.
   2) Cabin attendant records.
   3) Flight Oprerations Officer records.
   4) Operations and maintenance records (including Fuel and oil records)

D. Detail requirements of recording and keeping for AOC holder's employees is prescribed in Attachment 9.2.2.5

9.2.2.6 Flight Deck Voice and Flight Data Recorder Records

A. Each AOC holder shall retain:
   1) The most recent flight data recorder calibration
   2) The flight data recorder correlation for one aircraft of any group of aircraft operated by the AOC holder

a) That are of the same type;
b) On which the model flight recorder and its installation are the same; and
c) On which there is no difference in type design with respect to the original installation of instruments associated with the recorder.

B. In the event of an accident or occurrence requiring immediate notification of the Authority, the AOC holder shall remove and keep recorded information from the flight deck voice recorder and flight data recorder for at least 60 days or, if requested by the Authority, for a longer period.

9.2.2.7 Aircraft Records

A. Each AOC holder shall maintain a current list of each aircraft that operates in air transportation and shall submit the application of amendment to authority whenever change occurs.

B. Above A. includes the aircraft operated by other AOC holder under the bi-lateral agreement.

9.2.2.8 AOC Holder's Aircraft Technical Log

Each AOC holder shall have an aircraft technical log that is carried on the aircraft that contains a journey records section and an aircraft maintenance record section. The journey records section is further described in 9.3.1.5 and the aircraft maintenance record section is further described in 9.4.1.9

9.2.3 Aircraft

9.2.3.1 Authorized Aircraft

A. No person may operate an aircraft in commercial air transport unless that aircraft has an appropriate current airworthiness certificate, is in an airworthy condition, and meets the applicable airworthiness requirements for these operations, including those related to identification and equipment.

B. No person may operate any specific type of aircraft in commercial air transport until it has completed satisfactory initial certification, which includes the issuance of an AOC listing that type of aircraft.

C. No person may operate additional or replacement aircraft of a type for which it is currently authorized unless it can show that each aircraft has completed an evaluation process for inclusion in the AOC holders fleet by amendment of Operations Specification.

9.2.3.2 Dry Leasing of Foreign Registered Aircraft

A. An AOC holder may dry-lease a foreign-registered aircraft for commercial air transport as authorized by the Authority.

B. No person may be authorized to operate a foreign registered aircraft unless

1) There is in existence a current agreement between the Authority and the State of Registry that, while the aircraft is operated by the AOC holder, the operations regulations of Republic of Korea are applicable;
2) There is in existence a current agreement between the Authority and the State of Registry that
   a) While the aircraft is operated by the AOC holder, the airworthiness regulations of the State

of Registry are applicable; or,

b) If the State of Registry agrees to transfer some or all of the responsibility for airworthiness to the Authority under Article 83 *bis* of the Chicago Convention, the airworthiness regulations of Republic of Korea shall apply to the extent agreed upon by the Authority and State of Registry.

3) The agreement acknowledges that the Authority shall have free and uninterrupted access to the aircraft at any place and any time.

C. Attachment 9.2.3.2 for additional requirements for dry leasing of foreign-registered aircraft.

9.2.3.3 Aircraft Interchange

A. No person may interchange aircraft with another AOC holder without the approval of the Authority.

B. See Attachment 9.2.3.3 for requirements pertaining to aircraft interchange agreements approved by the Authority.

9.2.3.4 Wet-Leasing

A. No person may conduct wet-lease operations on behalf of another air operator except in accordance with the applicable laws and regulations of the country in which the operation occurs and the restrictions imposed by the Authority.

B. No person may allow another entity or air operator to conduct wet-lease operations on its behalf unless

1) That air operator holds an AOC or its equivalent from a Contracting State that authorizes those operations; and

2) The AOC holder advises the Authority of such operations and provides a copy of the AOC under which the operation was conducted.

C. See Attachment 9.2.3.4 for additional requirements when wet leasing aircraft

9.2.3.5 Emergency Evacuation Demonstration

A. No person may use an aircraft type and model in commercial air transport passenger-carrying operations unless it has first conducted, for the Authority, an actual full capacity emergency evacuation demonstration for the configuration in 90 seconds or less. This requirements may be waived for the similar aircraft type and model by Authority.

B. The full capacity actual demonstration may not be required or partial demonstration can be accepted if the AOC holder provides a written petition for deviation with evidence to the Authority that

1) A satisfactory full capacity emergency evacuation for the aircraft to be operated was demonstrated during the aircraft type certification or during the certification of another air operator; and

2) There is an engineering analysis, which shows that an evacuation is still possible within the 90-second standard, if the AOC holders aircraft configuration differs with regard to number of exits or exit type or number of cabin attendants or location of the attendants.

C. If a full capacity demonstration is not required, no person may use an aircraft type and model in commercial air transport passenger-carrying operations unless it has first demonstrated to the

Authority that its available personnel, procedures and equipment could provide sufficient open exits for evacuation in 15 seconds or less.

D. No person may use a land plane in extended overwater operations unless it has first demonstrated to the Authority that it has the ability and equipment to efficiently carry out its ditching procedures.

E. See Attachment 9.2.3.5 for additional requirements concerning emergency evacuation demonstrations.

9.2.3.6 Demonstration Flights

A. No person may operate an aircraft type in commercial air transport unless it first conducts satisfactory demonstration flights for the Authority in that aircraft type.

B. No person may operate an aircraft in a designated special area, or using a specialised navigation system, unless it conducts a satisfactory demonstration flight for the Authority.

C. Demonstration flights required by paragraph A. shall be conducted in accordance with the regulations applicable to the type of operation and aircraft type used.

D. The Authority may authorize deviations from this section if the Authority finds that special circumstances make full compliance with this section unnecessary. The AOC holder shall provides the Authority with evidence in advance.

(e) See Attachment 9.2.3.6 for additional requirements concerning demonstration flights.

9.2.4 Facilities and Operations Schedules

9.2.4.1 Facilities

A. Each operator shall maintain operational and airworthiness support facilities at the main operating base, appropriate for the area and type of operation.

B. Each AOC holder shall arrange appropriate ground handling facilities at each airport used to ensure the safe servicing and loading of its flights.

9.2.4.2 Operations Schedules

In establishing flight operations schedules, each AOC holder conducting scheduled operations shall allow enough time for the proper servicing of aircraft at intermediate stops, and shall consider the prevailing winds en route and cruising speed for the type of aircraft. This cruising speed may not be more than that resulting from the specified cruising output of the engines.

9.3 AOC FLIGHT OPERATIONS MANAGEMENT

9.3.1.1 Applicability

subchapter 9.3 provides those certification requirements that apply to management of flight operations personnel and their functions.

9.3.1.2 Operations Manual

A. In accordance with Aviation Act 116 and its Enforcement Regulation 282 through 283.2, Each

AOC holder shall issue to the crewmembers and persons assigned operational control functions, an Operations Manual approval or acceptable to the CASA.

B. The Operations Manual shall contain the overall company policies and procedures regarding the flight operations AOC holder conducts.

C. Each AOC holder shall prepare and keep current an Operations Manual which contains the AOC procedures and policies for the use and guidance of its personnel.

D. Each AOC holder shall issue the Operations Manual, or pertinent portions, together with all amendments and revisions to all personnel that are required to use it.

E. The operation manual may be published in parts, as a single document, or as a series volumes when it or they contain what required under Aviation Act Enforcement Regulation 283

F. According to the Paragraph (e), the operations manual may be published a series of volumes. Specific subjects are listed below and several subjects may be published in one volume.

1) Policy and Administration Manual

2) Annex

a) Aircraft Operating Manual, Operating Manual or Pilot Operating Manual (Either of manufacturer's or AOC holder's own is acceptable)

b) Minimum Equipment List and Configuration Deviation List

c) Training Manual(Separate volumes for Flight crew, Flight Operations Officer, Cabin attendant)

d) Aircraft Performance Manual

e) Route Guide

f) Emergency Evacuation Procedure Manual

g) Dangerous Goods Manual

h) Accident Procedures Manual

i) Security Manual

j) Aircraft Loading and Handling Manual

k) Cabin Crew Manual

l) Weight and Balance Control Manual

m) Exit Row Seating Manual

n) Flight Manual

G. See Attachment 9.3.1.2 for a contents of Operations Manual.

9.3.1.3 Training Programme

A. Each AOC holder shall ensure that all operations personnel are properly instructed in their duties and responsibilities and the relationship of such duties to the operation as a whole.

B. Each AOC holder shall have a training programme manual approved by the Authority containing the general training, checking, and record keeping policies.

C. Each AOC holder shall have approval of the Authority prior to using a training curriculum for the purpose of qualifying a crewmember, or person performing operational control functions such as Flight Operations Officer, for duties in commercial air transport.

D. Each AOC holder shall submit to the Authority any revision to an approved training programme, and shall receive written approval from the Authority before that revision can be used.

9.3.1.4 Aircraft Operating Manual

A. Each AOC holder or applicant shall submit proposed aircraft operating manuals for each type and variant of aircraft operated, containing the normal, abnormal and emergency procedures relating to the operation of the aircraft for approval by the Authority.

B. Each Aircraft Operating Manual shall be based upon the aircraft manufacturers data for the specific aircraft type and variant operated by the AOC holder and shall include specific operating parameters, details of the aircraft systems, and of the check lists to be used applicable to the operations of the AOC that are approved by the Authority. The design of the manual shall observe human factors principles.

C. The Aircraft Operating Manual shall be issued to the flight crewmembers and persons assigned operational control functions to each aircraft operated by the AOC.

9.3.1.5 AOC Holders Aircraft Technical Log-Journey Records Section

Each AOC holder shall use an aircraft technical log containing a journey records section which includes the following information for each flight:

1) Aircraft nationality and registration;
2) Date;
3) Call sign;
4) Name of crew mwmber
5) Duty assignments of crewmembers;
6) Place of departure;
7) Place of arrival;
8) Time of departure;
9) Time of arrival;
10) Hours of flight;
11) Facts affecting safety of aircraft operations, if any; and
12) Signature of PIC.

9.3.1.6 Designation of PIC for Commercial Air Transport

The AOC holder shall, for each commercial air transport operation, designate in writing one pilot as the PIC.

9.3.1.7 Required Cabin Crew

A. The AOC holder shall schedule, and the PIC shall ensure that the minimum number of required cabin attendants are on board passenger-carrying flights.

B. The number of cabin attendants may not be less than minimum prescribed by the Authority in the AOC holders operation specification or the following, whichever is greater

   1) For a seating capacity of 20 to 50 passengers: 1 cabin attendant; and
   2) One additional cabin attendant for each unit, or part of a unit, of 50 passenger seat capacity.

C. When passengers are on board a parked aircraft, the minimum number of flight attendants shall be one-half that required for the flight operation, but never less than one cabin attendant (or another person qualified in the emergency evacuation procedures for the aircraft).

Note: Where one-half would result in a fractional number, it is permissible to round down to the next whole number.

9.3.1.8 Carriage of Special Situation Passengers

No AOC holder may allow the transportation of special situation passengers except

1) As provided in the AOC holders Operations Manual procedures; and
2) With the knowledge and concurrence of the PIC.

9.3.1.9 Crew Member Checking and Standardization Programme

Each AOC holder shall have a programme of checking and standardisation of crewmembers approved by the Authority.

9.3.1.10 Training to Proficiency: Pilots

A. An AOC holder may train its pilots to proficiency on those manoeuvres and procedures that area prescribed by the Authority for pilot proficiency checks, during every other proficiency check following the initial check.

B. See Attachment 9.3.1.10 for requirements pertaining to aircraft simulator training used in a proficiency check.

9.3.1.11 Cockpit Check Procedure

A. Each AOC holder shall issue to the flight crews and make available on each aircraft, the flight deck condensed checklist procedures appropriate to for the type and variant of aircraft.

B. Each AOC holder shall ensure that approved procedures include each item necessary for flight crew members to check for safety before starting engines, taking off, or landing, and for engine and systems abnormalities and emergencies.

C. Each AOC holder shall ensure that the checklist procedures are designed so that a flight crewmember will not need to rely upon their memory for items to be checked.

D. Each AOC holder shall make the approved procedures readily useable in the cockpit of each aircraft and the flight crew shall be required to follow them when operating the aircraft.

9.3.1.12 Minimum Equipment List and Configuration Deviation List

A. Each AOC holder shall provide for the use of the flight crewmembers, maintenance personnel and persons assigned operational control function during the performance of their duties, an MEL approved by the Authority.

B. The MEL shall be specific to the aircraft type and variant which contains the circumstances, limitations and procedures for release or continuance of flight of the aircraft with inoperative components, equipment or instruments.

C. For aircraft over 5,700 kg, Each AOC holder may provide for the use of flight crew, maintenance personnel and persons assigned operational control functions during the performance of their duties a Configuration Deviation List (CDL) specific to the aircraft type.

9.3.1.13 Aircraft Performance Manual

A. Each AOC holder shall provide for the use of the flight crewmembers and persons assigned

operational control functions during the performance of their duties, a Aircraft performance manual acceptable to the Authority.

B. The aircraft performance manual shall be specific to aircraft type and variant which contains adequate performance information to accurately calculate the performance in all normal phases of flight operation.

9.3.1.14 Performance Data Control System

A. Each AOC holder shall have a system approved by the Authority for obtaining, maintaining and distributing to appropriate personnel current performance data for each aircraft, route and airport that it uses.

B. The system approved by the Authority shall provide current obstacle data for departure and arrival performance calculations.

9.3.1.15 Aircraft Loading and Handling Manual

A. Each AOC holder shall provide for the use of the flight crewmembers, ground handling personnel and persons assigned operational control functions during the performance of their duties, an aircraft handling and loading manual acceptable to the Authority.

B. This manual shall be specific to the aircraft type and variant which contains the procedures and limitations for servicing and loading of the aircraft.

9.3.1.16 Mass and Balance Data Control System

Each AOC holder shall have a system approved by the Authority for obtaining, maintaining and distributing to appropriate personnel current information regarding the mass and balance of each aircraft operated.

9.3.1.17 Cabin Crew Manual

A. The AOC holder shall issue to the cabin attendants and provide to passenger agents during the performance of their duties, a cabin attendant manual acceptable to the Authority.

B. The cabin attendant manual shall contain those operational policies and procedures applicable to cabin attendants and the carriage of passengers.

C. The AOC holder shall issue to the cabin attendants, a manual specific to the aircraft type and variant which contains the details of their normal, abnormal and emergency procedures and the location and operation of emergency equipment.

9.3.1.18 Passenger Briefing Cards

A. Each AOC holder shall carry on each passenger carrying aircraft, in convenient locations for the use of each passenger, printed cards supplementing the oral briefing and containing

1) Diagrams and methods of operating the emergency exits;
2) Other instructions necessary for use of the emergency equipment, and
3) Information regarding the restrictions and requirements associated with sitting in an exit seat row.

B. Each AOC holder shall ensure that each card contains information that is pertinent only to the type and variant of aircraft used for that flight.

C. See Attachment 9.3.1.18 for specific information to be included on passenger information cards.

9.3.1.19 Aeronautical Data Control System

A. Each AOC holder shall for obtain, maintain and distribute to appropriate personnel current aeronautical data for each route and airport that it uses.
B. Each AOC holder shall have a system approved by the Authority for implementing A. above
C. Each AOC holder shall provide information of each airport in use to appropriate personnel.
D. See Attachment 9.3.1.19 for specific airport information to be included Aeronautical Data Control System.

9.3.1.20 Route Guide

A. Each AOC holder shall provide for the use of the flight crewmembers and persons assigned operational control functions during the performance of their duties, a route guide and aeronautical charts acceptable to the Authority.
B. The route guide and aeronautical charts shall be current and appropriate for the proposed types and areas of operations to be conducted by the AOC holder.

9.3.1.21 Weather Reporting Sources

A. Each AOC holder shall use sources approved the Meteorological Agency or Authority equivalent for the weather reports and forecasts used for decisions regarding flight preparation, routing and terminal operations.
B. For passenger carrying operations on a published schedule, the AOC holder shall have an approved system for obtaining forecasts and reports of adverse weather phenomena that may affect safety of flight on each route to be flown and airport to be used.
C. See Attachment 9.3.1.21 for sources of weather reports satisfactory for flight planning or controlling flight movement.

9.3.1.22 De-icing and Anti-icing Programme

A. Each AOC holder planning to operate an aircraft in conditions where frost, ice, or snow may reasonably be expected to adhere to the aircraft shall
  1) Use only aircraft adequately equipped for such conditions;
  2) Ensure flight crew is adequately trained for such conditions as frost, ice, or snow; and
  3) Have an ground de-icing and anti-icing programme approved from authority.
B. See Attachment 9.3.1.22 for detailed requirements pertaining to the AOC holder's de-icing programme.

9.3.1.23 Flight Supervision and Monitoring System: Scheduled Air Transport

A. For operations on a published schedule, each AOC holder shall have an adequate system approved from Authority for proper dispatch and monitoring of the progress of the scheduled flights and list in the Operations Specification.
B. The system described in paragraph A. shall have enough dispatch centres, adequate for the operations to be conducted, located at points necessary to ensure adequate flight preparation,

dispatch and in-flight contact with the scheduled flight operations.

C. For scheduled operations, each AOC holder shall provide enough qualified flight operations officers at each dispatch centre to ensure proper operational control of each flight.

9.3.1.24 Flight Following System : Non-scheduled Air Transport

A. For non-scheduled operating include charter flight operations, each AOC holder shall have a system for providing flight preparation documents and determining the departure and arrival times of its flights at all airports approved.

B. The system described in paragraph A. shall have a means of communication by private or available public facilities to monitor the departure and arrival at all airports, including flight diversions.

C. For aircraft under 5700 kg, an AOC holder is not required to have a flight following system for each flight in which an ATC flight plan is filed and remains active until arrival at destination.

D. Paragraph A. is not applicable to AOC holder, if it has a system described in 9.3.1.23

E. See Attachment 9.3.1.24 for detailed requirements flight following system.

9.3.1.25 Communications Facilities

A. Each AOC holders flights shall be able to have two-way radio communications with all ATC facilities along the routes and alternate routes to be used.

B. For passenger carrying operations on a published schedule, each AOC holder shall be able to have rapid and reliable radio communications with all flights over the AOCs entire route structure under normal operating conditions.

9.3.1.26 Routes and Areas of Operation

A. An AOC holder may conduct operations only along such routes and within such areas for which

1) Ground facilities and services, including meteorological services, maintenance for aircraft and auxiliary equipment, are provided which are adequate for the planned operation;
2) The performance of the aircraft intended to be used is adequate to comply with minimum flight altitude requirements;
3) The equipment of the aircraft intended to be used meets the minimum requirements for the planned operation;
4) Appropriate and current maps and charts are available;
5) If two-engine aircraft are used, adequate airports are available with the time/distance limitations; and
6) If single-engine aircraft are used, surfaces are available which permit a safe forced landing to be executed.

B. No person may conduct commercial air transport operations on any route or area of operation unless AOC holder shows evidence and have approval from Authority in accordance with Aviation Act 115.2 and Enforcement Regulation 280.4 for followings

1) Flight is accomplished between regular, provisional or re-fueling airports using entire or part of AOC's route structure
2) Facilities and operating conditions described in 9.3.1.21, 9.3.1.27 is appropriate for planned operations.

C. Despite paragraph B., it is not necessary to demonstrate in actual flight over that area or route if AOC holder proves that safe operating system has been ensured. Operating system includes airport facilities, Maintenance facilities, communication system for operational control, navigational equipment of aircraft, refueling capacity, air to ground communication, ground services and qualified operational personnel.

D. The AOC holder may not use for commercial operations, such a routes or areas unless it is approved by the CASA.

9.3.1.27 Navigational Accuracy

A. Each AOC holder shall have, for each proposed route or area, that the navigational systems and facilities it uses capable of navigating the aircraft

1) Within the degree of accuracy required for ATC; and
2) To the airports in the operational flight plan within the degree of accuracy necessary for the operation involved.

B. In situations without adequate navigation systems reference, the Authority may authorize day VFR operations that can be conducted safely by pilotage because of the characteristics of the terrain.

C. Except for those navigational aids required for routes to alternate airports, the Authority will list in the AOC holder's operations specifications non-visual ground aids required for approval of routes outside of controlled airspace.

D. Non-visual ground aids are not required for night VFR operations on routes that the certificate holder shows have reliably lighted landmarks adequate for safe operation.

E. Operations on route segments where the use of celestial or other specialised means of navigation shall be approved by the Authority.

9.3.1.28 Airports: Required data

A. Each AOC holder must show that each route it submits for approval has enough airports that are properly equiped and adequate for the proposed operation .

B. Considering above paragraph A. items include such as size, surface, obstructions, facilities, public protection, lighting, navigational and communications aids, and ATC.

C. Each AOC holder must show that it has an aeronautical data control system in Attachment 9.3.1.19.

9.3.1.29 Approval of Additional Airport

A. The certificate holder, who is to open a new route, shall have a approval through a Operations System and Safety Inspection by CASA before commencing operation in accordance with Aviation Act. 115.2.5

B. The contents and procedure of Operations System and Safety Inspection shall be in accordance with Aviation Act Enforcement Regulations 281, and it shall fulfill the requirements specified in 9.3.

C. Operations System and Safety Inspection shall be conducted on the following cases:

1) On-spot inspection
   a) When operating scheduled flights to an airport that is not authorized as a Regular airport
   b) When operating charter flights with fixed route and time for more than 1 month to an airport that is not authorized as a Regular airport (Not less than 1 flight per week over a same leg)
   c) When operation is re-started after a suspension of 12 months or more for all aircraft types authorized to a regular airport authorized in Operations Specification.
2) Paper inspection only
   a) When operating a aircraft type not authorized to an authorized regular airport, or when operation is re-started after a 6 to 12 month suspension for all authorized aircraft types
   b) When operating charter flights with fixed route and time for less than 1 month to an airport not authorized as regular airport. (not less than 8 flights total with at least once-a-week schedule)
3) Waiver of Inspection
   a) When operating charter flight that does not fall under the category of (1) (ii) and (2) (ii)
   b) When operating the same aircraft type to a regular airport authorized in Operations Specification or when replacing another aircraft type on abnormal situation (accident, aircraft malfunction, etc.)
   c) When operating training flight to an airport not authorized as a regular airport for the purpose of new route inauguration or operating training flight with an aircraft type not authorized to a regular airport.
   d) When operating the same aircraft type to an authorized regular airport from a different departing point (authorized regular airport)
   E) When operation is re-started to an authorized regular airport after a suspension less than 6 months for all aircraft types authorized.

9.4 AOC MAINTENANCE REQUIREMENTS

9.4.1.1 Applicability

This subchapter provides those certification and maintenance requirements that apply to an AOC holder utilizing an AMO or an equivalent system.

9.4.1.2 Maintenance Responsibility

A. Each AOC holder shall ensure the airworthiness of the aircraft and the serviceability of both operational and emergency equipment by
   1) Assuring the accomplishment of preflight inspections;
   2) Assuring the correction of any defect and/or damage affecting safe operation of an aircraft to an approved standard, taking into account the MEL and CDL if available for the aircraft type;
   3) Assuring the accomplishment of all maintenance in accordance with the approved operator's aircraft maintenance programme;
   4) The analysis of the effectiveness of the AOC holder's approved aircraft maintenance programme;
   5) Assuring the accomplishment of any operational directive, airworthiness directive and any other continued airworthiness requirement made mandatory by the Authority; and

6) Assuring the accomplishment of modifications in accordance with an approved standard and, for non-mandatory modifications, the establishment of an embodiment policy.

B. Each AOC holder shall ensure that the Certificate of Airworthiness for each aircraft operated remains valid in respect to

1) The requirements in paragraph A.;
2) The expiration date of the Certificate; and
3) Any other maintenance condition specified in the Certificate.

Note: The Authority may or may not impose an expiration date on a Certificate of Airworthiness; an expiration date is used by the JAA, the FAA does not issue an expiration date on a Certificate of Airworthiness.

C. Each AOC holder shall ensure that the requirements specified in paragraph A. are performed in accordance with procedures approved by or acceptable to the Authority.

D. Each AOC holder shall ensure that the maintenance, preventive maintenance, and modification of its aircraft/aeronautical products are performed in accordance with its maintenance control manual and/or current instructions for continued airworthiness, and applicable aviation regulations.

E. Each AOC holder may make an arrangement with another person or entity for the performance of any maintenance, preventive maintenance, or modifications; but shall remain responsible of all work performed under such arrangement.

9.4.1.3 Approval and Acceptance of AOC Maintenance Systems and Programmes

A. An AOC holder shall not operate an aircraft, except for pre-flight inspections, unless it is maintained and released to service by an AMO or equivalent system of maintenance that is approved by the State of Registry and is acceptable to the Authority.

B. For aircraft registered in Republic of Korea, an AMO or an equivalent system of maintenance shall be approved by the Authority.

C. For aircraft not registered in Republic of Korea, an AMO or an equivalent system of maintenance will be approved by the State of Registry of the aircraft, and such approval will be accepted by the Authority.

D. When the Authority or the State of Registry accepts an equivalent system of maintenance, the persons designated to sign a maintenance release or airworthiness release shall be licensed in accordance with Part 2, as appropriate.

9.4.1.4 Maintenance Control Manual

A. Each AOC holder shall provide to the Authority, an AOC holder's maintenance control manual and subsequent amendments, for the use and guidance of maintenance and operational personnel concerned, containing details of the organizations structure including:

1) The accountable manager and designated person(s) responsible for the maintenance system as required by 9.2.2.2.
2) Procedures to be followed to satisfy the maintenance responsibility of 9.4.1.2, except where the AOC holder is an AMO, and the quality functions of 9.4.1.6. Such procedures may be included in the AMO procedures manual.
3) Procedures for the reporting of failures, malfunctions, and defects to the CASA within 72

hours of discovery; in addition, items that warrant immediate notification to the Authority by telephone/telex/fax, with a written follow-on report as soon as possible but no later than within 72 hours of discovery, are

a) Primary structural failure,
b) Control system failure,
c) Fire in the aircraft,
d) Engine structure failure, or
e) Any other condition considered an imminent hazard to safety.

B. The AOC holders maintenance control manual shall contain the following information which may be issued in separate parts

1) A description of the administrative agreements between the AOC holder and the AMO, or a description of the maintenance procedures and the procedures for completing and signing a maintenance release when maintenance is based on a system other than that of an AMO;
2) A description of the procedures to ensure each aeroplane they operate is in an airworthy condition;
3) A description of the procedures to ensure the operational emergency equipment for each flight is serviceable;
4) The names and duties of the person or persons required to ensure that all maintenance is carrier out in accordance with the maintenance control manual;
5) A reference to the maintenance programme required in 9.4.1.12;
6) A description of the methods for completion and retention of the operators maintenance records required by 9.4.1.8;
7) A description of the procedures for monitoring, assessing and reporting maintenance and operational experience for all aircraft over 5,700 kg maximum certificated take-off mass;
8) A description of the procedures for obtaining and assessing continued airworthiness information and implementing any resulting actions for all aircraft over 5,700 kg maximum certificated take-off mass, from the organization responsible for the type design, and shall implement such actions considered necessary by the State of Registry;
9) A description of the procedures for implementing mandatory continuing airworthiness information as required in 9.4.1.2A.(5);
10) A description of establishing and maintaining a system of analysis and continued monitoring of the performance and efficiency of the maintenance programme in order to correct any deficiency in that programme;
11) A description of aircraft types and models to which the manual applies;
12) A description of procedures for ensuring that unserviceabilities affecting airworthiness are recorded and rectified; and
13) A description of the procedures for advising the State of Registry of significant in-service occurrences

C. No person may provide for use of its personnel in commercial air transport any Maintenance Control Manual or portion of this manual which has not been reviewed and approved for the AOC holder by the Authority.

9.4.1.5 Maintenance Management

A. The AOC holder, approved as an AMO, may carry out the requirements specified in 9.4.1.2

A.(2),(3),(5)and (6).

B. If the AOC holder is not an AMO, the AOC holder shall meet its responsibilities under in 9.4.1.2 A.(2),(3),(5)and (6) by using
   1) An equivalent system of maintenance approved or accepted by the Authority; or
   2) Through an arrangement with an AMO with a written maintenance contract agreed between the AOC holder and the contracting AMO detailing the required maintenance functions and defining the support of the quality functions approved or accepted by the Authority.

Note: ICAO Doc. 9389, Attachment 6F contains requirements for contractual maintenance agreements.

C. Each AOC holder shall employ a person or group of persons, acceptable to the Authority, to ensure that all maintenance is carried out to an approved standard such that the maintenance requirements of 9.4.1.2 and requirements of the AOC holder's maintenance control manual are satisfied, and to ensure the functioning of the quality system.

D. Each AOC holder shall provide suitable office accommodation at appropriate locations for the personnel specified in paragraph C..

9.4.1.6 Quality System

A. For maintenance purposes, each AOC holder's quality system required by 9.2.2.3 shall additionally include at least the following functions:
   1) Monitoring that the activities of 9.4.1.2 are being performed in accordance with the accepted procedures;
   2) Ensure that all contracted maintenance is carried out in accordance with the contract;
   3) Monitoring the continued compliance with the requirements of subchapter 9.4; and
   4) Monitoring compliance with, and adequacy of, procedures required ensuring safe maintenance practices, airworthy aircraft and aeronautical products.

B. For maintenance purposes, each AOC holder's quality system required by 9.2.2.3 shall include a quality assurance programme that contains procedures designed to verify that all maintenance operations are being conducted in accordance with all applicable requirements, standards and procedures.

C. Where the AOC holder is also an AMO, the AOC holder's quality management system may be combined with the requirements of an AMO and submitted for acceptance to the Authority.

9.4.1.7 Aircraft Technical Log Entries: AOC Holders

A. Each person who takes action in the case of a reported or observed failure or malfunction of an aircraft/ aeronautical product, that is critical to the safety of flight shall make, or have made, a record of that action in the maintenance section of the aircraft technical log.

B. Each AOC holder shall have a procedure for keeping adequate copies of required records to be carried aboard, in a place readily accessible to each flight crewmember and shall put that procedure in the AOC holder's operations manual.

9.4.1.8 Maintenance Records

A. Each AOC holder shall ensure that a system has been established to keep, in a form acceptable to the Authority, the following records:
   1) The total time in service (hours, calendar time and cycles, as appropriate) of the aircraft and all life-limited components;
   2) The current status of compliance with all mandatory continuing airworthiness information;
   3) Appropriate details of modifications and repairs to the aircraft and its major components;
   4) The time in service (TSO ; hours, calendar time and cycles, as appropriate) since last overhaul of the aircraft or its components subject to mandatory overhaul life;
   5) The current aircraft status of compliance with the maintenance programme; and
   6) The detailed maintenance records to show that all requirements for signing of a maintenance release and airworthiness release have been met.

B. Each AOC holder shall ensure that items in A.(1-5) shall be kept for a minimum of 90 days after the unit to which they refer has been permanently withdrawn from service, and the records in A.(6) shall be kept for a minimum of 1 year after the signing of the maintenance release and/or airworthiness release.

C. Each AOC holder shall ensure that in the event of temporary change of operator, the records specified in paragraph A. shall be made available to the new operator.

D. Each AOC holder shall ensure that when an aircraft is permanently transferred from one operator to another operator, the records specified in paragraph A. are also transferred.

9.4.1.9 AOC Holder's Aircraft Technical Log - Maintenance Record Section

A. Each AOC holder shall use an aircraft technical log which includes an aircraft maintenance record section containing the following information for each aircraft:
   1) Information about each previous flight necessary to ensure continued flight safety.
   2) The current aircraft maintenance release and/or an airworthiness release.
   3) The current inspection status of the aircraft, to include inspections due to be performed on an established schedule and inspections that are due to be performed that are not on an established schedule, except that the Authority may agree to the maintenance statement being kept elsewhere.
   4) The current maintenance status of the aircraft, to include maintenance due to be performed on an established schedule and maintenance that is due to be performed that is not on an established schedule except that the Authority may agree to the maintenance statement being kept elsewhere.
   5) All deferred defects that affect the operation of the aircraft.

Note: Defects which are not airworthiness items may be deferred to a later date for rectification. When this is done, there must be a method of recording such a deferral, and normally the aeroplane technical log has a section solely for this purpose. Some operators have a system of classifying deferred defects so as to allow different lengths of time, either in hours flown, number of sectors, or on return to a maintenance base, until a defect must be rectified before further flight.

B. The aircraft technical log and any subsequent amendment shall be approved by the Authority.

9.4.1.10 Release to Service or Maintenance Section Records of the Technical Log

A. An AOC holder shall not operate an aircraft unless it is maintained and released to service by an organization approved by Authority, or under an equivalent system.
B. An AOC holder using an equivalent system shall not operate an aircraft after release under subparagraph A. unless a maintenance release and/or airworthiness release is prepared or caused to be prepared by an appropriately licensed and rated individual in accordance with Part 2, as appropriate. The maintenance release and/or airworthiness release shall be made in accordance with the AOC maintenance control manual procedures.
C. An AOC holder using an AMO shall not operate an aircraft after release under subparagraph A. unless an appropriate entry is made in accordance with the AOC maintenance control manual procedures acceptable to the Authority.
D. The AOC holder shall give a copy of the maintenance release and/or airworthiness release form for the aircraft to the PIC, or ensure that an entry noting the release is made in the maintenance section of the aircraft technical log.

9.4.1.11 Modification and Repairs

A. All modifications and repairs shall comply with airworthiness requirements acceptable to the Authority. Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained. However, in the case of a major repair or major modification, the work must have been done in accordance with technical data approved by the Authority.
B. An AOC holder which is authorized to perform maintenance, preventive maintenance, and modifications of any aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof, in accordance with the approved AOCs specific operating provisions that wishes to approve for return to service major repairs or major modifications to an aircraft registered in Repulic of Korea shall use a current and valid licensed AMT with an airframe and powerplant rating and shall be qualified in accordance with
C. Each AOC holder shall, promptly upon its completion, prepare a report of each major modification or major repair of an airframe, aircraft engine, propeller, or appliance of an aircraft operated by it.
D. The AOC holder shall submit a copy of each report of a major modification to the Authority, and shall keep a copy of each report of a major repair available for inspection.

9.4.1.12 Aircraft Maintenance Programme

A. Each AOC holder's aircraft maintenance programme and any subsequent amendment shall be submitted to the Authority for approval upon the AOC holder complying with recommendations provided by Authority.
B. The Authority will require an operator to include a reliability programme when the Authority determines that such a reliability programme is necessary. When such a determination is made by the Authority the AOC holder shall provide such procedures and information in the AOC holders maintenance control manual
C. Each AOC holder shall ensure that each aircraft is maintained in accordance with the AOC holder's aircraft approved maintenance programme as required by 9.4.1.3 which shall include
1) Maintenance tasks and the intervals in which these are to be performed, taking into account

the anticipated utilisation of the aircraft;

2) When applicable, a continuing structural integrity programme;
3) Procedures for changing or deviating from subparagraphs C.(1) and C.(2); and
4) When applicable, condition monitoring and reliability programme, descriptions for aircraft systems, components, and powerplants.

D. Repetitive maintenance tasks that are specified in mandatory intervals as a condition of approval of the type design shall be identified as such.

Note: The maintenance programme should be based on maintenance programme information made available by the State of Design or by the organization responsible for the type design, and any additional applicable experience.

E. No person may provide for use of its personnel in commercial air transport a Maintenance Programme or portion thereof which has not been reviewed and approved for the AOC holder by the Authority.

F. Approval by the Authority of an AOC holder's maintenance programme and any subsequent amendments shall be noted in the AOC certificate pursuant to 9.1.1.7B.(6).

G. Each AOC holder shall have an inspection programme and a programme covering other maintenance, preventive maintenance, and modifications to ensure that

1) Maintenance, preventive maintenance, and modifications performed by it, or by other persons, are performed in accordance with the AOC holder's maintenance control manual;
2) Each aircraft released to service is airworthy and has been properly maintained for operation.

H. The Authority may amend any specifications issued to an AOC holder to permit deviation from those provisions of this subchapter that would prevent the return to service and use of airframe components, powerplants, appliances, and spare parts thereof because those items have been maintained, altered, or inspected by persons employed outside Republic of Korea who do not hold a Korean technicians license. Each AOC holder who is granted authority under this deviation shall provide for surveillance of facilities and practices to assure that all work performed on these parts is accomplished in accordance with the AOC holders maintenance control manual.

9.4.1.13 AOC Continuous Maintenance Programme and Inspection Requirements

AOC holder shall maintain airworthiness by establishing and amending continuous maintenance programme including

1) Inspection practice
2) Scheduled maintenance and Inspection programme
3) Un-scheduled maintenance programme
4) Overhaul and repair system
5) Body structure inspection programme
6) Inspection items
7) Reliability control programme
8) Record keeping system
9) Continuous Analysis and Surveillance programme

10) Policy and procedure

9.4.1.14 Authority to Perform and Approve Maintenance, Preventive Maintenance and Modifications

A. An AOC holder which is not approved as an AMO may perform and approve maintenance, preventive maintenance, or modifications of any aircraft, airframe, aircraft engine, propeller, appliance, or component, or a part thereof for return to service, if approved in the specific operating provisions, as provided in its maintenance programme and maintenance control manual.

B. An AOC holder may make arrangements with an AMO (appropriately rated) for the performance of maintenance, preventive maintenance, or modifications of any aircraft, airframe, aircraft engine, propeller, appliance, or component, or part thereof as provided in its maintenance programme and maintenance control manual.

C. An AOC holder which is not approved as an AMO shall use a appropriately licensed and rated individual in accordance with Part 2, as appropriate, to approve maintenance, preventive maintenance, or modifications of any aircraft, airframe, aircraft engine, propeller, or appliance for return to service after performing or supervising in accordance with technical data approved by the Authority.

9.4.1.15 License Requirements for a Technician - AOC Holder Using Equivalent System

A. Each person who is directly in charge of maintenance, preventive maintenance, or modification, of any aircraft, airframe, aircraft engine, propeller, appliance, or component, or part thereof and each person performing required inspections and approving for return to service the maintenance performed shall be a appropriately licensed and rated technician or repair specialists.

B. A person who is directly in charge shall be on site but need not physically observe and direct each worker constantly, but shall be available for consultation and decision on matters requiring instruction or decision from higher authority than that of the persons performing the work.

9.4.1.16 Rest and Duty Limitations for Persons Performing Maintenance Functions on AOC Holder Aircraft

A. No person may assign, nor shall any person perform maintenance functions for aircraft certified for commercial air transport, unless that person has had a minimum rest period of 8 hours prior to the beginning of duty.

B. No person may schedule a person performing maintenance functions for aircraft Certified for commercial air transport for more than 12 consecutive hours of duty.

C. In situations involving unscheduled aircraft unserviceability, persons performing maintenance functions for aircraft Certified for commercial air transport may be continued on duty for
   1) Up to 16 consecutive hours; or
   2) 20 hours in 24 consecutive hours.

D. Following unscheduled duty periods, the person performing maintenance functions for aircraft shall have a mandatory rest period of 10 hours.

E. The AOC holder shall relieve the person performing maintenance functions from all duties for 24 consecutive hours during any 7 consecutive day period.

9.5 AOC SECURITY MANAGEMENT

9.5.1.1 Applicability

subchapter 9.5 provides those certification requirements that apply to the AOC holders protection of aircraft, facilities and personnel from unlawful interference.

9.5.1.2 Security Requirements

Each AOC holder shall ensure that all appropriate personnel are familiar, and comply with, the relevant requirements of Aviation safety and security Act and Implementation plan of Aviation safety and security under the paragraph 10 of it.

9.5.1.3 Aviation Safety and Security Organization

AOC holder shall establish organization and assign Security manager in the department concerned to prevent unlawful disturbance in the aircraft and ensure safety and security of Civil Aviation.

9.5.1.4 Security Training Programmes

To prevent aircraft hijack, explosive threat, and other unlawful misconduct and to minimize the effect of such problems, the certificate holder must provide an approved training program for employees to be able to take appropriate actions on emergency situations. The training program must include the following:

1) Making judgment on critical events
2) Communication and cooperation between crew members
3) Self-defense measures
4) Using authorized defensive weapons
5) Understanding behavioral traits of terrorists
6) Simulated threat management exercise
7) Cockpit Access Procedure
8) Aircraft search procedure and direction to the explosive-safe area

9.5.1.5 Supplement Measure for Aircraft Maintenance Facility

The AOC holder shall establish, maintain and enforce security measures for the facilities operated by commercial air-transport operator, including maintenance facility.

9.5.1.6 Aircraft Security

A. When aircraft is parked for more than 5 hours, boarding equipment should be removed to prevent unauthorized person from entering the aircraft. The aircraft should be parked in lighted area.

B. The AOC holder shall seal the aircraft door or assign a guard when the threat toward aircraft increases.

C. The AOC holder shall carry out a cabin security check using the security checklist. Also, the certificate holder should provide aircrew with training of cabin security check and instruction regarding related procedure.

D. The AOC holder shall take the following action for cockpit safety:

1) Establishing a Cockpit Access Restriction measure
2) Preparing a method of keeping the cockpit access key
3) The cockpit door must be closed and locked before passengers board until they completely de-board. Only those officially authorized persons may access cockpit.
4) All passenger aircraft with more than 60 passenger seats or maximum takeoff weight of more than 45,500 kg should have cockpit doors fulfilling the following requirements:
   a) Bullet-proof that tolerates impact from guns, grenade splinters, and others outside.
   b) Lock that can only be locked or opened from the cockpit side
   c) Device that checks the person outside of cockpit from inside.

Note: Effective since Nov. 1, 2003 for all passenger aircraft with more than 60 passenger seats or maximum takeoff weight of more than 45,500 kg

5) Installing safety and security devices following the order of Chief of CASA, which is based on article 32 of Aviation Safety and Security Act.

9.5.1.7 Transit Passenger Security Check

A. The AOC holder must conduct a security check on transit passengers and their belongings as well as checked baggage before boarding.
B. When security check is carried out by the certificate holder or outsourcing agency, and the security agent must complete the specified training at a designated training agency.
C. The AOC holder shall make sure there are no transit passengers remaining inside the aircraft when the aircraft arrives.
D. The AOC holder shall have personnel who completed a specified training check inside the aircraft to make sure the transit passengers de-boarded with all belongings.
E. The certificate holder shall make sure that the transit passengers do not get out of the transit area without permission and re-board assigned aircraft.

9.5.1.8 Cargo Security Check

A. The AOC holder shall conduct a security check on the cargo to be loaded on passenger aircraft using X-ray examiner. However, in one of the following cases, baggage must be opened for close examination of the contents inside. Explosive detecting device shall be used if any explosive is suspected in it.
   1) When X-ray examiner is not available or inoperative.
   2) When in doubt of secreting weapons or hazardous article
   3) When the X-ray is not capable to identify contents
   4) For other reasons that threatens aviation safety and security

B. For the cargos to be loaded on cargo aircraft, the AOC holder must conduct open examination, X-ray check, explosive detector check, check by explosive detecting dog, and pressure room check. The cargo security standard issued by the Authority.
C. When security check is carried out by the certificate holder or outsourcing agency, and the security agent must complete the specified training at a training agency designated by the Authority.

9.5.1.9 In-Flight Meal and Stored Goods Security Check

A. The AOC holder shall establish and enforce a control measure to prevent weapons, explosives, or other hazardous articles in-flowing onboard with meals and other cabin goods.

B. In one of the following cases, the AOC holder should not accept in-flight meal or cabin goods onboard.

1) Trace of trespassing presents.
2) Check was not carried by an authorized person.
3) In-flight meal containers and utensils are suspected to have hazardous material.

9.5.1.10 Restricted Area Pass

A. The AOC holder shall have personnel working inside the airports restricted area wear the pass issued by the airport authority at all times in easily recognizable manner.

B. The AOC holder, when discovered a personnel not wearing the pass, shall check his/her identification and advise to wear it all the time.

9.5.1.11 Flight Document Security

A. The AOC holder shall establish a security measure regarding documents related to passenger and checked baggage such as boarding pass, checked baggage tag, boarding passenger manifest, cargo manifest, hazardous article report, weapon report, and etc. in order to prevent loading of prohibited articles and forgery of boarding pass.

B. The AOC holder shall keep the documents A. above and other documents specified by Authority away from unauthorized persons, and preserve them for at least 1 year.

C. The AOC holder shall have unused flight related documents should be kept at a separate place managed by the AOC personnel or designated agent.

9.5.1.12 Passenger and Cargo Common Procedure

A. The AOC holder shall establish a de-boarding procedure for the baggage of passengers who failed to board the aircraft after check-in.

B. The AOC holder shall check whether the number of passengers onboard is same as the number of issued boarding passes, considering the following:

1) Passengers who are to continue flying re-boarding to the same aircraft
2) Whether normally checked in passengers are boarded
3) Passengers who arrived at stop over station and re-board the aircraft

9.5.1.13 Unlawful Disturbance Report

A. The AOC holder shall immediately report to the Chief of CASA or the Chief of Regional Aviation Authority of the following:

1) Hijacking or hijack attempt
2) Explosive threat toward aircraft, the site airline is located, and branch offices
3) Discovery of explosives, weapons, and other hazardous articles onboard
4) Aircraft explosion due to explosives
5) Any unlawful activities on aircraft

B. The AOC holder shall not have the aircraft take off or land without the following after receiving information about explosive or hijack threat:
1) Close security check on the aircraft when parked
2) When the aircraft is in operation, the information should be informed to the captain so he can take appropriate emergency action. Security check should be carried out after the aircraft arrives at airport.

9.6 AOC DANGEROUS GOODS MANAGEMENT

9.6.1.1 Applicability

subchapter 9.6 provides those AOC requirements that apply to operations and management of operations personnel and their functions regarding dangerous goods.

9.6.1.2 Approval to Transport Dangerous Goods

A. No AOC holder may transport dangerous goods in an aircraft unless it is approved by Authoiry according to Aviation Act 61. except the case according to the ICAO technical criteria of air transport for dangerous goods under the Aviation Act Enforcement regulation 188.2
B. Despite Aviation Act Enforcement regulation 188.2, No person may transport dangerous goods unless AOC is issued or approved by Authority meeting Training programme described in 9.6.1.14 B.

9.6.1.3 Scope

A. Each AOC holder shall comply with the provisions contained in the ICAO Technical Instructions for the Safe Transport of Dangerous Goods By Air, ICAO Doc. 9284 (Technical Instructions) on all occasions when dangerous goods are carried, irrespective of whether the flight is wholly or partly within or wholly outside the territory of ROK. Where dangerous goods are to be transported outside the territory of ROK, the AOC holder shall review and comply with the appropriate variations noted by contracting states contained in Attachment 3 to the Technical Instructions.
B. Articles and substances which would otherwise be classed as dangerous goods are excluded from the provisions of subchapter 9.6, to the extent specified in the Technical Instructions, provided they are
1) Required to be aboard the aircraft for operating reasons;
2) Carried as catering or cabin service supplies;
3) Carried for use in flight as veterinary aid or as a humane killer for an animal; or
4) Carried for use in flight for medical aid for a patient, provided that
a) Gas cylinders have been manufactured specifically for the purpose of containing and transporting that particular gas;
b) Rugs, medicines and other medical matter are under the control of trained personnel during the time when they are in use in the aircraft;
c) Equipment containing wet cell batteries is kept and, when necessary secured, in an upright position to prevent spillage of the electrolyte; and
d) Proper provision is made to stow and secure all the equipment during take-off and landing

and at all other times when deemed necessary by the PIC in the interests of safety; or

e) They are carried by passengers or crewmembers.

C. Articles and substances intended as replacements for those in paragraph B.(1) may be transported on an aircraft as specified in the Technical Instructions.

9.6.1.4 Limitations on The Transport of Dangerous Goods

A. Each AOC holder shall take all reasonable measures to ensure that articles and substances that are specifically identified by name or generic description in the Technical Instructions as being forbidden for transport under any circumstances are not carried on any aircraft.

B. Each AOC holder shall take all reasonable measures to ensure that articles and substances or other goods that are identified in the Technical Instructions as being forbidden for transport in normal circumstances are transported only when

1) They are exempted by the States concerned under the provisions of the Technical Instructions; or

2) The Technical Instructions indicate they may be transported under an approval issued by the State of Origin.

9.6.1.5 Classification

Each AOC holder shall take all reasonable measures to ensure that articles and substances are classified as dangerous goods as specified in the Technical Instructions.

9.6.1.6 Packing

Each AOC holder shall take all reasonable measures to ensure that dangerous goods are packed as specified in the Technical Instructions.

9.6.1.7 Labelling and Marking

A. Each AOC holder shall take all reasonable measures to ensure that packages, overpacks and freight containers are labelled and marked as specified in the Technical Instructions.

B. Where dangerous goods are carried on a flight which takes place wholly or partly outside the territory of ROK, the AOC holder shall ensure that labelling and marking are in the English language in addition to any other language requirements.

9.6.1.8 Dangerous Goods Transport Document

A. Each AOC holder shall ensure that, except when otherwise specified in the Technical Instructions, dangerous goods are accompanied by a dangerous goods transport document.

B. Where dangerous goods are carried on a flight which takes place wholly or partly outside the territory of a Republic of Korea, the AOC holder shall ensure that the English language is used for the dangerous goods transport document in addition to any other language requirements.

9.6.1.9 Acceptance of Dangerous Goods

A. No AOC holder may accept dangerous goods for transport until the package, overpack or freight container has been inspected in accordance with the acceptance procedures in the Technical Instructions.

B. Each AOC holder, or its handling agent, shall use an acceptance check list which
   1) Shall allow for all relevant details to be checked; and
   2) Shall be in such form as will allow for the recording of the results of the acceptance check by manual, mechanical or computerised means.

9.6.1.10 Inspection for Damage, Leakage or Contamination

Each AOC holder shall ensure that:

1) Packages, overpacks and freight containers are inspected for evidence of leakage or damage immediately prior to loading on an aircraft or into a unit load device, as specified in the Technical Instructions;
2) A unit load device is not loaded on an aircraft unless it has been inspected as required by the Technical Instructions and found free from any evidence of leakage from, or damage to, the dangerous goods contained therein;
3) Leaking or damaged packages, overpacks or freight containers are not loaded on an aircraft;
4) Any package of dangerous goods found on an aircraft and which appears to be damaged or leaking is removed or arrangements made for its removal by an appropriate authority or organization.
5) After removal of any leaking or damaged goods, the remainder of the consignment is inspected to ensure it is in a proper condition for transport and that no damage or contamination has occurred to the aircraft or its load; and
6) Packages, overpacks and freight containers are inspected for signs of damage or leakage upon unloading from an aircraft or from a unit load device and, if there is evidence of damage or leakage, the area where the dangerous goods were stowed is inspected for damage or contamination.

9.6.1.11 Removal of Contamination

Each AOC holder shall ensure that

1) Any contamination found as a result of the leakage or damage of dangerous goods is removed without delay; and
2) An aircraft which has been contaminated by radioactive materials is immediately taken out of service and not returned until the radiation level at any accessible surface and the non-fixed contamination are not more than the values specified in the Technical Instructions.

9.6.1.12 Loading Restrictions

A. Passenger Cabin and Flight Deck. Each AOC holder shall ensure that dangerous goods are not carried in an aircraft cabin occupied by passengers or on the flight deck, unless otherwise specified in the Technical Instructions.

B. Cargo Compartments. Each AOC holder shall ensure that dangerous goods are loaded, segregated, stowed and secured on an aircraft as specified in the Technical Instructions.

C. Dangerous Goods Designated for Carriage Only on Cargo Aircraft. Each AOC holder shall ensure that packages of dangerous goods bearing the Cargo Aircraft Only label are carried on a cargo aircraft and loaded as specified in the Technical Instructions.

9.6.1.13 Provision of Information

A. Information to Ground Staff. Each AOC holder shall ensure that:

1) Information is provided to enable ground staff to carry out their duties with regard to the transport of dangerous goods, including the actions to be taken in the event of incidents and accidents involving dangerous goods; and
2) Where applicable, the information referred to in paragraph A.(1) is also provided to the handling agent.

B. Information to Passengers. Each AOC holder shall ensure that information is promulgated as required by the Technical Instructions so that passengers are warned as to the types of goods which they are forbidden from transporting aboard an aircraft.

C. Information to Acceptance Points Personnel. Each AOC holder and, where applicable, the handling agent shall ensure that notices are provided at acceptance points for cargo giving information about the transport of dangerous goods.

D. Information to Crew Members. Each AOC holder shall ensure that information is provided in the Operations Manual to enable crew members to carry out their responsibilities in regard to the transport of dangerous goods, including the actions to be taken in the event of emergencies arising involving dangerous goods.

E. Information to the PIC. Each AOC holder shall ensure that the PIC is provided with written information, as specified in the Technical Instructions.

F. Information in the Event of an Aircraft Incident or Accident. Each AOC holder which is involved in an aircraft incident shall

1) As soon as possible, inform the appropriate authority of the State in which the aircraft accident occurred of any dangerous goods carried; and
2) On request, provide any information required to minimise the hazards created by any dangerous goods carried.

9.6.1.14 Training programmes

A. Each AOC holder shall establish, maintain, and have approved by the Authority, staff training programmes, as required by the Technical Instructions

B. Person ,who is not AOC holder, shall submit the request for approval to carry dangerous goods after completion of training described in table below.

C. Each AOC holder, Aircraft Handling Agent, Shppier's Agent shall ensure that not holding a permanent approval to carry dangerous goods shall ensure to observe that

1) Shipper' agents (includes airline personnel working with) (Table column #1)
2) Packers (Table column # 2)
3) Dangerous goods acceptance staff of operators and agencies acting on behalf of operators (Table column # 3)
4) Staff of operators and agencies acting on behalf of operators engaged in the ground handling, storage and loading of cargo and baggage (Table column # 4)
5) Passenger-handling staff and security staff who deal with the screening of passengers and their baggage (Table column #5)
6) Staff of agencies other than operators involved in processing cargo (Table column # 6)
7) Flight crew members and load planners (Table column # 7)

8) Cabin crew members (Table column # 8)

9) Cargo acceptance staff (other than dangerous goods acceptance staff) of operators and agencies acting on behalf of operators (Table column # 9)

[Table]

Areas of Training	1	2	3	4	5	6	7	8	9
General philosophy	X	X	X	X	X	X	X	X	X
Limitations on dangerous goods in air transport	X		X		X	X	X	X	X
General requirements for shippers	X		X			X			
Classification of dangerous goods	X	X	X			X			
List of dangerous goods	X	X	X			X	X		
General packing requirements	X	X	X			X			
Packing instructions	X	X	X			X			
Labelling and marking	X	X	X	X	X	X	X	X	X
Dangerous goods transport document and other relevant documentation	X		X			X			X
Acceptance procedures			X						X
Storage and loading procedures			X	X			X		X
Pilot' notification			X	X			X		
Provisions for passengers and crew	X	X	X	X	X	X	X	X	X
Emergency procedures	X	X	X	X	X	X	X	X	X

Note: x indicates an area to be covered.

9.6.1.15 Dangerous Goods Incident and Accident Reports

Each AOC holder shall report dangerous goods incidents and accidents to the Authority as soon as possible, unless exceptional circumstances prevent this.

SUPPLEMENT

1. Effective date : This Flight Safety Regulation is effective from 12 June, 2002.

2. Acknowledgement ; Flight Operations personnel, cabin attendant qualified and things certified, approved, designated and Authorized by regulations in the past shall maintain the effectiveness.