PART 91

GENERAL OPERATING AND FLIGHT RULES

This part of Jordanian Civil Aviation Regulations is hereby adopted under the authority and provisions of the Civil Aviation Law No. (41) dated 2007.

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Chief Commissioner/CEO
Civil Aviation Regulatory Commission

المملكة الاردنية الهاشمية
هيئة تنظيم الطيران المدني
CIVIL AVIATION REGULATORY COMMISSION
THE HASHEMITE KINGDOM OF JORDAN

Revision Control Sheet

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91.1 Applicability.

(a) Except as provided in paragraphs (b) and (c) of this section and 91.701 and 91.703, this part prescribes rules governing the operation of aircraft within Jordan, including the waters within 3 nautical miles of the Jordanian coast.

(b) Each person operating an aircraft in the airspace overlying the waters between 3 and 12 nautical miles from the coast of Jordan shall comply with 91.1 through 91.21; 91.101 through 91.143; 91.151 through 91.159; 91.167 through 91.193; 91.203; 91.205; 91.209 through 91.217; 91.221; 91.303 through 91.319; 91.323; 91.605; 91.609; 91.703 through 91.715; and 91.903.

(c) This part applies to each person on board an aircraft being operated under this part, unless otherwise specified.

91.3 Responsibility and authority of the pilot in command.

(a) The pilot in command of an aircraft is directly responsible for, and is the final authority as to, the operation of that aircraft.

(b) In an in-flight emergency requiring immediate action, the pilot in command may deviate from any rule of this part to the extent required to meet that emergency.

(c) Each pilot in command who deviates from a rule under paragraph (b) of this section shall, upon the request of Chief Commissioner/CEO, send a written report of that deviation to Chief Commissioner/CEO.

91.5 Pilot in command of aircraft requiring more than one required pilot.

No person may operate an aircraft that is type certificated for more than one required pilot flight crewmember unless the pilot in command meets the requirements of JCAR part FCL1.

91.7 Civil aircraft airworthiness.

(a) No person may operate a civil aircraft unless it is in an airworthy condition.

(b) The pilot in command of a civil aircraft is responsible for determining whether that aircraft is in condition for safe flight. The pilot in command shall discontinue the flight when unairworthy mechanical, electrical, or structural conditions occur.

91.9 Civil aircraft flight manual, marking, and placard requirements.

(a) Except as provided in paragraph (d) of this section, no person may operate a civil aircraft without complying with the operating limitations specified in the approved Airplane or Rotorcraft Flight Manual, markings, and placards, or as otherwise prescribed by the certificating authority of the country of registry.

(b) No person may operate a Jordanian-registered civil aircraft :

(1) For which an Airplane or Rotorcraft Flight Manual is required by 21.5 of JCAR unless there is available in the aircraft a current, approved Airplane or Rotorcraft Flight Manual or the manual provided for in JCAR part FCL1 and part Ops1); and

(2) For which an Airplane or Rotorcraft Flight Manual is not required by 21.5 of JCAR, unless there is available in the aircraft a current approved Airplane or Rotorcraft Flight Manual, approved manual material, markings, and placards, or any combination thereof.

(c) No person may operate a Jordanian-registered civil aircraft unless that aircraft is identified and marked in accordance with subpart q of JCAR part 21.

(d) Any person taking off or landing a helicopter certificated under JCAR at a heliport constructed over water may make such momentary flight as is necessary for takeoff or landing through the prohibited range of the limiting height-speed envelope established for the helicopter if that flight through the prohibited range takes place over water on which a safe ditching can be accomplished and if the helicopter is amphibious or is equipped with floats or other emergency flotation gear adequate to accomplish a safe emergency ditching on open water.

91.11 Prohibition on interference with crewmembers.

No person may assault, threaten, intimidate, or interfere with a crewmember in the performance of the crewmember's duties aboard an aircraft being operated.

91.13 Careless or reckless operation.

(a) Aircraft operations for the purpose of air navigation. No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of others.
(b) Aircraft operations other than for the purpose of air navigation. No person may operate an aircraft, other than for the purpose of air navigation, on any part of the surface of an airport used by aircraft for air commerce (including areas used by

those aircraft for receiving or discharging persons or cargo), in a careless or reckless manner so as to endanger the life or property of others.

91.15 Dropping objects.

No pilot in command of a civil aircraft may allow any object to be dropped from that aircraft in flight that creates a hazard to persons or property. However, this section does not prohibit the dropping of any object if reasonable precautions are taken to avoid injury or damage to persons or property.

91.17 Alcohol or drugs.

(a) No person may act or attempt to act as a crewmember of a civil aircraft :

(1) Within 8 hours after the consumption of any alcoholic beverage;

(2) While under the influence of alcohol;

(3) While using any drug that affects the person's faculties in any way contrary to safety; or

(4) While having 0.04 percent by weight or more alcohol in the blood.

(b) Except in an emergency, no pilot of a civil aircraft may allow a person who appears to be intoxicated or who demonstrates by manner or physical indications that the individual is under the influence of drugs (except a medical patient under proper care) to be carried in that aircraft.

(c) A crewmember shall do the following:

(1) On request of a law enforcement officer, submit to a test to indicate the percentage by weight of alcohol in the blood, when :

(i) The law enforcement officer is authorized under Jordanian laws and regulations to conduct the test or to have the test conducted; and

(ii) The law enforcement officer is requesting submission to the test to investigate a suspected violation of Jordanian law and regulations governing the same or substantially similar conduct prohibited by paragraph (a)(1), (a)(2), or (a)(4) of this section.

(2) Whenever Chief Commissioner/CEO has a reasonable basis to believe that a person may have violated paragraph (a)(1), (a)(2), or (a)(4) of this section, that person shall, upon request by Chief Commissioner/CEO, furnish the Chief Commissioner/CEO, or authorize any clinic, hospital,

doctor, or other person to release to Chief Commissioner/CEO, the results of each test taken within 4 hours after acting or attempting to act as a crewmember that indicates percentage by weight of alcohol in the blood.

(d) Whenever Chief Commissioner/CEO has a reasonable basis to believe that a person may have violated paragraph (a)(3) of this section, that person shall, upon request by Chief Commissioner/CEO, furnish Chief Commissioner/CEO, or authorize any clinic, hospital, doctor, or other person to release to Chief Commissioner/CEO, the results of each test taken within 4 hours after acting or attempting to act as a crewmember that indicates the presence of any drugs in the body.

(e) Any test information obtained by Chief Commissioner/CEO under paragraph (c) or (d) of this section may be evaluated in determining a person's qualifications for any airman certificate or possible violations of this JCAR and may be used as evidence in any legal proceeding under Jordanian laws and regulations.

91.19 Carriage of narcotic drugs, marijuana, and depressant or stimulant drugs or substances.

(a) Except as provided in paragraph (b) of this section, no person may operate a civil aircraft within Jordan with knowledge that narcotic drugs, marijuana, and depressant or stimulant drugs are carried in the aircraft.

(b) Paragraph (a) of this section does not apply to any carriage of narcotic drugs, marijuana, and depressant or stimulant drugs or substances authorized by or under any Jordanian laws and regulations or by any government agency.

91.21 Portable electronic devices.

(a) Except as provided in paragraph (b) of this section, no person may operate, nor may any operator or pilot in command of an aircraft allow the operation of, any portable electronic device on any of the following Jordanian-registered civil aircraft:

(1) Aircraft operated by a holder of an air carrier operating certificate or an operating certificate; or

(2) Any other aircraft while it is operated under IFR.

(b) Paragraph (a) of this section does not apply to:

(1) Portable voice recorders;

(2) Hearing aids;

(3) Heart pacemakers;

(4) Electric shavers; or

(5) Any other portable electronic device that the operator of the aircraft has determined will not cause interference with the navigation or communication system of the aircraft on which it is to be used.

(c) In the case of an aircraft operated by a holder of an air carrier operating certificate or an operating certificate, the determination required by paragraph (b)(5) of this section shall be made by that operator of the aircraft on which the particular device is to be used. In the case of other aircraft, the determination may be made by the pilot in command or other operator of the aircraft.

91.23 Truth-in-leasing clause requirement in leases and conditional sales contracts.

(a) Except as provided in paragraph (b) of this section, the parties to a lease or contract of conditional sale involving a Jordanian-registered large civil aircraft , shall execute a written lease or contract and include therein a written truth-in-leasing clause as a concluding paragraph in large print, immediately preceding the space for the signature of the parties, which contains the following with respect to each such aircraft:

(1) Identification of the Jordanian Civil Aviation Regulations under which the aircraft has been maintained and inspected during the 12 months preceding the execution of the lease or contract of conditional sale, and certification by the parties thereto regarding the aircraft's status of compliance with applicable maintenance and inspection requirements in this part for the operation to be conducted under the lease or contract of conditional sale.

(2) The name and address (printed or typed) and the signature of the person responsible for operational control of the aircraft under the lease or contract of conditional sale, and certification that each person understands that person's responsibilities for compliance with applicable Jordanian Civil Aviation Regulations.

(3) A statement that an explanation of factors bearing on operational control and pertinent Jordanian Civil Aviation Regulations can be obtained from the CARC Flight Safety Directorate.

(b) The requirements of paragraph (a) of this section do not apply :

(1) To a lease or contract of conditional sale when :

(i) The party to whom the aircraft is furnished is a foreign air carrier or certificate holder under part FCL1and part OPS1 of JCAR, or

(ii) The party furnishing the aircraft is a foreign air carrier or a person operating under part FCL1 and part OPS1 of JCAR, or a person operating under part FCL1 and part OPS1 of JCAR having authority to engage in on-demand operations with large aircraft.

(2) To a contract of conditional sale, when the aircraft involved has not been registered anywhere prior to the execution of the contract, except as a new aircraft under a dealer's aircraft registration certificate issued in accordance with 47.61 of JCAR.

(c) No person may operate a large civil aircraft of Jordanian registry that is subject to a lease or contract of conditional sale to which paragraph (a) of this section applies, unless:

(1) The lessee or conditional buyer, or the registered owner if the lessee is not a Jordanian citizen, has mailed a copy of the lease or contract that complies with the requirements of paragraph (a) of this section, within 24 hours of its execution, to JCARC, P.O. Box 7547, Amman, 11110, Jordan;

(2) A copy of the lease or contract that complies with the requirements of paragraph (a) of this section is carried in the aircraft. The copy of the lease or contract shall be made available for review upon request by Chief Commissioner/CEO, and

(3) The lessee or conditional buyer, or the registered owner if the lessee is not a Jordanian citizen, has notified by telephone or in person CARC Flight Safety Directorate where the flight will originate. Unless otherwise authorized by CARC, the notification shall be given at least 48 hours before takeoff in the case of the first flight of that aircraft under that lease or contract and inform CARC of:

(i) The location of the airport of departure;
(ii) The departure time; and

(iii) The registration number of the aircraft involved.

(d) The copy of the lease or contract furnished to CARC under paragraph (c) of this section is commercial or financial information obtained from a person.

(e) For the purpose of this section, a lease means any agreement by a person to furnish an aircraft to another person for compensation or hire, whether with or without flight crewmembers, other than an agreement for the sale of an aircraft and a contract of conditional sale under Jordanian laws and regulations. The person furnishing the aircraft is referred to as the lessor, and the person to whom it is furnished the lessee.

91.25 Aviation Safety Reporting Program: Prohibition against use of reports for enforcement purposes.

Chief Commissioner/CEO will not use reports submitted under the Aviation Safety Reporting Program (or information derived there from) in any enforcement action except information concerning accidents or criminal offenses which are wholly excluded from the Program.

91.27 Applicability of the Rules of the Air.

(a) Territorial application of the rules of the air:
The rules of the air shall apply to aircraft bearing the nationality and registration marks of Jordan wherever they may be, to the extent that they do not conflict with the rules published by the State having jurisdiction over the territory over flown.

(b) For Jordanian registered aircraft flying over those parts of the high seas where a Contracting States has accepted, pursuant to a regional air navigation agreement, the responsibility for providing air traffic services will be the "appropriate Air Traffic Services Authority (ATSA) which is the relevant authority designated by the State responsible for providing those services.

(c) The operation of an aircraft either in flight or on the movement area of an aerodrome shall be in compliance with the general rules and, in addition, when in flight, either with:

(1) The visual flight rules, or

(2) The instrument flight rules.

91. 29 Problematic use of psychoactive substances.

No Air Traffic controller personnel shall undertake Air Traffic Services function while under the influence of any psychoactive substance, by reason of which human performance is impaired. No such person shall engage in any kind of problematic use of substances.

91. 31 Flight plan(General).

(a) The flight plan shall contain information relative to an intended flight or portion of the flight.

(b) A flight plan shall be submitted prior to operation and shall be provided to air traffic services units.

(c) Closing a flight plan;

(1) A report of arrival shall be made by radio telephony or via data link at the earliest possible moment after landing to the air traffic service unit.

(2) When a flight plan has been submitted only in respect of a portion of a flight, other than the remaining portion of a flight to destination, it shall, when required, be closed by an appropriate report to the relevant air traffic services unit.

(3) When communication facilities at the arrival aerodrome are known to be inadequate and alternate arrangements for the handling of arrival reports on the ground are not available, the following action shall be taken. Immediately prior to landing the aircraft shall, if practicable, transmit to the appropriate air traffic services unit, a message comparable to an arrival report, where such a report is required. Normally, this transmission shall be made to the aeronautical station serving the air traffic services unit in charge of the flight information region in which the aircraft is operated.

(4) Unless otherwise prescribed by the appropriate ATS authority, a report of arrival shall be made in person, by radiotelephony or via data link at the earliest possible moment after landing, to the appropriate air traffic services unit at the arrival aerodrome, by any flight for which a flight plan has been submitted covering the entire flight or the remaining portion of a flight to the destination aerodrome.

(5) Arrival reports made by aircraft shall contain the following elements :

(i) Aircraft identification;

(ii) Departure aerodrome;

(iii) Destination aerodrome (only in the case of a diversionary landing);

(iv) Arrival aerodrome;

(v) Time of arrival.

91 .33 Changes to a flight plan.

(a**)** All changes to a flight plan submitted for an IFR flight, or a VFR flight operated as a controlled flight, shall be reported as soon as practicable to the appropriate air traffic services unit. For other VFR flights, significant changes to a flight plan shall be reported as soon as practicable to the appropriate air traffic services unit.

(b) If prior to departure, it is anticipated that depending on fuel endurance and subject to re-clearance in flight, a decision may be taken to proceed to a revised destination aerodrome, the appropriate air traffic control units shall be so notified by the insertion in the flight plan the information concerning the revised route (where known) and the revised destination and all other changes.

(c) Variation in true airspeed.
If the average true airspeed at cruising level between reporting points varies or is expected to vary by plus or minus 5 per cent of the true airspeed, from that given in the flight plan, the appropriate air traffic services unit shall be so informed.

(d) Change in time estimate.
If the time estimate for the next applicable reporting point, flight information region boundary or destination aerodrome, whichever comes first, is found to be in error in excess of three minutes from that notified to air traffic services, , a revised estimated time shall be notified as soon as possible to the appropriate air traffic services unit.

(e) Additionally, when an ADS agreement is in place, the air traffic services unit (ATSU) shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the ADS event contract.

91.35 Intended changes.

Requests for flight plan changes shall include the following information:

(a) Change of cruising level.

(1) Aircraft identification.

(2) New cruising level.

(3) Cruising speed at this level.

(4) Revised time estimates (when applicable) at subsequent flight information region boundaries.

(b) Change of route.

(1) Destination unchanged.
Aircraft identification.

(i) Flight rules.

(ii) Description of new route of flight including related flight plan data beginning with the position from which the requested change of route is to commence.

(iii)Revised time estimates.

(iv)Any other pertinent information.

(2) Destination changed.
Aircraft identification.

(i) Flight rules.

(ii) Description of revised route of flight to revised destination aerodrome including related flight plan data, beginning with the position from which the requested change of route is to commence.

Revised time estimates.
Alternate aerodrome(s); any other pertinent information.

91.37 Surface movement of Aircraft(General).

(a) An aircraft operates in a controlled aerodrome shall not taxi on the manoeuvring area without clearance from the Aerodrome Control Tower and shall comply with any instructions given by that unit.

(b) An aircraft taxiing on the manoeuvring area shall stop and hold at all runway-holding positions unless otherwise authorized by the Aerodrome Control Tower.

(c) In case of danger of collision between two aircraft taxiing on the movement area of an aerodrome the following shall be applied:

(1) When the two aircraft are approaching head on, or approximately so, each shall stop or where practicable alter its course to the right so as to keep well clear;

(2) When the two aircraft are on a converging course, the one which has the other on its right shall give way;

91.39 Taking - off and Landing(General).

(a) Taking -off. An aircraft taxiing on the manoeuvring area of an aerodrome shall give way to aircraft taking off or about to take off.

(1) An aircraft in flight , or operating on ground or water shall give way to aircraft landing or on the final stage of an approach to land.

(2) Aircraft at the higher level shall give way to aircraft at lower level.

(3) Power - driven aircraft shall give way to gliders and /or balloons .

(4) An aircraft known to be compelled to land shall be given the way .

(b) An aircraft which is being overtaken by another aircraft shall have the right-of-way and the overtaking aircraft shall keep well clear from the other aircraft.

(c) Aircraft landing on or taking off from the water shall, in so far as practicable, keep well clear of all vessels and avoid impeding their navigation

91.41 Signals.

(a) Upon observing or receiving any of the signals , aircraft shall take such action as may be required by the interpretation of the signal given in Appendix -1

(b) Lights to be displayed by aircraft on the water.
Between sunset and sunrise or such other period between sunrise and sunset all aircraft on the water shall display lights as required by the International Regulations for Preventing Collisions at Sea unless it is impractical for them to do so, in such case they shall display lights as closely similar as possible in characteristics and position to those required by the International Regulations.

91.43 Time.

(a) Coordinated Universal Time (UTC) shall be used and shall be expressed in hours and minutes and, when required, by seconds of the 24-hour- Day begins at midnight.

(b) A time check shall be obtained prior to operating a controlled flight and at such other times during the flight as may be necessary.

(c) Wherever time is utilized in the application of data
link communications, it shall be accurate to within 1 second of UTC.

91.45 Visual flight Rules(General).

(a**)** Unless special VFR clearance is obtained, VFR flights shall not take off or land at an aerodrome within a control zone, or enter the aerodrome traffic zone or traffic pattern:

(1) When the ceiling is less than 450 m (1 500 ft); or

(2) When the ground visibility is less than 5 km.

(b) VFR flights between sunset and sunrise, or such other period between sunrise and sunset shall be operated in accordance with the special VFR conditions .

(c) VFR flights shall not be operated:

(1) Above FL 200;

(2) At transonic and supersonic speeds

(d) Except when necessary for take-off or landing, or except by permission from the CARC, a VFR flight shall not be flown:

(1) Over the congested areas of cities, towns or settlements or over an open-air assembly of persons at a height less than 300 m (1 000 ft) above the highest obstacle within a radius of 600m from the aircraft

(2**)** Elsewhere at a height less than 150 m (500 ft) above the ground or water.

(e**)** A VFR flight operating within or into areas, or along route designated by the ATS authority in accordance with sections 91.153 and 91.155 shall maintain continuous air-ground voice communication watch on the appropriate communication channel of, and report its position as necessary to, the air traffic services unit providing air traffic control unit .

(f) An aircraft operated in accordance with the Visual Flight Rules which wishes to change the compliance to the Instrument Flight Rules shall:

(1) If a flight plan was submitted, communicate the necessary changes to be effected to its current flight plan, or

(2) When so required as by section 91.169 submit a flight plan to the appropriate air traffic services unit and obtain a clearance prior to proceeding to IFR when in controlled airspace.

91.47 Instrument Flight Rules(General).

(a) **A**ll IFR flights shall be equipped with suitable instruments and with navigation equipment appropriate to the route to be flown .

(b) An IFR flight operating in controlled airspace shall be flown at a cruising level appropriate to its track as specified in The table of cruising levels as prescribed by Appendix -H Table of Cursing levels except when otherwise specified by the CARC for flight at or below 900 m (3 000 ft) above mean sea level.

91.49 Rules applicable to IFR flights outside controlled airspace.

(a) Cruising levels**.**

(b) An IFR flight operating in level cruising flight outside of controlled airspace shall be flown at a cruising level appropriate to its track as specified in:

(1) The Tables of cruising levels in Appendix-H except when otherwise

specified by the CARC for flight at or below 900 m (3 000 ft) above mean sea level; or

(2) A modified table of cruising levels, when so prescribed in accordance with Appendix-H for flight above FL 410.

(b) Minimum levels.

Except when necessary for take-off or landing, an IFR flight shall be flown at a level which is not below the minimum flight altitude established as follow:

(1) Over Conjusted areas and over high terrain or in mountainous areas, at a level which is at least 600 m 2 000 ft above the highest obstacle located within 8 km of the estimated position of the aircraft;

(2) Elsewhere, at a level which is at least 300 m (1000 ft) above the highest obstacle located within 8 km of the estimated position of the aircraft.

91.51 Change from IFR flight to VFR flight.

An aircraft wishes to change the conduct of its flight from compliance with the Instrument Flight Rules to compliance with the Visual Flight Rules shall, if a flight plan was submitted, notify the appropriate air traffic services unit specifically that the IFR flight is cancelled and communicate thereto the changes to be made to its current flight plan

91.53 Communications.

(a) An aircraft operating as controlled flight within Jordan or along Jordan ATC routes shall maintain an air-ground voice communication watch on the appropriate communication channel and establish two-way communication, as necessary, with the air traffic services unit providing air traffic control service the requirements for aircraft to maintain an air – ground voice communication watch remains in effect after CPDLC has been established

(b) An aircraft experience communication failure, the standards procedures for communication failure procedures shall be applied.

91.55 Position reports.

(a) Unless exempted by the appropriate Air traffic control services unit under conditions specified by that unit, a controlled IFR flight shall report to the

appropriate air traffic services unit, as soon as possible, the time and level of passing each designated compulsory reporting point, together with any other required information. Position reports shall similarly be made in relation to additional points when requested by the appropriate air traffic services unit. In the absence of designated reporting points, position reports shall be made at intervals prescribed by the appropriate air traffic services unit.

(b) Controlled flights providing position information to the appropriate air traffic services unit via data link communications (CPDLC) shall only provide voice position reports when requested.

91.57 Termination of control.

A controlled flight shall, except when landing at a controlled aerodrome, advise the appropriate ATC unit as soon as it ceases to be subject to air traffic control service.

91.59 Weather deterioration below the VMC.

When it becomes evident that flight in VMC in accordance with its current flight plan will not be practicable, a VFR flight operated as a controlled flight shall:

(a) Request an amended clearance enabling the aircraft to continue in special VFR to destination or to an alternative aerodrome, or to leave the airspace within which an ATC clearance is required; or

(b) If clearance in accordance with paragraph (a) of this section cannot be obtained, continue to operate in VMC and notify the appropriate ATC unit of the action being taken either to leave the airspace concerned or to land at the nearest suitable aerodrome; or

(c) If operated within a control zone, request authorization to operate as a special VFR flight; or

(d) Request clearance to operate in accordance with the instrument flight rules .

91.61 Potential re-clearance in flight.

(a) If prior to departure, it is anticipated that depending on fuel endurance and subject to re-clearance in flight, a decision may be taken to proceed to a revised destination aerodrome, the appropriate air traffic control units shall be so notified by the insertion in the flight plan of information concerning the revised route (where known) and the revised destination .

(b) Clearance Priority. Whenever an aircraft has requested a clearance involving priority, a report explaining the necessity for such priority shall be submitted, to the appropriate air traffic control unit

91.63 Unlawful interference.

An aircraft which is being subjected to unlawful interference shall make every endeavor to notify the appropriate ATS unit of this fact, any significant circumstances associated there with and deviations from the current flight plan necessitated by the circumstances, shall be passed immediately to the ATS unit, ATS unit shall give priority to the aircraft and shall minimize conflict with other aircraft

91.65 Interception.

Interception of civil aircraft shall be governed by the Jordan Royal Airforce according to the appropriate regulations and administrative directives issued by the CARC in compliance with the Convention on International Civil Aviation, details are found in Air Traffic Control Services manuals

91.67 Unmanned free balloons.

(a**)** Unmanned free balloons are classified as:

(1) Light .

(2) Medium.

(3) Heavy .

(b) Unmanned free balloons shall not be operated without appropriate authorization from the CARC providing that:

(1) There are no clouds or obscuring phenomena of more than four oktas coverage; or

(2) The horizontal visibility is less than 8 km.

(c)An unmanned free balloons used exclusively for meteorological purposes shall not be operated across ATS routes and / or across the Jordan territory without the appropriate authorization from Jordan CAA.

(d) An unmanned free balloon shall be operated in such a manner as to minimize hazards to persons, property or other aircraft and in accordance with the conditions specified in the following:

(1) A heavy unmanned free balloon shall not be operated in an area where ground-based SSR equipment is in use, unless it is equipped with a secondary surveillance radar transponder, with altitude reporting capability, which is continuously operating on an assigned code, or which can be turned on when necessary by the tracking station.

(2) A heavy unmanned free balloon shall not be operated between sunset and sunrise or such other period between sunrise and sunset as may be prescribed by CARC, unless the balloon and its attachments and payload, are lighted.

91.69 Documents carried in Aircraft.

No person may operate a civil aircraft, engaged in international navigation, unless it has within it the following current and approved documents, in conformity with the provisions prescribed in JCARs:

(a) Its Certificate of Registration;

(b) Its Certificate of Airworthiness;

(c) Its Certificate of Noise;

(d) The appropriate licenses for each member of crew;

(e) Its Journey Log Book;

(f) Insurance Policy;

(g) Original or certified true copy of Air Operating Certificate; for operations under JCAR Part OPS1

(h) Operation Specifications and General Operating Manual; for operations under JCAR Part OPS1;

(i) Aircraft Operating Manual;

(j) Aircraft Radio Station License;

(k) Airplane Flight Manual or Rotorcraft Flight Manual;

(l) Minimum Equipment List and Master Minimum Equipment List; for operations under JCAR Part 91.213;

(m) Cargo manifest including special loads information; for operations under JCAR Part OPS1

(n) List of passenger names and points of embarkation and destination; for operations under JCAR Part OPS1

(o) Roster of special situation passengers;

(p) Mass and balance documentation;

(q) Dangerous Goods manual; where the operator has dangerous goods permit under Jordan Civil Aviation Regulations Part Ops1.

91.71- 91.99 Reserved .

Subpart- B
Flight Rules.

91.101 Applicability.

This subpart prescribes flight rules governing the operation of an aircraft within Jordan and within 3 nautical miles from the coast of Jordan.

91.103 Preflight action.

Each pilot in command shall, before beginning a flight, become familiar with all available information concerning that flight. This information must include:

(a) For a flight under IFR or a flight not in the vicinity of an airport, weather reports and forecasts, fuel requirements, alternatives available if the planned flight cannot be completed, and any known traffic delays of which the pilot in command has been advised by ATC;

(b) For any flight, runway lengths at airports of intended use, and the following takeoff and landing distance information:

(1) For civil aircraft for which an approved Airplane or Rotorcraft Flight Manual containing takeoff and landing distance data is required, the takeoff and landing distance data contained therein; and

(2) For civil aircraft other than those specified in paragraph (b)(1) of this section, other reliable information appropriate to the aircraft, relating to aircraft performance under expected values of airport elevation and runway slope, aircraft gross weight, and wind and temperature.

91.104 Reserved.

91.105 Flight crewmembers at stations.

(a) During takeoff and landing, and while en route, each required flight crewmember shall:

(1) Be at the crewmember station unless the absence is necessary to perform duties in connection with the operation of the aircraft or in connection with physiological needs; and

(2) Keep the safety belt fastened while at the crewmember station.

(b) Each required flight crewmember of a Jordanian-registered civil aircraft shall, during takeoff and landing, keep his or her shoulder harness fastened while at his or her assigned duty station. This paragraph does not apply if :

(1)The seat at the crewmember's station is not equipped with a shoulder harness; or

(2) The crewmember would be unable to perform required duties with the shoulder harness fastened.

91.107 Use of safety belts, shoulder harnesses, and child restraint systems.

(a) Unless otherwise authorized by Chief Commissioner/CEO:

(1) No pilot may take off a Jordanian-registered civil aircraft unless the pilot in command of that aircraft ensures that each person on board is briefed on how to fasten and unfasten that person's safety belt and, if installed, shoulder harness.

(2) No pilot may cause to be moved on the surface, take off, or land a Jordanian-registered civil aircraft unless the pilot in command of that aircraft ensures that each person on board has been notified to fasten his or her safety belt and, if installed, his or her shoulder harness.

(3) Except as provided in this paragraph, each person on board a Jordanian-registered civil aircraft must occupy an approved seat or berth with a safety belt and, if installed, shoulder harness, properly secured about him or her during movement on the surface, takeoff, and landing. For seaplane and float equipped rotorcraft operations during movement on the surface, the person pushing off the seaplane or rotorcraft from the dock and the person mooring the seaplane or rotorcraft at the dock are excepted from the preceding seating and safety belt requirements. Notwithstanding the preceding requirements of this paragraph, a person may:

(i) Be held by an adult who is occupying an approved seat or berth, provided that the person being held has not reached his or her second birthday and does not occupy or use any restraining device;

(ii) Use the floor of the aircraft as a seat, provided that the person is on board for the purpose of engaging in sport parachuting; or

(iii) Notwithstanding any other requirement of JCAR, occupy an approved child restraint system furnished by the operator or one of the persons described in paragraph (a)(3)(iii)(A) of this section provided that:

(A) The child is accompanied by a parent, guardian, or attendant designated by the child's parent or guardian to attend to the safety of the child during the flight;

(B) Except as provided in paragraph (a)(3)(iii)(B)(3) of this action, the approved child restraint system bears one or more labels as follows:

(1) Seats manufactured to approved standards, must bear the label: "This child restraint system conforms to all applicable Jordanian safety standards";

(2) Seats that do not qualify under paragraphs (a)(3)(iii)(B)(1) of this section must bear either a label showing approval of a foreign government or a label showing that the seat was manufactured under the standards of the United Nations;

(3) Notwithstanding any other provision of this section, booster-type child restraint systems, vest- and harness-type child restraint systems, and lap held child restraints are not approved for use in aircraft; and

(C) The operator complies with the following requirements:

(1) The restraint system must be properly secured to an approved forward-facing seat or berth;

(2) The child must be properly secured in the restraint system and must not exceed the specified weight limit for the restraint system; and

(3) The restraint system must bear the appropriate label(s).

(b) Unless otherwise stated, this section does not apply to operations conducted under part OPS1 of JCAR. Paragraph (a)(3) of this section does not apply to persons subject to 91.105.

91.109 Flight instruction; Simulated instrument flight and certain flight tests.

(a) No person may operate a civil aircraft (except a manned free balloon) that is being used for flight instruction unless that aircraft has fully functioning dual controls. However, instrument flight instruction may be given in a single-engine airplane equipped with a single, functioning throw over control wheel in place of fixed, dual controls of the elevator and ailerons when:

(1) The instructor has determined that the flight can be conducted safely; and

(2) The person manipulating the controls has at least a private pilot certificate with appropriate category and class ratings.

(b) No person may operate a civil aircraft in simulated instrument flight unless :

(1) The other control seat is occupied by a safety pilot who possesses at least a private pilot certificate with category and class ratings appropriate to the aircraft being flown.

(2) 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; and

(3) Except in the case of lighter-than-air aircraft, that aircraft is equipped with fully functioning dual controls. However, simulated instrument flight may be conducted in a single-engine airplane, equipped with a single, functioning, throw over control wheel, in place of fixed, dual controls of the elevator and ailerons, when:

(i) The safety pilot has determined that the flight can be conducted safely; and

(ii) The person manipulating the controls has at least a private pilot certificate with appropriate category and class ratings.

(c) No person may operate a civil aircraft that is being used for a flight test for an airline transport pilot certificate or a class or type rating on that certificate, or for a part OPS1, proficiency flight test, unless the pilot seated at the controls, other than the pilot being checked, is fully qualified to act as pilot in command of the aircraft.

91.111 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 pilot in command of each aircraft in the formation.

(c) No person may operate an aircraft, carrying passengers for hire, in formation flight.

91.113 Right-of-way rules: Except water operations.

(a) Inapplicability. This section does not apply to the operation of an aircraft on water.

(b) General. When weather conditions permit, regardless of whether an operation is conducted under Instrument Flight Rules (IFR) or Visual Flight Rules (VFR), vigilance shall be maintained by each person operating an aircraft so as to see and avoid other aircraft. When a rule of this section 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.

(c) In distress. An aircraft in distress has the right-of-way over all other air traffic.

(d) Converging. 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. If the aircraft are of different categories :

(1) A balloon has the right-of-way over any other category of aircraft;

(2) A glider has the right-of-way over an airship, airplane, or rotorcraft; and

(3) An airship has the right-of-way over an airplane or rotorcraft.

However, an aircraft towing or refueling other aircraft has the right-of-way over all other engine-driven aircraft.

(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, except that they shall 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. When two or more aircraft are approaching an airport for the purpose of landing, the aircraft at the lower altitude has the right-of-way, but it shall not take advantage of this rule to cut in front of another which is on final approach to land or to overtake that aircraft.

91.115 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 section.

(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.

91.117 Aircraft speed.

(a) Unless otherwise authorized by Chief Commissioner/CEO, no person may operate an aircraft below 10,000 feet (3000 meters)MSL at an indicated airspeed of more than 250 knots (288 mph.).

(b) Unless otherwise authorized or required by ATC, no person may operate an aircraft at or below 2,500 feet (750 meters) within an airport traffic area at indicated airspeed of more than:

(1) For reciprocating powered aircraft 156 Kt.

(2) For turbine powered aircraft 200 Kt.

(3) No person may operate aircraft in the airspace beneath the lateral limits of any terminal control area at an indicated airspeed of more than 200 KT.

(c) If the minimum safe airspeed for any particular operation is greater than the maximum speed prescribed in this section, the aircraft may be operated at that minimum speed.

91.119 Minimum safe altitudes: General.

Except when necessary for takeoff or landing, with reference to 91.177and 91.515, no person may operate an aircraft below the following altitudes:

(a) Anywhere. An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.

(b) Over congested areas. Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 2,000 feet (600 meters) above the highest obstacle within a horizontal radius of 2,000 feet (600 meters) of the aircraft.

(c) Over other than congested areas. An altitude of 500 feet (150 meters) above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet (150 meters) to any person, vessel, vehicle, or structure.

(d) Helicopters. Helicopters may be operated at less than the minimums prescribed in paragraph (b) or (c) of this section if the operation is conducted without hazard to persons or property on the surface. In addition, each person operating a helicopter shall comply with any routes or altitudes specifically prescribed for helicopters by Chief Commissioner/CEO.

91.121, Altimeter settings.

(a) Each person operating an aircraft shall maintain the cruising altitude or flight level of that aircraft, as the case may be, by reference to :

(1) Flight levels for flights at or above the transition level FL150.

(2) Altitudes for flights below the transition altitude ALT 13,000 feet (3900 meters) MSL.

(b) The lowest usable flight level is determined by the atmospheric pressure in the area of operation as shown in the following table:

Current altimeter setting	**Lowest usable flight level**
1013.2 hPa (or higher)	150
1012 through 996	155
995 through 979	160
978 through 962	165
961 through 945	170
944 through 927	175
926 through 910	180

(c) To convert minimum altitude prescribed under 91.119 and 91.177 to the minimum flight level, the pilot shall take the flight level equivalent of the minimum altitude in feet and add the appropriate number of feet specified below, according to the current reported altimeter setting:

Current altimeter setting	Adjustment factor
1013.2 (or higher)	None
1012 through 996	500
995 through 979	1,000
978 through 962	1,500
961 through 945	2,000
944 through 927	2,500
926 through 910	3,000

91.123 Compliance with ATC clearances and instructions.

(a) When an ATC clearance has been obtained, no pilot in command may deviate from that clearance unless an amended clearance is obtained, an emergency exists, or the deviation is in response to a traffic alert and collision avoidance system resolution advisory. However, except in Class A airspace, a pilot may cancel an IFR flight plan if the operation is being conducted in Visual Meteorological Conditions (VMC). When a pilot is uncertain of an ATC clearance, that pilot shall immediately request clarification from ATC.

(b) Except in an emergency, no person may operate an aircraft contrary to an ATC instruction in an area in which air traffic control is exercised.

(c) Each pilot in command who, in an emergency, or in response to a traffic alert and collision avoidance system resolution advisory, deviates from an ATC clearance or instruction shall notify ATC of that deviation as soon as possible.

(d) Each pilot in command who (though not deviating from a rule of this subpart) is given priority by ATC in an emergency, shall submit a detailed report of that emergency within 48 hours to the manager of that ATC facility, if requested by ATC.

(e) Unless otherwise authorized by ATC, no person operating an aircraft may operate that aircraft according to any clearance or instruction that has been issued to the pilot of another aircraft for radar air traffic control purposes.

91.125 Operating on or in the vicinity of an airport.

An aircraft operated on or in the vicinity of an airport shall, whether or not within an airport traffic zone:

(a) Observe other airport traffic for the purpose of avoiding collision;

(b) Conform with or avoid the pattern of traffic formed by other aircraft in operation.

(c) Make all turns to the left, when approaching for a landing and after taking off, unless otherwise instructed.

(d) Land and take off into the wind unless safety, the runway configuration, or air traffic considerations determine that a different direction is preferable.

91.126 thru 91.129 (Reserved).

91.130 Operations in Class C airspace.

(a) General. Unless otherwise authorized by ATC, each aircraft operation in Class C airspace must be conducted in compliance with this section. For the purpose of this section, the primary airport is the airport for which the Class C airspace area is designated. A satellite airport is any other airport within the Class C airspace area.

(b) Traffic patterns. No person may take off or land an aircraft at a satellite airport within a Class C airspace area except in compliance with CARC arrival and departure traffic patterns.

(c) Communications. Each person operating an aircraft in Class C airspace must meet the following two-way radio communications requirements:

(1) Arrival or through flight. Each person must establish two-way radio communications with the ATC facility providing air traffic services prior to entering that airspace and thereafter maintain those communications while within that airspace.

(2) Departing flight. Each person:

(i) From the primary airport or satellite airport with an operating control tower must establish and maintain two-way radio communications with the control tower, and thereafter as instructed by ATC while operating in the Class C airspace area; or

(ii) From a satellite airport without an operating control tower, must establish and maintain two-way radio communications with the ATC facility having jurisdiction over the Class C airspace area as soon as practicable after departing.

(d) Equipment requirements. Unless otherwise authorized by the ATC having jurisdiction over the Class C airspace area, no person may operate an aircraft within a Class C airspace area designated for an airport unless that aircraft is equipped with the applicable equipment specified in 91.215.

(e) Deviations. An operator may deviate from any provision of this section under the provisions of an ATC authorization issued by the ATC facility having jurisdiction over the airspace concerned. ATC may authorize a deviation on a continuing basis or for an individual flight, as appropriate.

91.131 (Reserved).

91.133 Restricted and prohibited areas.

(a) No person may operate an aircraft within a restricted area contrary to the restrictions imposed, or within a prohibited area, unless that person has the permission of the using or controlling agency, as appropriate.

(b) Each person conducting, within a restricted area, an aircraft operation (approved by the using agency) that creates the same hazards as the operations for which the restricted area was designated may deviate from the rules of this subpart that are not compatible with the operation of the aircraft.

91.135 Operations in Class A airspace.

Except as provided in paragraph (d) of this section, each person operating an aircraft in Class A airspace must conduct that operation under instrument flight rules (IFR) and in compliance with the following:

(a) Clearance. Operations may be conducted only under an ATC clearance received prior to entering the airspace.

(b) Communications. Unless otherwise authorized by ATC, each aircraft operating in Class A airspace must be equipped with a two-way radio capable of communicating with ATC on a frequency assigned by ATC. Each pilot must maintain two-way radio communications with ATC while operating in Class A airspace.

(c) Transponder requirement. Unless otherwise authorized by ATC, no person may operate an aircraft within Class A airspace unless that aircraft is equipped with the applicable equipment specified in 91.215.

(d) ATC authorizations. An operator may deviate from any provision of this section under the provisions of an ATC authorization issued by the ATC facility having jurisdiction of the airspace concerned. In the case of an inoperative transponder, ATC may immediately approve an operation within a Class A airspace area allowing flight to continue, if desired, to the airport of ultimate destination, including any intermediate stops, or to proceed to a place where suitable repairs can be made, or both. Requests for deviation from any provision of this section must be submitted in writing, at least 4 days before the proposed operation. ATC may authorize a deviation on a continuing basis or for an individual flight.

91.137 Temporary flight restrictions in the vicinity of disaster/hazard areas.

(a) Chief Commissioner/CEO will issue a Notice to Airmen (NOTAM) designating an area within which temporary flight restrictions apply and specifying the hazard or condition requiring their imposition, whenever he determines it is necessary in order to:

(1) Protect persons and property on the surface or in the air from a hazard associated with an incident on the surface;

(2) Provide a safe environment for the operation of disaster relief aircraft; or

(3) Prevent an unsafe congestion of sightseeing and other aircraft above an incident or event which may generate a high degree of public interest.
The Notice to Airmen will specify the hazard or condition that requires the imposition of temporary flight restrictions.

(b) When a NOTAM has been issued under paragraph (a)(1) of this section, no person may operate an aircraft within the designated area unless that aircraft is participating in the hazard relief activities and is being operated under the direction of the official in charge of on scene emergency response activities.

(c) When a NOTAM has been issued under paragraph (a)(2) of this section, no person may operate an aircraft within the designated area unless at least one of the following conditions are met:

(1) The aircraft is participating in hazard relief activities and is being operated under the direction of the official in charge of on scene emergency response activities.

(2) The aircraft is carrying law enforcement officials.

(3) The aircraft is operating under the ATC approved IFR flight plan.

(4) The operation is conducted directly to or from an airport within the area, or is necessitated by the impracticability of VFR flight above or around the area due to weather, or terrain; notification is given to ATC facility specified in the NOTAM to receive advisories concerning disaster relief aircraft operations; and the operation does not hamper or endanger relief activities and is not conducted for the purpose of observing the disaster.

(5) The aircraft is carrying properly accredited news representatives, and, prior to entering the area, a flight plan is filed with the appropriate CARC or ATC facility specified in the Notice to Airmen and the operation is conducted above the altitude used by the disaster relief aircraft, unless otherwise authorized by the official in charge of on scene emergency response activities.

(d) When a NOTAM has been issued under paragraph (a)(3) of this section, no person may operate an aircraft within the designated area unless at least one of the following conditions is met:

(1) The operation is conducted directly to or from an airport within the area, or is necessitated by the impracticability of VFR flight above or around the area due to weather or terrain, and the operation is not conducted for the purpose of observing the incident or event.

(2) The aircraft is operating under an ATC approved IFR flight plan.

(3) The aircraft is carrying incident or event personnel, or law enforcement officials.

(4) The aircraft is carrying properly accredited news representatives and, prior to entering that area, a flight plan is filed with the appropriate FSS or ATC facility specified in the NOTAM.

(e) Flight plans filed and notifications made with an FSS or ATC facility under this section shall include the following information:

(1) Aircraft identification, type and color.

(2) Radio communications frequencies to be used.

(3) Proposed times of entry of, and exit from, the designated area.

(4) Name of news media or organization and purpose of flight.

(5) Any other information requested by ATC.

91.139 Emergency air traffic rules.

(a) This section prescribes a process for utilizing Notices to Airmen (NOTAMs) to advise of the issuance and operations under emergency air traffic rules and regulations and designates the official who is authorized to issue NOTAMs on behalf of Chief Commissioner/CEO in certain matters under this section.

(b) Whenever Chief Commissioner/CEO determines that an emergency condition exists, or will exist, relating to CARC ability to operate the air traffic control system and during which normal flight operations under JCAR cannot be conducted consistent with the required levels of safety and efficiency:

(1) Chief Commissioner/CEO issues an immediately effective air traffic rule or regulation in response to that emergency condition; and

(2) Chief Commissioner/CEO may utilize the NOTAM system to provide notification of the issuance of the rule or regulation.

Those NOTAMs communicate information concerning the rules and regulations that govern flight operations, the use of navigation facilities, and designation of that airspace in which the rules and regulations apply.

(c) When a NOTAM has been issued under this section, no person may operate an aircraft, or other device governed by the regulation concerned, within the designated airspace except in accordance with the authorizations, terms, and conditions prescribed in the regulation covered by the NOTAM.

91.141 Flight restrictions in the proximity of Royal flights and other parties.

No person may operate an aircraft over or in the vicinity of any area to be visited or traveled by His Majesty The King, or other public figures contrary to the restrictions established by Chief Commissioner/CEO and published in a Notice to Airmen (NOTAM).

91.143 Reserved.

91.144 Temporary restriction on flight operations during abnormally high barometric pressure conditions.

(a) Special flight restrictions. When any information indicates that barometric pressure on the route of flight currently exceeds or will exceed 31 inches of mercury, no person may operate an aircraft or initiate a flight contrary to the requirements established by Chief Commissioner/CEO and published in a Notice to Airmen issued under this section.

(b) Waivers. Chief Commissioner/CEO is authorized to waive any restriction issued under paragraph (a) of this section to permit emergency supply, transport, or medical services to be delivered to isolated communities, where the operation can be conducted with an acceptable level of safety.

91.145 Management of aircraft operations in the vicinity of aerial demonstrations and major sporting events.

(a) CARC will issue a Notice to Airmen (NOTAM) designating an area of airspace in which a temporary flight restriction applies when it determines that a temporary flight restriction is necessary to protect persons or property on the surface or in the air, to maintain air safety and efficiency, or to prevent the unsafe congestion of aircraft in the vicinity of an aerial demonstration or major sporting event.

(b) In deciding whether a temporary flight restriction is necessary for an aerial demonstration or major sporting event, CARC considers the following factors:

(1) Area where the event will be held.

(2) Effect flight restrictions will have on known aircraft operations.

(3) Any existing ATC airspace traffic management restrictions.

(4) Estimated duration of the event.

(5) Degree of public interest.

(6) Number of spectators.

(7) Provisions for spectator safety.

(8) Number and types of participating aircraft.

(9) Use of mixed high and low performance aircraft.
(10) Impact on non-participating aircraft.

(11) Weather minimums.

(12) Emergency procedures that will be in effect.

(c) A NOTAM issued under this section will state the name of the aerial demonstration or sporting event and specify the effective dates and times, the geographic features or coordinates, and any other restrictions or procedures governing flight operations in the designated airspace.

(d) When a NOTAM has been issued in accordance with this section, no person may operate an aircraft or device, or engage in any activity within the designated airspace area, except in accordance with the authorizations, terms, and conditions of the temporary flight restriction published in the NOTAM, unless otherwise authorized by Chief Commissioner/CEO.

(e) For the purpose of this section:

(1) Flight restricted airspace area for an aerial demonstration - The amount of airspace needed to protect persons and property on the surface or in the air, to maintain air safety and efficiency, or to prevent the unsafe congestion of aircraft will vary depending on the aerial demonstration and the factors listed in paragraph (b) of this section. The restricted airspace area will normally be limited to a 5 nautical mile radius from the center of the demonstration and an altitude 15000 feet (4500 meters) mean sea level (for high performance aircraft) or 12000 feet (3600 meters) above the surface (for certain parachute operations), but will be no greater than the minimum airspace necessary for the management of aircraft operations in the vicinity of the specified area.

(2) Flight restricted area for a major sporting event. The amount of airspace needed to protect persons and property on the surface or in the air, to maintain air safety and efficiency, or to prevent the unsafe congestion of aircraft will vary depending on the size of the event and the factors listed in paragraph (b) of this section. The restricted airspace will normally be limited to a 5 km radius from the center of the event and 2500 feet (750 meters) above the surface but will not be greater than the minimum airspace necessary for the management of aircraft operations in the vicinity of the specified area.

(f) A NOTAM issued under this section will be issued at least 30 days in advance of an aerial demonstration or a major sporting event, unless CARC finds good cause for a shorter period and explains this in the NOTAM.

(g) When warranted, Chief Commissioner/CEO may exclude the following flights from the provisions of this section:

(1) Royal.

(2) Essential military.

(3) Medical and rescue.

(4) Visiting heads of state.

(5) Law enforcement and security.

(6) Public health and welfare.

Visual Flight Rules

91.151 Fuel requirements for flight in VFR conditions.

(a) No person may begin a flight in an airplane under VFR unless (considering wind and forecast weather conditions) there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed :

(1) During the day, to fly after that for at least 30 minutes; or

(2) At night, to fly after that for at least 45 minutes.

(b) No person may begin a flight in a rotorcraft under VFR unless (considering wind and forecast weather conditions) there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed, to fly after that for at least 20 minutes.

91.153 VFR flight plan: Information required.

(a) Information required. Unless otherwise authorized by ATC, each person filing a VFR flight plan shall include in it the following information:

(1) The aircraft identification number and, if necessary, its radio call sign.

(2) The type of the aircraft or, in the case of a formation flight, the type of each aircraft and the number of aircraft in the formation and wake turbulence category.

(3) The point and proposed time of departure.

(4) The proposed route, cruising altitude (or flight level), and cruising airspeed at that altitude.

(5) The point of first intended landing and the estimated elapsed time until over that point.

(6) Alternate airport

(7) The amount of fuel on board (in hours).

(8) The number of persons in the aircraft, except where that information is otherwise readily available to CARC.

(9) Equipment.

(10) Emergency and survival equipment.

(11) Any other information the pilot in command or ATC believes is necessary for ATC purposes.

(b) Cancellation. When a flight plan has been activated, the pilot in command, upon canceling or completing the flight under the flight plan, shall notify AIS or ATC facility.

91.155 Basic VFR weather minimums.

(a) Except as provided in paragraph (b) of this section and 91.157, no person may operate an aircraft under VFR when the flight visibility is less, or at a distance from clouds that is less, than that prescribed for the corresponding altitude and class of airspace in the following table:

Airspace	**Flight visibility**	**Distance from clouds**
Class A	Not Applicable	Not Applicable
Class C	8 km at and above 10000 feet AMSL 5 km below 10000 feet AMSL	1500 meters horizontally 1000 feet vertically.
Class G: Above 3000 feet AMSL or above 1000 feet above surface, whichever is the higher At and below 3000 feet AMSL or 1000 feet above surface whichever is the higher.	8 km at and above 10000 feet AMSL 5 km below 10000 feet AMSL 5 km	1500 meters horizontally 1000 feet vertically. Clear of clouds and insight of the surface.

VFR flight shall not be operated above FL150.
VFR flights shall be not be operated between sunset and sunrise within controlled airspace. Special authorization may, however, be obtained from Chief Commissioner/CEO.

(b) Class G Airspace. Notwithstanding the provisions of paragraph (a) of this section, the following operations may be conducted in Class G airspace below 1000 feet above the surface:

(1) At and below (1000)ft 300m above the terrain, flight at speed not exceeding 140 knots IAS may operate with flight visibility of not less than 3 km, or not less than 1.5 km when flight conducted in an aerodrome traffic circuit and the pilot has the aerodrome in sight.

(2) Helicopter may, in the same air space operate with flight visibility less than 800 m , at a speed that will aloe adequate opportunity to see other traffic or any obstruction to avoid collision.

(c) Except as provided in 91.157, no person may operate an aircraft beneath the ceiling under VFR within the lateral boundaries of controlled airspace designated to the surface for an airport when the ceiling is less than 1500 feet (450 meters).

(d) Except as provided in 91.157 of this part, no person may take off or land an aircraft, or enter the traffic pattern of an airport, under VFR, within the lateral boundaries of the surface areas of Class C airspace designated for an airport:

(1) Unless ground visibility at that airport is at least 5 kilometers; or

(2) If ground visibility is not reported at that airport, unless flight visibility during landing or takeoff, or while operating in the traffic pattern is at least 5 kilometers.

91.157 Special VFR weather minimums.

(a) Special VFR operations may be conducted under the weather minimums and requirements of this section, instead of those contained in 91.155, below 10,000 feet (3000 meters) MSL within the airspace contained by the upward extension of the lateral boundaries of the controlled airspace designated to the surface for an airport.

(b) Special VFR operations may only be conducted:

(1) With an ATC clearance;

(2) Clear of clouds;

(3) Except for helicopters, when flight visibility is at least 1500 meters; and

(4) Except for helicopters, between sunrise and sunset unless:

(i) The person being granted the ATC clearance meets the applicable requirements for instrument flight under part FCL1 of JCAR; and

(ii) The aircraft is equipped as required in 91.205(d).

(c) No person may take off or land an aircraft (other than a helicopter) under special VFR:

(1) Unless ground visibility is at least 1500 meters; or

(2) If ground visibility is not reported, unless flight visibility is at least 1500 meters. For the purposes of this paragraph, the term flight visibility includes the visibility from the cockpit of an aircraft in takeoff position if the flight is conducted under this part .

(d) The determination of visibility by a pilot in accordance with paragraph (c)(2) of this section is not an official weather report or an official ground visibility report.

91.159 VFR cruising altitude.

Each person operating an aircraft under VFR in level cruising flight more than 3,000 feet (900 meters) above the surface shall maintain the appropriate altitude prescribed below, unless otherwise authorized by ATC:

(a) On a magnetic course of zero degrees through 179 degrees, any odd thousand foot MSL altitude +500 feet (such as 3,500, 5,500, or 7,500); or

(b) On a magnetic course of 180 degrees through 359 degrees, any even thousand foot MSL altitude +500 feet (such as 4,500, 6,500, or 8,500).

91.161-91.165 [Reserved].

Instrument Flight Rules.

91.167 Fuel requirements for flight in IFR conditions.

(a) No person may operate a civil aircraft in IFR conditions unless it carries enough fuel (considering weather reports and forecasts and weather conditions) to:

(1) Complete the flight to the first airport of intended landing;

(2) Except as provided in paragraph (b) of this section, fly from that airport to the alternate airport; and

(3) Fly after that for 45 minutes at normal cruising speed or, for helicopters, fly after that for 30 minutes at normal cruising speed.

(b) Paragraph (a)(2) of this section does not apply if:

(1) Part 97 of JCAR prescribes a standard instrument approach procedure to, or a special instrument approach procedure has been issued by Chief Commissioner/CEO to the operator for, the first airport of intended landing; and

(2) Appropriate weather reports or weather forecasts, or a combination of them, indicate the following:

(i) For aircraft other than helicopters. For at least 1 hour before and for 1 hour after the estimated time of arrival, the ceiling will be at least 2,000 feet (600 meters) above the airport elevation and the visibility will be at least 5 kilometers.

(ii) For helicopters. At the estimated time of arrival and for 1 hour after the estimated time of arrival, the ceiling will be at least 1,000 feet (300 meters) above the airport elevation, or at least 400 feet (120 meters) above the lowest applicable approach minima, whichever is higher, and the visibility will be at least 3 kilometers.

91.169 IFR flight plan: Information required.

(a) Information required. Unless otherwise authorized by ATC, each person filing an IFR flight plan must include in it the following information:

(1) Information required under 91.153 (a) of this part;

(2) Except as provided in paragraph (b) of this section, an alternate airport.

(b) Paragraph (a)(2) of this section does not apply if:

(1) A special instrument approach procedure has been issued by Chief Commissioner/CEO to the operator for, the first airport of intended landing; and

(2) Appropriate weather reports or weather forecasts, or a combination of them, indicate the following:

(i) For aircraft other than helicopters. For at least 1 hour before and for 1 hour after the estimated time of arrival, the ceiling will be at least 2,000 feet (600 meters) above the airport elevation and the visibility will be at least 5 kilometers.

(ii) For helicopters. At the estimated time of arrival and for 1 hour after the estimated time of arrival, the ceiling will be at least 1,000 feet (300 meter) above the airport elevation, or at least 400 feet (120 meters) above the lowest applicable approach minima, whichever is higher, and the visibility will be at least 3 kilometers.

(c) IFR alternate airport weather minima. Unless otherwise authorized by Chief Commissioner/CEO, no person may include an alternate airport in an IFR flight plan unless appropriate weather reports or weather forecasts, or a combination of them, indicate that, at the estimated time of arrival at the alternate airport, the ceiling and visibility at that airport will be at or above the following weather minima:

(1) If a special instrument approach procedure has been issued by Chief Commissioner/CEO to the operator, for that airport, the following minima:

(i) For aircraft other than helicopters*:* The alternate airport minima specified in that procedure, or if none are specified the following standard approach minima:

(A) For a precision approach procedure. Ceiling 600 feet (180 meters) and visibility 3 kilometers.

(B) For a nonprecision approach procedure. Ceiling 800 feet (240 meters) and visibility 3 kilometers.

(ii) For helicopters*:* Ceiling 200 feet (60 meters) above the minimum for the approach to be flown, and visibility at least 1 statute mile but never less than the minimum visibility for the approach to be flown, and

(2) If no special instrument approach procedure has been issued by Chief Commissioner/CEO to the operator, for the alternate airport, the ceiling and

visibility minima are those allowing descent from the MDA, approach, and landing under basic VFR.

(d) Cancellation. When a flight plan has been filed, the pilot in command, upon canceling or completing the flight under the flight plan, shall notify CARC or ATC facility.

91.171 VOR equipment check for IFR operations.

(a) No person may operate a civil aircraft under IFR using the VOR system of radio navigation unless the VOR equipment of that aircraft:

(1) Is maintained, checked, and inspected under an approved procedure; or

(2) Has been operationally checked within the preceding 30 days, and was found to be within the limits of the permissible indicated bearing error set forth in paragraph (b) or (c) of this section.

(b) Except as provided in paragraph (c) of this section, each person conducting a VOR check under paragraph (a)(2) of this section shall :

(1) Use, at the airport of intended departure, CARC-operated or approved test signal or a test signal radiated by a certificated and appropriately rated radio repair station or, outside Jordan, a test signal operated or approved by an appropriate authority to check the VOR equipment (the maximum permissible indicated bearing error is plus or minus 4 degrees); or

(2) Use, at the airport of intended departure, a point on the airport surface designated as a VOR system checkpoint by Chief Commissioner/CEO, or, outside Jordan, by an appropriate authority (the maximum permissible bearing error is plus or minus 4 degrees);

(3) If neither a test signal nor a designated checkpoint on the surface is available, use an airborne checkpoint designated by Chief Commissioner/CEO or, outside Jordan, by an appropriate authority (the maximum permissible bearing error is plus or minus 6 degrees); or

(4) If no check signal or point is available, while in flight:

(i) Select a VOR radial that lies along the centerline of an established VOR airway;

(ii) Select a prominent ground point along the selected radial preferably more than 20 nautical miles from the VOR ground facility and maneuver the aircraft directly over the point at a reasonably low altitude; and
(iii) Note the VOR bearing indicated by the receiver when over the ground point (the maximum permissible variation between the published radial and the indicated bearing is 6 degrees).

(c) If dual system VOR (units independent of each other except for the antenna) is installed in the aircraft, the person checking the equipment may check one system against the other in place of the check procedures specified in paragraph (b) of this section. Both systems shall be tuned to the same VOR ground facility and note the indicated bearings to that station. The maximum permissible variation between the two indicated bearings is 4 degrees.

(d) Each person making the VOR operational check, as specified in paragraph (b) or (c) of this section, shall enter the date, place, bearing error, and sign the aircraft log or other record. In addition, if a test signal radiated by a repair station, as specified in paragraph (b)(1) of this section, is used, an entry must be made in the aircraft log or other record by the repair station certificate holder or the certificate holder's representative certifying to the bearing transmitted by the repair station for the check and the date of transmission.

91.173 ATC clearance and flight plan required

No person may operate an aircraft in controlled airspace under IFR/VFR unless that person has:

(a) Filed a flight plan; and

(b) Received an appropriate ATC clearance.

91.175 Takeoff and landing under IFR.

(a) Instrument approaches to civil airports.
Unless otherwise authorized by Chief Commissioner/CEO, when an instrument letdown to a civil airport is necessary, each person operating an aircraft, except a military aircraft of Jordan, shall use a standard instrument approach procedure prescribed for the airport in applicable regulations.

(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 pilot in command.

(3) The DH or MDA for which the aircraft is equipped.

(c) Operation below DH or MDA. Where a DH or MDA is applicable, no pilot may operate an aircraft, except a military aircraft of Jordan, at any airport 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 maneuvers, and for operations conducted under part OPS1, or part OPS1unless that descent rate will allow touchdown to occur within the touchdown zone of the runway of intended landing;

(2) The flight visibility is not less than the visibility prescribed in the standard instrument approach being used; and

(3) Except for a Category II or Category III approach where any necessary visual reference requirements are specified by Chief Commissioner/CEO, at least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:

(i) The approach light system, except that the pilot may not descend below 100 feet (30 meters) 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.

(ii) The threshold.

(iii) The threshold markings.

(iv) The threshold lights.

(v) The runway end identifier lights.

(vi) The visual approach slope indicator.

(vii) The touchdown zone or touchdown zone markings.

(viii) The touchdown zone lights.

(ix) The runway or runway markings.
(x) The runway lights.

(d) Landing. No pilot operating an aircraft, except a military aircraft of Jordan, may land that aircraft when the flight visibility is less than the visibility prescribed in the standard instrument approach procedure being used.

(e) Missed approach procedures. Each pilot operating an aircraft, except a military aircraft of Jordan, shall immediately execute an appropriate missed approach procedure when either of the following conditions exist:

(1) Whenever the requirements of paragraph (c) of this section are not met at either of the following times:

(i) When the aircraft is being operated below MDA; or

(ii) 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 airport is not distinctly visible to the pilot during a circling maneuver at or above MDA, unless the inability to see an identifiable part of the airport results only from a normal bank of the aircraft during the circling approach.

(f) Civil airport takeoff minimums. Unless otherwise authorized by Chief Commissioner/CEO, no pilot operating an aircraft under part OPS1 of JCAR may take off from a civil airport under IFR unless weather conditions are at or above the weather minimum for IFR takeoff prescribed for that airport. If takeoff minimums are not prescribed Chief Commissioner/CEO for a particular airport, the following minimums apply to takeoffs under IFR for aircraft operating under those parts:

(1) For aircraft, other than helicopters, having two engines or less – 1500 meters visibility.

(2) For aircraft having more than two engines 750 meters visibility.

(3) For helicopters 750 meters visibility.

(g) Military airports. Unless otherwise prescribed by Chief Commissioner/CEO, each person operating a civil aircraft under IFR into or out of a military airport shall comply with the instrument approach procedures and the takeoff and landing minimum prescribed by the military authority having jurisdiction of that airport.

(h) Comparable values of RVR and ground visibility.

(1) Except for Category II or Category III minimums, if RVR minimums for takeoff or landing are prescribed in an instrument approach procedure, but RVR is not reported for the runway of intended operation, the RVR minimum shall be converted to ground visibility in accordance with the table in paragraph (h)(2) of this section and shall be the visibility minimum for takeoff or landing on that runway.

(2) ILS Table:

I LS CAT	**RVR (meters)**	**Visibility (meters)**
CAT I 200 feet (60 meters)	550	800
CAT II 100 feet (30 meters)	350	500
CAT IIIa 0 feet (0 meters)	200	300
CAT IIIb 0 feet (0 meters)	100	150
CAT IIIc 0 feet (0 meters)	50	75

(i) Operations on unpublished routes and use of radar in instrument approach procedures. When radar is approved at certain locations for ATC purposes, it may be used not only for surveillance and precision radar approaches, as applicable, but also may be used in conjunction with instrument approach procedures predicated on other types of radio navigational aids. Radar vectors may be authorized to provide course guidance through the segments of an approach to the final course or fix. When operating on an unpublished route or while being radar vectored, the pilot, when an approach clearance is received, shall, in addition to complying with 91.177, maintain the last altitude assigned to that pilot until the aircraft is established on a segment of a published route or instrument approach procedure unless a different altitude is assigned by ATC. After the aircraft is so established, published altitudes apply to descent within each succeeding route or approach segment unless a different altitude is assigned by ATC. Upon reaching the final approach course or fix, the pilot may either complete the instrument approach in accordance with a procedure approved for the facility or continue a surveillance or precision radar approach to a landing.

(j) Limitation on procedure turns. In the case of a radar vector to a final approach course or fix, a timed approach from a holding fix, or an approach for which the procedure specifies "No PT," no pilot may make a procedure turn unless cleared to do so by ATC.

(k) ILS components. The basic ground components of an ILS are the localizer, glide slope, outer marker, middle marker, and, when installed for use with Category II or Category III instrument approach procedures, an inner marker. A compass locator or precision radar may be substituted for the outer or middle marker. DME, VOR, or nondirectional beacon fixes authorized in the standard instrument approach procedure or surveillance radar may be substituted for the outer marker. Applicability of, and substitution for, the inner marker for Category II or III approaches is determined by approved approach procedure, letter of authorization, or operations specification pertinent to the operations.

91.177 Minimum altitudes for IFR operations.

(a) Operation of aircraft at minimum levels. Except when necessary for takeoff or landing, no person may operate an aircraft under IFR below:

(1) The applicable minimum levels prescribed in applicable regulations; or

(2) If no applicable minimum level is prescribed in those parts:

(i) In the case of operations over an area designated as a mountainous area in AIP, a level of 2,000 feet (600 meters) above the highest obstacle within a horizontal distance of 8 kilometers of the estimated location of the aircraft; or

(ii) In any other case, at a level of 1,000 feet (300 meters) above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown.

(b) Climb. Climb to a higher minimum IFR altitude shall begin immediately after passing the point beyond which that minimum altitude applies, except that when ground obstructions intervene, the point beyond which that higher minimum altitude applies shall be crossed at or above the applicable MCA.

91.179 IFR cruising altitude or flight level including RVSM.

In controlled airspace. Each person operating an aircraft under IFR in level cruising flight in controlled airspace shall maintain the altitude or flight level assigned to that aircraft by ATC. However, if the ATC clearance assigns "VFR

conditions on-top," that person shall maintain an altitude or flight level as prescribed by 91.159.

(a) When operating below 13000 feet (3900 meters) MSL and:

(1) On a magnetic course of zero degrees through 179 degrees, any odd thousand foot MSL altitude (such as 3,000, 5,000, or 7,000); or

(2) On a magnetic course of 180 degrees through 359 degrees, any even thousand foot MSL altitude (such as 2,000, 4,000, or 6,000).

(b) When operating at or above 15000 feet(4500 meters) MSL but below flight level 290, and :

(1) On a magnetic course of zero degrees through 179 degrees, any odd flight level (such as 190, 210, 230, 250, 270); or

(2) On a magnetic course of 180 degrees through 359 degrees, any even flight level (such as 180, 200, 220. 240, 260, 280).

(c) Within RVSM airspace, air traffic control (ATC) separates aircraft by a minimum of 1,000 feet vertically between flight level (FL) 290 and FL 410 inclusive.

(1) On a .magnetic track of zero degrees through 179 degrees, at odd flight levels up to 410 flight level; i.e. FL 290, 310, 350, 370. 390. 410.

(2) On a magnetic track of 180 degrees through 359 degrees, at even flight levels up to 410 flight levels; i.e. FL 300, 320…….400.

(d) When operating at flight level 430 and above, and:

(1) On a magnetic course of zero degrees through 179 degrees, any flight level, at 4,000 feet (1200 meters) intervals, beginning at and including flight level 450

(2) On a magnetic course of 180 degrees through 359 degrees, any flight level, at 4,000 feet (1200 meters) intervals, beginning at and including flight level 430.

91.181 Course to be flown.

Unless otherwise authorized by ATC, no person may operate an aircraft within controlled airspace under IFR except as follows:

(a) On ATS routes, along the centerline of that route.

(b) On any other route, along the direct course between the navigational aids or fixes defining that route. However, this section does not prohibit maneuvering the aircraft to pass well clear of other air traffic or the maneuvering of the aircraft in Visual Meteorological Conditions (VMC) to clear the intended flight path both before and during climb or descent.

91.183 IFR radio communications and position report.

The pilot in command of each 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:

(a) The time and level 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;

(b) Any unforecast weather conditions encountered; and

(c) Any other information relating to the safety of flight.

91.185 IFR operations: Two-way radio communications failure.

(a) General. Unless otherwise authorized by ATC, each pilot who has two-way radio communications failure when operating under IFR shall comply with the rules of this section.

(b) VMC conditions. If the failure occurs in VMC conditions, or if VMC conditions are encountered after the failure, each pilot shall:

(1) Set transponder to Code 7600;

(2) Continue the flight under VMC;

(3) Land at the nearest suitable airport; and

(4) Report its arrival time by the most expeditious means to ATC.

(c) Instrument Meteorological Conditions (IMC). If the failure occurs in IMC , or if paragraph (b) of this section cannot be complied with, each pilot shall :

(1) Set transponder to Code 7600;

(2) Maintain for a period of 7 minutes the last assigned speed and level or the minimum flight altitude, if the flight altitude is higher than the last assigned level. The period of 7 minutes commences:

(i) If operating on a route without compulsory reporting points or if instructions have been received to omit position reports:

(A) At the time the last assigned level or minimum flight altitude is reached or

(B) At the time the transponder is set to Code 7600, whichever is later ; or

(ii) If operating on a route with compulsory reporting points and no instruction to omit position reports has been received.

(A) At the time the last assigned level or minimum flight altitude is reached, or

(B) At the previously reported pilot estimate for the compulsory reporting point, or

(C) At the time of a failed report of position over a compulsory reporting point whichever is later;

(3) Thereafter, adjust level and speed in accordance with the filed flight plan.

(4) If being radar vectored or proceeding offset according to RNAV without a specified limit, proceed in the most direct manner possible to rejoin the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude.

(5) Proceed according to the current flight plan route to the appropriate designated navigation aid serving the destination aerodrome and, when required compliance with (c) (6) of this section, hold over this aid until commencement of descent.

(6) Commence descent from the navigation aid specified in (c) (5) of this section, or as possible to, the expected approach time last received and acknowledged or, if no expected approach time has been received and

acknowledged, at, or as close as possible to, the estimated time of arrival resulting from the current flight plan.

(7) Complete a normal instrument approach procedure as specified for the designated navigation aid; and

(8) Land, if possible, within thirty minutes after the estimated time of arrival specified in 5.3.1 f) or the last acknowledged expected approach time, whichever is later.

91.187 Operation under IFR in controlled airspace: Malfunction reports.

(a) The pilot in command 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 required by paragraph (a) of this section, the pilot in command 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.

91.189 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 flight crew of the aircraft consists of a pilot in command and a second in command who hold the appropriate authorizations and ratings prescribed in part FCL1 of JCAR;

(2) Each flight crewmember 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 Chief Commissioner/CEO, 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) Authorized DH. For the purpose of this section, 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 pilot in command.

(3) The DH for which the aircraft is equipped.

(d) Unless otherwise authorized by Chief Commissioner/CEO, 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 maneuvers, 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:

(i) The approach light system, except that the pilot may not descend below 100 feet (30 meters) 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.

(ii) The threshold.

(iii) The threshold markings.

(iv) The threshold lights.

(v) The touchdown zone or touchdown zone markings.

(vi) The touchdown zone lights.

(e) Unless otherwise authorized by Chief Commissioner/CEO, 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.

(f) No person operating an aircraft using a Category III approach without decision height may land that aircraft except in accordance with the provisions of the letter of authorization issued by Chief Commissioner/CEO.

(g) Paragraphs (a) through (f) of this section do not apply to operations conducted by the holders of certificates issued under part OPS1 of JCAR. No person may operate a civil aircraft in a Category II or Category III operation conducted by the holder of a certificate issued under part OPS1of JCAR unless the operation is conducted in accordance with that certificate holder's operations specifications.

91.191 Category II and Category III manual.

(a) Except as provided in paragraph (c) of this section, after January1,2005 , no person may operate a Jordanian-registered 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 Chief Commissioner/CEO.

(c) This section does not apply to operations conducted by a holder of a certificate issued under part OPS1of JCAR.

91.193 Certificate of authorization for certain Category II operations.

Chief Commissioner/CEO may issue a certificate of authorization authorizing deviations from the requirements of 91.189, 91.191, and 91.205(f) for the operation of small aircraft identified as Category A aircraft in Category II operations if Chief Commissioner/CEO finds that the proposed operation can be safely conducted under the terms of the certificate. Such authorization does not permit operation of the aircraft carrying persons or property for compensation or hire.

91.195 Aircraft Interception.

The pilot-in-command of a civil aircraft, when intercepted, shall comply with the Standards in Appendix D, Sections 2 and 3, interpreting and responding to visual signals as specified the Tables (Table –1, Table A-2 , Table A-3 in Appendix D).

91.197 - 91.199 [Reserved].

Subpart- C
Equipment, Instrument, and Certificate Requirements

91.201 [Reserved]

91.203 Civil aircraft: Certifications required.

(a) Except as provided in 91.715, no person may operate a civil aircraft unless it has within it the following:

(1) An appropriate and current airworthiness certificate. Each Jordanian airworthiness certificate used to comply with this subparagraph (except a special flight permit, a copy of the applicable operations specifications issued under 21.197(c) of JCAR, appropriate sections of the air carrier manual required by part OPS1 of JCAR containing that portion of the operations specifications issued under 21 or an authorization under 91.611) must have on it the registration number assigned to the aircraft under part 47 of JCAR. However, the airworthiness certificate need not have on it an assigned special identification number before 10 days after that number is first affixed to the aircraft. A revised airworthiness certificate having on it an assigned special identification number, that has been affixed to an aircraft, may only be obtained upon application to CARC.

(b) No person may operate a civil aircraft unless the airworthiness certificate required by paragraph (a) of this section or a special flight authorization issued under 91.715 is displayed at the cabin or cockpit entrance so that it is legible to passengers or crew.

(c) No person may operate an aircraft with a fuel tank installed within the passenger compartment or a baggage compartment unless the installation was accomplished pursuant to part M of JCAR, and a copy of CARC Form 337 authorizing that installation is on board the aircraft.

(d) No person may operate a civil airplane (domestic or foreign) into or out of an airport in Jordan unless it complies with the fuel venting and exhaust emissions requirements of part 34 of JCAR.

91.205 Powered civil aircraft with standard category Jordanian airworthiness certificates: Instrument and equipment requirements.

(a) General. Except as provided in paragraphs (c)(3) and (e) of this section, no person may operate a powered civil aircraft with a standard category Jordanian airworthiness certificate in any operation described in paragraphs (b) through (f) of this section unless that aircraft contains the instruments and equipment specified in those paragraphs (or CARC-approved equivalents) for that type of operation, and those instruments and items of equipment are in operable condition.

(b) Visual-flight rules (day). For VFR flight during the day, the following instruments and equipment are required:

(1) Airspeed indicator.

(2) Altimeter.

(3) Magnetic direction indicator.

(4) Tachometer for each engine.

(5) Oil pressure gauge for each engine using pressure system.

(6) Temperature gauge for each liquid-cooled engine.

(7) Oil temperature gauge for each air-cooled engine.

(8) Manifold pressure gauge for each altitude engine.

(9) Fuel gauge indicating the quantity of fuel in each tank.

(10) Landing gear position indicator, if the aircraft has a retractable landing gear.

(11) For small civil airplanes certificated after January1, 1996, in accordance with part 23 of JCAR, an approved aviation red or aviation white anticollision light system. In the event of failure of any light of the anticollision light system, operation of the aircraft may continue to a location where repairs or replacement can be made.

(12) If the aircraft is operated for hire over water and beyond power-off gliding distance from shore, approved flotation gear readily available to each occupant and at least one pyrotechnic signaling device. As used in this section, "shore" means that area of the land adjacent to the water which is

above the high water mark and excludes land areas which are intermittently under water.

(13) An approved safety belt with an approved metal-to-metal latching device for each occupant 2 years of age or older.

(14) For small civil airplanes an approved shoulder harness for each front seat. The shoulder harness must be designed to protect the occupant from serious head injury when the occupant experiences the ultimate inertia forces specified in 23.561(b)(2) of JCAR. Each shoulder harness installed at a flight crewmember station must permit the crewmember, when seated and with the safety belt and shoulder harness fastened, to perform all functions necessary for flight operations. For purposes of this paragraph:

(i) The date of manufacture of an airplane is the date the inspection acceptance records reflect that the airplane is complete and meets the CARC-approved type design data; and

(ii) A front seat is a seat located at a flight crewmember station or any seat located alongside such a seat.

(15) An emergency locator transmitter, if required by 91.207.

(16) For normal, utility, and acrobatic category airplanes with a seating configuration, excluding pilot seats, of 9 or less, manufactured after December 31, 1987, a shoulder harness for :

(i) Each front seat that meets the requirements of 23.785 (g) and (h) of JCAR ;

(ii) Each additional seat that meets the requirements of 23.785(g) of JCAR.

(17) For rotorcraft manufactured after December 31, 1992, a shoulder harness for each seat that meets the requirements of approved standards.

(c) Visual flight rules (night). For VFR flight at night, the following instruments and equipment are required:

(1) Instruments and equipment specified in paragraph (b) of this section.

(2) Approved position lights.

(3) An approved aviation red or aviation white anticollision light system on all Jordanian-registered civil aircraft. Anticollision light systems on aircraft must at least meet the anticollision light standards of part 23, 27, or 29 of JCAR, as applicable, except that the color may be either aviation red or aviation white. In the event of failure of any light of the anticollision light system, operations with the aircraft may be continued to a stop where repairs or replacement can be made.

(4) If the aircraft is operated for hire, one electric landing light.

(5) An adequate source of electrical energy for all installed electrical and radio equipment.

(6) One spare set of fuses, or three spare fuses of each kind required, that are accessible to the pilot in flight.

(d) Instrument flight rules. For IFR flight, the following instruments and equipment are required:

(1) Instruments and equipment specified in paragraph (b) of this section, and, for night flight, instruments and equipment specified in paragraph (c) of this section.

(2) Two-way radio communications system and navigational equipment appropriate to the ground facilities to be used.

(3) Gyroscopic rate-of-turn indicator, except on the following aircraft:

(i) Airplanes with a third attitude instrument system usable through flight attitudes of 360 degrees of pitch and roll and installed in accordance with the instrument requirements prescribed in part OPS1 of JCAR; and

(ii) Rotorcraft with a third attitude instrument system usable through flight attitudes of ±80 degrees of pitch and ±120 degrees of roll and installed in accordance with JCAR.

(4) Slip-skid indicator.

(5) Sensitive altimeter adjustable for barometric pressure.

(6) A clock displaying hours, minutes, and seconds with a sweep-second pointer or digital presentation.

(7) Generator or alternator of adequate capacity.

(8) Gyroscopic pitch and bank indicator (artificial horizon).

(9) Gyroscopic direction indicator (directional gyro or equivalent).

(e) Flight at and above 24,000 feet(7200 meters) MSL (FL 240). If VOR navigational equipment is required under paragraph (d)(2) of this section, no person may operate a Jordanian-registered civil aircraft within Jordan at or above FL 240 unless that aircraft is equipped with approved distance measuring equipment (DME). When DME required by this paragraph fails at and above FL 240, the pilot in command of the aircraft shall notify ATC immediately, and then may continue operations at and above FL 240 to the next airport of intended landing at which repairs or replacement of the equipment can be made.

(f) Category II operations. The requirements for Category II operations are the instruments and equipment specified in:

(1) Paragraph (d) of this section; and

(2) Appendix A to this part.

(g) Category III operations. The instruments and equipment required for Category III operations are specified in paragraph (d) of this section.

(h) Exclusions. Paragraphs (f) and (g) of this section do not apply to operations conducted by a holder of a certificate issued under OPS1of JCAR.

91.207 Emergency Locator Transmitters (ELT).

(a) Except as provided in paragraphs (e) and (f) of this section, no person may operate a Jordanian-registered civil airplane unless :

(1) There is attached to the airplane an approved automatic type emergency locator transmitter that is in operable condition for the following operations.

(i) Those operations governed by the supplemental air carrier and commercial operator rules of part OPS1 of JCAR;

(ii) Charter flights governed by the domestic and flag air carrier rules of part OPS1, of JCAR; and

(iii) Operations governed by part OPS1 of JCAR; or

(2) For operations other than those specified in paragraph (a)(1) of this section, there must be attached to the airplane an approved personal type or an approved automatic type emergency locator transmitter that is in operable condition.

(b) Each emergency locator transmitter required by paragraph (a) of this section must be attached to the airplane in such a manner that the probability of damage to the transmitter in the event of crash impact is minimized. Fixed and deployable automatic type transmitters must be attached to the airplane as far aft as practicable.

(c) Batteries used in the emergency locator transmitters required by paragraphs (a) and (b) of this section must be replaced (or recharged, if the batteries are rechargeable):

(1) When the transmitter has been in use for more than 1 cumulative hour; or

(2) When 50 percent of their useful life (or, for rechargeable batteries, 50 percent of their useful life of charge) has expired, as established by the transmitter manufacturer under its approval. The new expiration date for replacing (or recharging) the battery must be legibly marked on the outside of the transmitter and entered in the aircraft maintenance record. Paragraph (c)(2) of this section does not apply to batteries (such as water-activated batteries) that are essentially unaffected during probable storage intervals.

(d) Each emergency locator transmitter required by paragraph (a) of this section must be inspected within 12 calendar months after the last inspection for:

(1) Proper installation;

(2) Battery corrosion;

(3) Operation of the controls and crash sensor; and

(4) The presence of a sufficient signal radiated from its antenna.

(e) Notwithstanding paragraph (a) of this section, a person may :

(1) Ferry a newly acquired airplane from the place where possession of it was taken to a place where the emergency locator transmitter is to be installed; and

(2) Ferry an airplane with an inoperative emergency locator transmitter from a place where repairs or replacements cannot be made to a place where they can be made.

No person other than required crewmembers may be carried aboard an airplane being ferried under paragraph (e) of this section.

(f) Paragraph (a) of this section does not apply to :

(1) Before January 1, 2006, turbojet-powered aircraft;

(2) Aircraft while engaged in scheduled flights by scheduled air carriers;
(3) Aircraft while engaged in training operations conducted entirely within a 50-nautical mile radius of the airport from which such local flight operations began;

(4) Aircraft while engaged in flight operations incident to design and testing;

(5) New aircraft while engaged in flight operations incident to their manufacture, preparation, and delivery;

(6) Aircraft while engaged in flight operations incident to the aerial application of chemicals and other substances for agricultural purposes;

(7) Aircraft certificated by Chief Commissioner/CEO for research and development purposes;

(8) Aircraft while used for showing compliance with regulations, crew training, exhibition, air racing, or market surveys;

(9) Aircraft equipped to carry not more than one person.

(10) An aircraft during any period for which the transmitter has been temporarily removed for inspection, repair, modification, or replacement, subject to the following:

(i) No person may operate the aircraft unless the aircraft records contain an entry which includes the date of initial removal, the make, model, serial number, and reason for removing the transmitter, and a placard located in view of the pilot to show "ELT not installed."

(ii) No person may operate the aircraft more than 90 days after the ELT is initially removed from the aircraft; and

(11) On and after January 1, 2006, aircraft with a maximum payload capacity of more than 18,000 pounds (8200 kg) when used in air transportation.

91.209 Aircraft lights.

No person may:

(a) During the period from sunset to sunrise:

(1) Operate an aircraft unless it has lighted position lights;

(2) Park or move an aircraft in, or in dangerous proximity to, a night flight operations area of an airport unless the aircraft:

(i) Is clearly illuminated;

(ii) Has lighted position lights; or

(iii) Is in an area that is marked by obstruction lights;

(3) Anchor an aircraft unless the aircraft:

(i) Has lighted anchor lights; or

(ii) Is in an area where anchor lights are not required on vessels; or

(b) Operate an aircraft that is equipped with an anticollision light system, unless it has lighted anticollision lights. However, the anticollision lights need not be lighted when the pilot-in-command determines that, because of operating conditions, it would be in the interest of safety to turn the lights off.

91.211 Supplemental oxygen.

(a) General. No person may operate a civil aircraft of Jordanian registry:

(1) At cabin pressure altitudes above 12,500 feet (3750 meters) (MSL) up to and including 14,000 feet (4200 meters) (MSL) unless the required minimum flight crew is provided with and uses supplemental oxygen for that part of the flight at those altitudes that is of more than 30 minutes duration;

(2) At cabin pressure altitudes above 14,000 feet (4200 meters) (MSL) unless the required minimum flight crew is provided with and uses supplemental oxygen during the entire flight time at those altitudes; and

(3) At cabin pressure altitudes above 15,000 feet (4500 meters) (MSL) unless each occupant of the aircraft is provided with supplemental oxygen.

(b) Pressurized cabin aircraft.

(1) No person may operate a civil aircraft of Jordanian registry with a pressurized cabin:

(i) At flight altitudes above flight level 250 unless at least a 10-minute supply of supplemental oxygen, in addition to any oxygen required to satisfy paragraph (a) of this section, is available for each occupant of the aircraft for use in the event that a descent is necessitated by loss of cabin pressurization; and

(ii) At flight altitudes above flight level 350 unless one pilot at the controls of the airplane is wearing and using an oxygen mask that is secured and sealed and that either supplies oxygen at all times or automatically supplies oxygen whenever the cabin pressure altitude of the airplane exceeds 14,000 feet (4200 meters) (MSL), except that the one pilot need not wear and use an oxygen mask while at or below flight level 410 if there are two pilots at the controls and each pilot has a quick-donning type of oxygen mask that can be placed on the face with one hand from the ready position within 5 seconds, supplying oxygen and properly secured and sealed.

(2) Notwithstanding paragraph (b)(1)(ii) of this section, if for any reason at any time it is necessary for one pilot to leave the controls of the aircraft when operating at flight altitudes above flight level 350, the remaining pilot at the controls shall put on and use an oxygen mask until the other pilot has returned to that crewmember's station.

91.213 Inoperative instruments and equipment.

(a) Except as provided in paragraph (d) of this section, no person may take off an aircraft with inoperative instruments or equipment installed unless the following conditions are met:

(1) An approved Minimum Equipment List exists for that aircraft.

(2) The aircraft has within it a letter of authorization, issued by the CARC having jurisdiction over the area in which the operator is located, authorizing operation of the aircraft under the Minimum Equipment List. The letter of authorization may be obtained by written request of the airworthiness certificate holder. The Minimum Equipment List and the letter of authorization constitute a supplemental type certificate for the aircraft.

(3) The approved Minimum Equipment List must:

(i) Be prepared in accordance with the limitations specified in paragraph (b) of this section; and

(ii) Provide for the operation of the aircraft with the instruments and equipment in an inoperable condition.

(4) The aircraft records available to the pilot must include an entry describing the inoperable instruments and equipment.

(5) The aircraft is operated under all applicable conditions and limitations contained in the Minimum Equipment List and the letter authorizing the use of the list.

(b) The following instruments and equipment may not be included in a 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 by this part.

(c) A person authorized to use an approved Minimum Equipment List issued for a specific aircraft under part OPS1of JCAR shall use that Minimum Equipment List in connection with operations conducted with that aircraft under this part without additional approval requirements.

(d) Except for operations conducted in accordance with paragraph (a) or (c) of this section, a person may takeoff an aircraft in operations conducted under this part with inoperative instruments and equipment without an approved Minimum Equipment List provided:

(1) The flight operation is conducted in a:

(i) Rotorcraft, nonturbine-powered airplane, glider, or lighter-than-air aircraft for which a master Minimum Equipment List has not been developed; or

(ii) Small rotorcraft, nonturbine-powered small airplane, glider, or lighter-than-air aircraft for which a Master Minimum Equipment List has been developed; and

(2) The inoperative instruments and equipment are not :

(i) Part of the VFR-day type certification instruments and equipment prescribed in the applicable airworthiness regulations under which the aircraft was type certificated;

(ii) Indicated as required on the aircraft's equipment list, or on the Kinds of Operations Equipment List for the kind of flight operation being conducted;

(iii) Required by 91.205 or any other rule of this part for the specific kind of flight operation being conducted; or

(iv) Required to be operational by an airworthiness directive; and

(3) The inoperative instruments and equipment are:

(i) Removed from the aircraft, the cockpit control placarded, and the maintenance recorded in accordance with part-M of JCAR; or

(ii) Deactivated and placarded "Inoperative." If deactivation of the inoperative instrument or equipment involves maintenance, it must be accomplished and recorded in accordance with part-M of JCAR; and

(4) A determination is made by a pilot, who is certificated and appropriately rated under part FCL1 of JCAR, or by a person, who is certificated and appropriately rated to perform maintenance on the aircraft, that the inoperative instrument or equipment does not constitute a hazard to the aircraft.

An aircraft with inoperative instruments or equipment as provided in paragraph (d) of this section is considered to be in a properly altered condition acceptable to Chief Commissioner/CEO.

(e) Notwithstanding any other provision of this section, an aircraft with inoperable instruments or equipment may be operated under a special flight permit issued in accordance with 21.197 and 21.199 of JCAR.

91.215 ATC transponder and altitude reporting equipment and use.

(a) Jordanian-registered civil aircraft. For operations not conducted under part OPS1 of JCAR, ATC transponder equipment installed must meet the performance and environmental requirements of any transponder (Mode A) or any transponder of (Mode A with altitude reporting capability) as appropriate, or the appropriate transponder of (Mode S).

(b) Unless otherwise authorized or directed by ATC, no person may operate an aircraft and that aircraft is equipped with an operable coded radar beacon transponder having either Mode 3/A code capability, replying to Mode 3/A interrogations with the code specified by ATC, or a Mode S capability, replying to Mode 3/A interrogations with the code specified by ATC and intermode and Mode S interrogations, and that aircraft is equipped with automatic pressure altitude reporting equipment having a Mode C capability that automatically replies to Mode C interrogations by transmitting pressure altitude information in 100-foot increments.

(c) Transponder-on operation. While in controlled airspace, each person operating an aircraft equipped with an operable ATC transponder maintained in accordance with 91.413 of this part shall operate the transponder, including Mode C equipment if installed, and shall reply on the appropriate code or as assigned by ATC.

91.217 Data correspondence between automatically reported pressure altitude data and the pilot's altitude reference.

No person may operate any automatic pressure altitude reporting equipment associated with a radar beacon transponder:

(a) When deactivation of that equipment is directed by ATC;

(b) Unless, as installed, that equipment was tested and calibrated to transmit altitude data corresponding within 125 feet (38 meters) (on a 95 percent probability basis) of the indicated or calibrated datum of the altimeter normally used to maintain flight altitude, with that altimeter referenced to 1013.2 hPa for altitudes from sea level to the maximum operating altitude of the aircraft; or

(c) Unless the altimeters and digitizers in that equipment meet the approved standards respectively.

91.219 Altitude alerting system or device: Turbojet-powered civil airplanes.

(a) Except as provided in paragraph (d) of this section, no person may operate a turbojet-powered Jordanian-registered civil airplane unless that airplane is equipped with an approved altitude alerting system or device that is in operable condition and meets the requirements of paragraph (b) of this section.
(b) Each altitude alerting system or device required by paragraph (a) of this section must be able to:

(1) Alert the pilot:

(i) Upon approaching a preselected altitude in either ascent or descent, by a sequence of both aural and visual signals in sufficient time to establish level flight at that preselected altitude; or

(ii) Upon approaching a preselected altitude in either ascent or descent, by a sequence of visual signals in sufficient time to establish level flight at that preselected altitude, and when deviating above and below that preselected altitude, by an aural signal;

(2) Provide the required signals from sea level to the highest operating altitude approved for the airplane in which it is installed;

(3) Preselect altitudes in increments that are commensurate with the altitudes at which the aircraft is operated;

(4) Be tested without special equipment to determine proper operation of the alerting signals; and

(5) Accept necessary barometric pressure settings if the system or device operates on barometric pressure. However, for operation below 3,000 feet (900 meters)AGL, the system or device need only provide one signal, either visual or aural, to comply with this paragraph. A radio altimeter may be included to provide the signal if the operator has an approved procedure for its use to determine DH or MDA, as appropriate.

(c) Each operator to which this section applies must establish and assign procedures for the use of the altitude alerting system or device and each flight crewmember must comply with those procedures assigned to him.

(d) Paragraph (a) of this section does not apply to any operation of an airplane that has an experimental certificate or to the operation of any airplane for the following purposes:

(1) Ferrying a newly acquired airplane from the place where possession of it was taken to a place where the altitude alerting system or device is to be installed.

(2) Continuing a flight as originally planned, if the altitude alerting system or device becomes inoperative after the airplane has taken off; however, the flight may not depart from a place where repair or replacement can be made.
(3) Ferrying an airplane with any inoperative altitude alerting system or device from a place where repairs or replacements cannot be made to a place where it can be made.

(4) Conducting an airworthiness flight test of the airplane.

(5) Ferrying an airplane to a place outside Jordan for the purpose of registering it in a foreign country.

(6) Conducting a sales demonstration of the operation of the airplane.

(7) Training foreign flight crews in the operation of the airplane before ferrying it to a place outside Jordan for the purpose of registering it in a foreign country.

91.221 Airborne collision avoidance system equipment and use.

(a) Any Airborne Collision Avoidance System (ACAS) installed in a Jordanian registered civil aircraft must be in accordance with the approved standards.

(b) ACAS shall be operated in Jordan airspace by all aircraft which meet the following criteria:

(1) All civil fixed-wing turbine powered aircraft having a maximum take-off mass in excess 33,000 pounds (15,000 kg) or approved passenger seating configuration of more than 30.
(2) With effect from 1 January 2005, all civil fixed-wing turbine-powered aircraft having a maximum take-off mass in excess of 12,500 pounds (5,700 kg) or approved passenger seating configuration of more than 19.

(c) All civil aircraft intending to operate in Jordan RVSM airspace shall be equipped with ACAS II .
(TCAS II system with version 7.0 incorporated meet ICAO ACAS II standard).

(d) Operators shall take action to familiar themselves of ACAS II equipage requirements and plan for compliance .

91.223 Terrain awareness and warning system.

(a) Airplanes manufactured after January 1, 2005. Except as provided in paragraph (d) of this section, no person may operate a turbine-powered Jordanian-registered airplane configured with six or more passenger seats, excluding any pilot seat, unless that airplane is equipped with an approved terrain awareness and warning system.

(b) Airplanes manufactured on or before January 1, 2005. Except as provided in paragraph (d) of this section, no person may operate a turbine-powered Jordanian-registered airplane configured with six or more passenger seats, excluding any pilot seat, after January 1, 2006, unless that airplane is equipped with an approved terrain awareness and warning system.

(c) Airplane Flight Manual. The Airplane Flight Manual shall contain appropriate procedures for:

(1) The use of the terrain awareness and warning system; and

(2) Proper flight crew reaction in response to the terrain awareness and warning system audio and visual warnings.

(d) Exceptions. Paragraphs (a) and (b) of this section do not apply to:

(1) Parachuting operations when conducted entirely within a 50 nautical mile radius of the airport from which such local flight operations began.

(2) Firefighting operations.

(3) Flight operations when incident to the aerial application of chemicals; and

(4) other substances.

91.224 -91.299 [Reserved]

Subpart- D

Special Flight Operations.

91.301 [Reserved]

91.303 Aerobatic flight.

No person may operate an aircraft in aerobatic flight:

(a) Over any congested area of a city, town, or settlement;

(b) Over an open air assembly of persons;

(c) Within the lateral boundaries of the surface areas of Class C airspace designated for an airport;
(d) Within 8 km of the center line of any ATS route;

(e) Below an altitude of 1,500 feet (450 meters) above the surface; or

(f) When flight visibility is less than 5 km.

For the purposes of this section, aerobatic flight means an intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight.

91.305 Flight test areas.

No person may flight test an aircraft except over open water, or sparsely populated areas, having light air traffic.

91.307 Parachutes and parachuting.

(a) No pilot of a civil aircraft may allow a parachute that is available for emergency use to be carried in that aircraft unless it is an approved type and:

(1) If a chair type (canopy in back), it has been packed by a certificated and appropriately rated parachute rigger within the preceding 120 days; or

(2) If any other type, it has been packed by a certificated and appropriately rated parachute rigger:

(i) 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

(ii) 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 conduct, a parachute operation from an aircraft within Jordan except in accordance with part 105 of JCAR.

(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 pilot certification or rating; or

(2) Spins and other flight maneuvers required by the regulations for any certificate or rating when given by:

(i) A certificated flight instructor; or

(ii) An airline transport pilot instructing in accordance with 61.67 of JCAR.

(e) For the purposes of this section, approved parachute means:

(1) A parachute manufactured under an approved type certificate; or

(2) A personnel-carrying military parachute identified by a military designation or specification number.

91.309 Towing: Gliders.

(a) No person may operate a civil aircraft towing a glider unless:

(1) The pilot in command of the towing aircraft is qualified under 61.69 of JCAR;

(2) The towing aircraft is equipped with a tow-hitch of a kind, and installed in a manner, that is approved by Chief Commissioner/CEO;

(3) The towline used has breaking strength not less than 80 percent of the maximum certificated operating weight of the glider and not more than twice this operating weight. However, the towline used may have a breaking strength more than twice the maximum certificated operating weight of the glider if:

(i) A safety link is installed at the point of attachment of the towline to the glider with a breaking strength not less than 80 percent of the maximum certificated operating weight of the glider and not greater than twice this operating weight.

(ii) A safety link is installed at the point of attachment of the towline to the towing aircraft with a breaking strength greater, but not more than 25 percent greater, than that of the safety link at the towed glider end of the towline and not greater than twice the maximum certificated operating weight of the glider;

(4) Before conducting any towing operation within the lateral boundaries of the surface areas of Class C airspace designated for an airport, or before making each towing flight within such controlled airspace if required by ATC, the pilot in command notifies the control tower. If a control tower does not exist or is not in operation, the pilot in command must notify Chief Commissioner/CEO flight service station serving that controlled airspace before conducting any towing operations in that airspace; and

(5) The pilots of the towing aircraft and the glider have agreed upon a general course of action, including takeoff and release signals, airspeeds, and emergency procedures for each pilot.

(b) No pilot of a civil aircraft may intentionally release a towline, after release of a glider, in a manner that endangers the life or property of another.

91.311 Towing: Other than under 91.309.

No pilot of a civil aircraft may tow anything with that aircraft (other than under 91.309) except in accordance with the terms of a certificate of waiver issued by Chief Commissioner/CEO.

91.313 Restricted category civil aircraft: Operating limitations.

(a) No person may operate a restricted category civil aircraft:

(1) For other than the special purpose for which it is certificated; or

(2) In an operation other than one necessary to accomplish the work activity directly associated with that special purpose.

(b) For the purpose of paragraph (a) of this section, operating a restricted category civil aircraft to provide flight crewmember training in a special purpose operation for which the aircraft is certificated is considered to be an operation for that special purpose.

(c) No person may operate a restricted category civil aircraft carrying persons or property for compensation or hire. For the purposes of this paragraph, a special purpose operation involving the carriage of persons or material necessary to accomplish that operation, such as crop dusting, seeding, spraying, and banner towing (including the carrying of required persons or material to the location of that operation), and operation for the purpose of providing flight crewmember training in a special purpose operation, are not considered to be the carriage of persons or property for compensation or hire.

(d) No person may be carried on a restricted category civil aircraft unless that person:

(1) Is a flight crewmember;

(2) Is a flight crewmember trainee;

(3) Performs an essential function in connection with a special purpose operation for which the aircraft is certificated; or

(4) Is necessary to accomplish the work activity directly associated with that special purpose.

(e) Except when operating in accordance with the terms and conditions of a certificate of waiver or special operating limitations issued by Chief Commissioner/CEO, no person may operate a restricted category civil aircraft within Jordan:

(1) Over a densely populated area;

(2) In a congested airway; or

(3) Near a busy airport where passenger transport operations are conducted.

(f) This section does not apply to nonpassenger-carrying civil rotorcraft external-load operations conducted under JCAR.

(g) No person may operate a small restricted-category civil airplane unless an approved shoulder harness is installed for each front seat. The shoulder harness must be designed to protect each occupant from serious head injury when the occupant experiences the ultimate inertia forces specified in 23.561(b)(2) of JCAR. The shoulder harness installation at each flight crewmember station must permit the crewmember, when seated and with the safety belt and shoulder harness fastened, to perform all functions necessary for flight operation. For purposes of this paragraph:

(1) The date of manufacture of an airplane is the date the inspection acceptance records reflect that the airplane is complete and meets the CARC-approved type design data; and

(2) A front seat is a seat located at a flight crewmember station or any seat located alongside such a seat.

91.315 Limited category civil aircraft: Operating limitations.

No person may operate a limited category civil aircraft carrying persons or property for compensation or hire.

91.317 Provisionally certificated civil aircraft: Operating limitations.

(a) No person may operate a provisionally certificated civil aircraft unless that person is eligible for a provisional airworthiness certificate under 21of this JCAR.

(b) No person may operate a provisionally certificated civil aircraft outside Jordan unless that person has specific authority to do so from Chief Commissioner/CEO and each foreign country involved.
(c) Unless otherwise authorized by Chief Commissioner/CEO, no person may operate a provisionally certificated civil aircraft except:

(1) In direct conjunction with the type or supplemental type certification of that aircraft;

(2) For training flight crews, including simulated air carrier operations;

(3) Demonstration flight by the manufacturer for prospective purchasers;

(4) Market surveys by the manufacturer;

(5) Flight checking of instruments, accessories, and equipment that do not affect the basic airworthiness of the aircraft; or

(6) Service testing of the aircraft.

(d) Each person operating a provisionally certificated civil aircraft shall operate within the prescribed limitations displayed in the aircraft or set forth in the provisional aircraft flight manual or other appropriate document. However, when operating in direct conjunction with the type or supplemental type certification of the aircraft, that person shall operate under the experimental aircraft limitations of 21.191 of JCAR and when flight testing, shall operate under the requirements of 91.305 of this part.

(e) Each person operating a provisionally certificated civil aircraft shall establish approved procedures for:

(1) The use and guidance of flight and ground personnel in operating under this section; and

(2) Operating in and out of airports where takeoffs or approaches over populated areas are necessary. No person may operate that aircraft except in compliance with the approved procedures.

(f) Each person operating a provisionally certificated civil aircraft shall ensure that each flight crewmember is properly certificated and has adequate knowledge of, and familiarity with, the aircraft and procedures to be used by that crewmember.

(g) Each person operating a provisionally certificated civil aircraft shall maintain it as required by applicable regulations and as may be specially prescribed by Chief Commissioner/CEO.

(h) Whenever the manufacturer, or Chief Commissioner/CEO, determines that a change in design, construction, or operation is necessary to ensure safe operation, no person may operate a provisionally certificated civil aircraft until that change has been made and approved. Section 21.99 of JCAR applies to operations under this section.

(i) Each person operating a provisionally certificated civil aircraft:

(1) May carry in that aircraft only persons who have a proper interest in the operations allowed by this section or who are specifically authorized by both the manufacturer and Chief Commissioner/CEO; and

(2) Shall advise each person carried that the aircraft is provisionally certificated.

(j) Chief Commissioner/CEO may prescribe additional limitations or procedures that Chief Commissioner/CEO considers necessary, including limitations on the number of persons who may be carried in the aircraft.

91.319 Aircraft having experimental certificates: Operating limitations.

(a) No person may operate an aircraft that has an experimental certificate:

(1) For other than the purpose for which the certificate was issued; or

(2) Carrying persons or property for compensation or hire.

(b) No person may operate an aircraft that has an experimental certificate outside of an area assigned by Chief Commissioner/CEO until it is shown that:

(1) The aircraft is controllable throughout its normal range of speeds and throughout all the maneuvers to be executed; and

(2) The aircraft has no hazardous operating characteristics or design features.

(c) Unless otherwise authorized by Chief Commissioner/CEO special operating limitations, no person may operate an aircraft that has an experimental certificate over a densely populated area or in a congested airway. Chief Commissioner/CEO may issue special operating limitations for particular aircraft to permit takeoffs and landings to be conducted over a densely populated area or in a congested airway, in accordance with terms and conditions specified in the authorization in the interest of safety in air commerce.

(d) Each person operating an aircraft that has an experimental certificate shall:

(1) Advise each person carried of the experimental nature of the aircraft;

(2) Operate under VFR, day only, unless otherwise specifically authorized by Chief Commissioner/CEO; and

(3) Notify the control tower of the experimental nature of the aircraft when operating the aircraft into or out of airports with operating control towers.

(e) Chief Commissioner/CEO may prescribe additional limitations that Chief Commissioner/CEO considers necessary, including limitations on the persons that may be carried in the aircraft.

91.321 -91.323 [Reserved].

91.325 Primary category aircraft: Operating limitations.

(a) No person may operate a primary category aircraft carrying persons or property for compensation or hire.

(b) No person may operate a primary category aircraft that is maintained by the pilot-owner under an approved special inspection and maintenance program except:

(1) The pilot-owner; or

(2) A designee of the pilot-owner, provided that the pilot-owner does not receive compensation for the use of the aircraft.

91.326 - 91.399 [Reserved].

Subpart- E
Maintenance, Preventive Maintenance, and Alterations.

91.401 Applicability.

(a) This subpart prescribes rules governing the maintenance, preventive maintenance, and alterations of Jordanian-registered civil aircraft operating within or outside of Jordan.

(b) Sections 91.405, 91.409, 91.411, 91.417, and 91.419 of this subpart do not apply to an aircraft maintained in accordance with a continuous airworthiness maintenance program as provided in part OPS1 of JCAR.

91.403 General.

(a) The owner or operator of an aircraft is primarily responsible for maintaining that aircraft in an airworthy condition, including compliance with part 21 of JCAR.

(b) The owner or operator of an aircraft must, upon receipt of mandatory continuing airworthiness information from the State of Design of the aircraft, adopt the mandatory information directly and take the appropriate action as indicated in the received information.

(c) Chief Commissioner/CEO must ensure the transmission, to the State of Design, of all mandatory information which is originated from any Jordanian registered aircraft.

(d) Maintenance tasks and frequencies that have been specified as mandatory by the State of Design in approval of the type design shall be identified.as such.

(e) No person may perform maintenance, preventive maintenance, or alterations on an aircraft other than as prescribed in this subpart and other applicable regulations, including part M of JCAR.

(f) 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 limitations section unless:

(1) The mandatory replacement times, inspection intervals, and related procedures specified in that section or alternative inspection intervals and related procedures set forth in an operations specification approved by Chief

Commissioner/CEO under part Ops1 of JCAR; or

(2) In accordance with an inspection program approved under 91.409(e) have been complied with.

91.405 Maintenance required.

Each owner or operator of an aircraft:

(a) Shall have that aircraft inspected as prescribed in subpart E of this part and shall between required inspections, except as provided in paragraph (c) of this section, have discrepancies repaired as prescribed in part M of JCAR;

(b) Shall ensure that maintenance personnel make appropriate entries in the aircraft maintenance records indicating the aircraft has been approved for return to service;

(c) Shall have any inoperative instrument or item of equipment, permitted to be inoperative by 91.213(d)(2) of this part, repaired, replaced, removed, or inspected at the next required inspection; and

(d) When listed discrepancies include inoperative instruments or equipment, shall ensure that a placard has been installed as required by part M of JCAR.

91.407 Operation after maintenance, preventive maintenance, rebuilding, or alteration.

(a) No person may operate any aircraft that has undergone maintenance, preventive maintenance, rebuilding, or alteration unless:

(1) It has been approved for return to service by a person authorized under part M of JCAR; and

(2) The maintenance record entry required by part M, as applicable, of JCAR has been made.

(b) No person may carry any person (other than crewmembers) in an aircraft that has been maintained, rebuilt, or altered in a manner that may have appreciably changed its flight characteristics or substantially affected its operation in flight until an appropriately rated pilot with at least a private pilot certificate flies the aircraft, makes an operational check of the maintenance performed or alteration made, and logs the flight in the aircraft records.

(c) The aircraft does not have to be flown as required by paragraph (b) of this section if, prior to flight, ground tests, inspection, or both show conclusively that the maintenance, preventive maintenance, rebuilding, or alteration has not appreciably changed the flight characteristics or substantially affected the flight operation of the aircraft.

91.409 Inspections.

(a) Except as provided in paragraph (c) of this section, no person may operate an aircraft unless, within the preceding 12 calendar months, it has had:

(1) An annual inspection in accordance with part M of JCAR and has been approved for return to service by a person authorized by part M of JCAR; or

(2) An inspection for the issuance of an airworthiness certificate in accordance with part 21 of JCAR.

No inspection performed under paragraph (b) of this section may be substituted for any inspection required by this paragraph unless it is performed by a person authorized to perform annual inspections and is entered as an "annual" inspection in the required maintenance records.

(b) Except as provided in paragraph (c) of this section, no person may operate an aircraft carrying any person (other than a crewmember) 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 M of s JCAR or has received an inspection for the issuance of an airworthiness certificate in accordance with part 21 of JCAR. 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 inspected in accordance with an approved aircraft inspection program under parts 20, OPS1 of JCAR and so identified by the registration

number in the operations specifications of the certificate holder having the approved inspection program;

(3) An aircraft subject to the requirements of paragraph (d) or (e) of this section; or

(4) 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 must submit a written request to Chief Commissioner/CEO, and shall provide:

(1) A certificated mechanic holding an inspection authorization, a certificated airframe repair station, 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:

(i) 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;

(ii) 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;

(iii) Sample routine and detailed inspection forms and instructions for their use; and

(iv) 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.

The frequency and detail of the progressive inspection shall provide for the complete inspection of the aircraft within each 12 calendar months and be consistent with the manufacturer's recommendations, field service

experience, and the kind of operation in which the aircraft is engaged. The progressive inspection schedule must ensure that the aircraft, at all times, will be airworthy and will conform to all applicable CARC aircraft specifications, type certificate data sheets, airworthiness directives, and other approved data. If the progressive inspection is discontinued, the owner or operator shall immediately inform Chief Commissioner/CEO, in writing, of the discontinuance. After the discontinuance, the first annual inspection under 91.409(a)(1) is due within 12 calendar months after the last complete inspection of the aircraft under the progressive inspection. The 100-hour inspection under 91.409(b) is due within 100 hours after that complete inspection. A complete inspection of the aircraft, for the purpose of determining when the annual and 100-hour inspections are due, requires a detailed inspection of the aircraft and all its components in accordance with the progressive inspection. A routine inspection of the aircraft and a detailed inspection of several components is not considered to be a complete inspection.

(e) Large airplanes (to which part 125 is not applicable), turbojet multiengine airplanes, turbopropeller-powered multiengine airplanes, and turbine-powered rotorcraft. No person may operate a large airplane, turbojet multiengine airplane, turbopropeller-powered multiengine airplane, or turbine-powered rotorcraft unless the replacement times for life-limited parts specified in the aircraft specifications, type data sheets, or other documents approved by Chief Commissioner/CEO are complied with and the airplane or turbine-powered rotorcraft, including the airframe, engines, propellers, rotors, appliances, survival equipment, and emergency equipment, is inspected in accordance with an inspection program selected under the provisions of paragraph (f) of this section, except that, the owner or operator of a turbine-powered rotorcraft may elect to use the inspection provisions of 91.409(a), (b), (c), or (d) in lieu of an inspection option of 91.409(f).

(f) Selection of inspection program under paragraph (e) of this section. The registered owner or operator of each airplane or turbine-powered rotorcraft described in paragraph (e) of this section must select, identify in the aircraft maintenance records, and use one of the following programs for the inspection of the aircraft:

(1) A continuous airworthiness inspection program that is part of a continuous airworthiness maintenance program currently in use by a person holding an air carrier operating certificate or an operating certificate issued under part ops1 of JCAR and operating that make and model aircraft under part OPS1 of JCAR or operating that make and model under part OPS1 of JCAR and maintaining it under OPS1 of JCAR.

(2) An approved aircraft inspection program approved under 135.419 of JCAR and currently in use by a person holding an operating certificate issued under part OPS1of JCAR.

(3) A current inspection program recommended by the manufacturer.

(4) Any other inspection program established by the registered owner or operator of that airplane or turbine-powered rotorcraft and approved by Chief Commissioner/CEO under paragraph (g) of this section. However, the Chief Commissioner/CEO may require revision of this inspection program in accordance with the provisions of section 91.415.

Each operator shall include in the selected program the name and address of the person responsible for scheduling the inspections required by the program and make a copy of that program available to the person performing inspections on the aircraft and, upon request, to Chief Commissioner/CEO.

(g) Inspection program approved under paragraph (e) of this section. Each operator of an airplane or turbine-powered rotorcraft desiring to establish or change an approved inspection program under paragraph (f)(4) of this section must submit the program for approval to Chief Commissioner/CEO. The program must be in writing and include at least the following information:

(1) Instructions and procedures for the conduct of inspections for the particular make and model airplane or turbine-powered rotorcraft, including necessary tests and checks. The instructions and procedures must set forth in detail the parts and areas of the airframe, engines, propellers, rotors, and appliances, including survival and emergency equipment required to be inspected.

(2) A schedule for performing the inspections that must be performed under the program expressed in terms of the time in service, calendar time, number of system operations, or any combination of these.

(h) Changes from one inspection program to another. When an operator changes from one inspection program under paragraph (f) of this section to another, the time in service, calendar times, or cycles of operation accumulated under the previous program must be applied in determining inspection due times under the new program.

91.410 Special maintenance program requirements.

No person may operate a turbine-powered transport category airplane with a type certificate, either a maximum type certificated passenger capacity of 30 or more, or a maximum type certificated payload capacity of 7,500 pounds (3400 kg)or more, unless instructions for maintenance and inspection of the fuel tank system are incorporated into its inspection program.

91.411 Altimeter system and altitude reporting equipment tests and inspections.

(a) No person may operate an airplane, or helicopter, in controlled airspace under IFR unless:

(1) Within the preceding 24 calendar months, each static pressure system, each altimeter instrument, and each automatic pressure altitude reporting system has been tested and inspected and found to comply with appendix E of part 43 of JCAR;

(2) Except for the use of system drain and alternate static pressure valves, following any opening and closing of the static pressure system, that system has been tested and inspected and found to comply with part M of JCAR; and

(3) Following installation or maintenance on the automatic pressure altitude reporting system of the ATC transponder where data correspondence error could be introduced, the integrated system has been tested, inspected, and found to comply with part M of JCAR.

(b) The tests required by paragraph (a) of this section must be conducted by:

(1) The manufacturer of the airplane, or helicopter, on which the tests and inspections are to be performed;

(2) A certificated repair station properly equipped to perform those functions and holding:

(i) An instrument rating, Class I;

(ii) A limited instrument rating appropriate to the make and model of appliance to be tested;

(iii) A limited rating appropriate to the test to be performed;

(iv) An airframe rating appropriate to the airplane, or helicopter, to be tested; or

(v) A limited rating for a manufacturer issued for the appliance in accordance with 145.101(b)(4) of JCAR; or

(3) A certificated mechanic with an airframe rating (static pressure system tests and inspections only).

(c) Altimeter and altitude reporting equipment approved under Technical Standard Orders are considered to be tested and inspected as of the date of their manufacture.

(d) No person may operate an airplane, or helicopter, in controlled airspace under IFR at an altitude above the maximum altitude at which all altimeters and the automatic altitude reporting system of that airplane, or helicopter, have been tested.

91.413 ATC transponder tests and inspections.

(a) No persons may use an ATC transponder that is specified in 91.215(a), and part OPS1 of JCAR unless, within the preceding 24 calendar months, the ATC transponder has been tested and inspected and found to comply with appendix F of part M of JCAR; and

(b) Following any installation or maintenance on an ATC transponder where data correspondence error could be introduced, the integrated system has been tested, inspected, and found to comply with paragraph (c), appendix E, of part 43 of JCAR.

(c) The tests and inspections specified in this section must be conducted by :

(1) A certificated repair station properly equipped to perform those functions and holding:

(i) A radio rating, Class III;

(ii) A limited radio rating appropriate to the make and model transponder to be tested;

(iii) A limited rating appropriate to the test to be performed;

(iv) A limited rating for a manufacturer issued for the transponder in accordance with 145.101(b)(4) of JCAR; or

(2) A holder of a continuous airworthiness maintenance program as provided in part OPS1 of JCAR; or

(3) The manufacturer of the aircraft on which the transponder to be tested is installed, if the transponder was installed by that manufacturer.

91.415 Changes to aircraft inspection programs.

(a) Whenever Chief Commissioner/CEO finds that revisions to an approved aircraft inspection program under 91.409(f)(4) are necessary for the continued adequacy of the program, the owner or operator shall, after notification by Chief Commissioner/CEO, make any changes in the program found to be necessary by the Chief Commissioner/CEO.

(b) The owner or operator may petition Chief Commissioner/CEO to reconsider the notice to make any changes in a program in accordance with paragraph (a) of this section.

(c) The petition must be filed with CARC which requested the change to the program within 30 days after the certificate holder receives the notice.

(d) 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 Chief Commissioner/CEO.

91.417 Maintenance records.

(a) Except for work performed in accordance with 91.411 and 91.413, each registered owner or operator shall keep the following records for the periods specified in paragraph (b) of this section:

(1) Records of the maintenance, preventive maintenance, and alteration and records of the 100-hour, annual, progressive, and other required or approved inspections, as appropriate, for each aircraft (including the airframe) and each engine, propeller, rotor, and appliance of an aircraft. The records must include:

(i) A description (or reference to data acceptable to Chief Commissioner/CEO of the work performed; and

(ii) The date of completion of the work performed; and

(iii) The signature, and certificate number of the person approving the aircraft for return to service.

(2) Records containing the following information:

(i) The total time in service of the airframe, each engine, each propeller, and each rotor.

(ii) The current status of life-limited parts of each airframe, engine, propeller, rotor, and appliance.

(iii) The time since last overhaul of all items installed on the aircraft which are required to be overhauled on a specified time basis.

(iv) 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.

(v) The current status of applicable airworthiness directives (AD) including, for each, the method of compliance, the AD number, and revision date. If the AD involves recurring action, the time and date when the next action is required.

(vi) Copies of the forms prescribed by 43.9(a) of JCAR for each major alteration to the airframe and currently installed engines, rotors, propellers, and appliances.

(b) The owner or operator shall retain the following records for the periods prescribed:

(1) The records specified in paragraph (a)(1) of this section shall be retained until the work is repeated or superseded by other work or for 1 year after the work is performed.

(2) The records specified in paragraph (a)(2) of this section shall be retained and transferred with the aircraft at the time the aircraft is sold.

(3) A list of defects furnished to a registered owner or operator under 43.11 of JCAR shall be retained until the defects are repaired and the aircraft is approved for return to service.

(c) The owner or operator shall make all maintenance records required to be kept by this section available for inspection by Chief Commissioner/CEO. In addition, the owner or operator shall present CARC Form 337 described in paragraph (d) of this section for inspection upon request of any law enforcement officer.

(d) When a fuel tank is installed within the passenger compartment or a baggage compartment pursuant to part M of JCAR, a copy of CARC Form 337 shall be kept on board the modified aircraft by the owner or operator.

91.419 Transfer of maintenance records.

Any owner or operator who sells a Jordanian-registered aircraft shall transfer to the purchaser, at the time of sale, the following records of that aircraft, in plain language form or in coded form at the election of the purchaser, if the coded form provides for the preservation and retrieval of information in a manner acceptable to Chief Commissioner/CEO:

(a) The records specified in 91.417(a)(2).

(b) The records specified in 91.417(a)(1) which are not included in the records covered by paragraph (a) of this section, except that the purchaser may permit the seller to keep physical custody of such records. However, custody of records by the seller does not relieve the purchaser of the responsibility under 91.417(c) to make the records available for inspection by Chief Commissioner/CEO.

91.421 Rebuilt engine maintenance records.

(a) The owner or operator may use a new maintenance record, without previous operating history, for an aircraft engine rebuilt by the manufacturer or by an agency approved by the manufacturer.

(b) Each manufacturer or agency that grants zero time to an engine rebuilt by it shall enter in the new record :

(1) A signed statement of the date the engine was rebuilt;

(2) Each change made as required by airworthiness directives; and

(3) Each change made in compliance with manufacturer's service bulletins, if the entry is specifically requested in that bulletin.

(c) For the purposes of this section, a rebuilt engine is a used engine that has been completely disassembled, inspected, repaired as necessary, reassembled, tested, and approved in the same manner and to the same tolerances and limits as a new engine with either new or used parts. However, all parts used in it must conform to the production drawing tolerances and limits for new parts or be of approved oversized or undersized dimensions for a new engine.

91.423-91.499 [Reserved]

Subpart –F
Large and Turbine-Powered Multiengine Airplanes

91.501 Applicability.

(a) This subpart prescribes operating rules, in addition to those prescribed in other subparts of this part, governing the operation of large and of turbojet-powered multiengine civil airplanes of Jordanian- registry. The operating rules in this subpart do not apply to those airplanes when they are required to be operated under part OPS1 of JCAR. (Section 91.409 prescribes an inspection program for large and for turbine-powered (turbojet and turboprop) multiengine airplanes of Jordanian registry when they are operated under this part .

(b) Operations that may be conducted under the rules in this subpart instead of those in JCAR part OPS1 when common carriage is not involved, include:

(1) Ferry or training flights;

(2) Aerial work operations such as aerial photography or survey, or pipeline patrol, but not including fire fighting operations;

(3) Flights for the demonstration of an airplane to prospective customers when no charge is made except for those specified in paragraph (d) of this section;

(4) Flights conducted by the operator of an airplane for his personal transportation, or the transportation of his guests when no charge, assessment, or fee is made for the transportation;

(5) Carriage of officials, employees, guests, and property of a company on an airplane operated by that company, or the parent or a subsidiary of the company or a subsidiary of the parent, when the carriage is within the scope of, and incidental to, the business of the company (other than transportation by air) and no charge, assessment or fee is made for the carriage in excess of the cost of owning, operating, and maintaining the airplane, except that no charge of any kind may be made for the carriage of a guest of a company, when the carriage is not within the scope of, and incidental to, the business of that company;

(6) The carriage of company officials, employees, and guests of the company on an airplane operated under a time sharing, interchange, or joint ownership agreement as defined in paragraph (c) of this section;

(7) The carriage of property (other than mail) on an airplane operated by a person in the furtherance of a business or employment (other than transportation by air) when the carriage is within the scope of, and incidental to, that business or employment and no charge, assessment, or fee is made for the carriage other than those specified in paragraph (d) of this section;

(8) The carriage on an airplane of an athletic team, sports group, choral group, or similar group having a common purpose or objective when there is no charge, assessment, or fee of any kind made by any person for that carriage; and

(9) The carriage of persons on an airplane operated by a person in the furtherance of a business other than transportation by air for the purpose of selling them land, goods, or property, including franchises or distributorships, when the carriage is within the scope of, and incidental to, that business and no charge, assessment, or fee is made for that carriage.

(c) As used in this section:

(1) A time sharing agreement means an arrangement whereby a person leases his airplane with flight crew to another person, and no charge is made for the flights conducted under that arrangement other than those specified in paragraph (d) of this section;

(2) An interchange agreement means an arrangement whereby a person leases his airplane to another person in exchange for equal time, when needed, on the other person's airplane, and no charge, assessment, or fee is made, except that a charge may be made not to exceed the difference between the cost of owning, operating, and maintaining the two airplanes;

(3) A joint ownership agreement means an arrangement whereby one of the registered joint owners of an airplane employs and furnishes the flight crew for that airplane and each of the registered joint owners pays a share of the charge specified in the agreement.

(d) The following may be charged, as expenses of a specific flight, for transportation as authorized by paragraphs (b) (3) and (7) and (c)(1) of this section:

(1) Fuel, oil, lubricants, and other additives.

(2) Travel expenses of the crew, including food, lodging, and ground transportation.

(3) Hangar and tie-down costs away from the aircraft's base of operation.

(4) Insurance obtained for the specific flight.

(5) Landing fees, airport taxes, and similar assessments.

(6) Customs, foreign permit, and similar fees directly related to the flight.

(7) In flight food and beverages.

(8) Passenger ground transportation.

(9) Flight planning and weather contract services.

(10) An additional charge equal to 100 percent of the expenses listed in paragraph (d)(1) of this section.

91.503 Flying equipment and operating information.

(a) The pilot in command of an airplane shall ensure that the following flying equipment and aeronautical charts and data, in current and appropriate form, are accessible for each flight at the pilot station of the airplane:

(1) A flashlight having at least two size "D" cells, or the equivalent, that is in good working order.

(2) A cockpit checklist containing the procedures required by paragraph (b) of this section.

(3) Pertinent aeronautical charts.

(4) For IFR, VFR over-the-top, or night operations, each pertinent navigational en route, terminal area, and approach and letdown chart.

(5) In the case of multiengine airplanes, one-engine inoperative climb performance data.

(b) Each cockpit checklist must contain the following procedures and shall be used by the flight crewmembers when operating the airplane:

(1) Before starting engines.

(2) Before takeoff.

(3) Cruise.

(4) Before landing.

(5) After landing.

(6) Stopping engines.

(7) Emergencies.

(c) Each emergency cockpit checklist procedure required by paragraph (b)(7) of this section must contain the following procedures, as appropriate:

(1) Emergency operation of fuel, hydraulic, electrical, and mechanical systems.

(2) Emergency operation of instruments and controls.

(3) Engine inoperative procedures.

(4) Any other procedures necessary for safety.

(d) The equipment, charts, and data prescribed in this section shall be used by the pilot in command and other members of the flight crew, when pertinent.

(e) Completed flight preparation forms shall be kept by an operator for a period of three months.

91.505 Familiarity with operating limitations and emergency equipment.

(a) Each pilot in command of an airplane shall, before beginning a flight, become familiar with the Airplane Flight Manual for that airplane, if one is required, and with any placards, listings, instrument markings, or any combination thereof, containing each operating limitation prescribed for that airplane by Chief Commissioner/CEO, including those specified in 91.9(b).

(b) Each required member of the crew shall, before beginning a flight, become familiar with the emergency equipment installed on the airplane to which that crewmember is assigned and with the procedures to be followed for the use of that equipment in an emergency situation.

91.507 Equipment requirements: Over-the-top or night VFR operations.

No person may operate an airplane over-the-top or at night under VFR unless that airplane is equipped with the instruments and equipment required for IFR operations under 91.205(d) and one electric landing light for night operations. Each required instrument and item of equipment must be in operable condition.

91.509 Survival equipment for overwater operations.

(a) No person may take off an airplane for a flight over water more than 50 nautical miles(80 km) from the nearest shore unless that airplane is equipped with a life preserver or an approved flotation means for each occupant of the airplane.

(b) No person may take off an airplane for a flight over water more than 30 minutes flying time or 100 nautical miles from the nearest shore unless it has on board the following survival equipment:

(1) A life preserver, equipped with an approved survivor locator light, for each occupant of the airplane.

(2) Enough liferafts (each equipped with an approved survival locator light) of a rated capacity and buoyancy to accommodate the occupants of the airplane.

(3) At least one pyrotechnic signaling device for each liferaft.

(4) One self-buoyant, water-resistant, portable emergency radio signaling device that is capable of transmission on the appropriate emergency frequency or frequencies and not dependent upon the airplane power supply.

(5) A lifeline stored in accordance with 25.1411(g) of JCAR.

(c) The required liferafts, life preservers, and signaling devices must be installed in conspicuously marked locations and easily accessible in the event of a ditching without appreciable time for preparatory procedures.

(d) A survival kit, appropriately equipped for the route to be flown, must be attached to each required liferaft.

(e) As used in this section, the term shore means that area of the land adjacent to the water which is above the high water mark and excludes land areas which are intermittently under water.

91.511 Radio equipment for overwater operations.

(a) Except as provided in paragraphs (c), (d), and (f) of this section, no person may take off an airplane for a flight over water more than 30 minutes flying time or 100 nautical miles from the nearest shore unless it has at least the following operable equipment:

(1) Radio communication equipment appropriate to the facilities to be used and able to transmit to, and receive from, any place on the route, at least one surface facility:

(i) Two transmitters.

(ii) Two microphones.

(iii) Two headsets or one headset and one speaker.

(iv) Two independent receivers.

(2) Appropriate electronic navigational equipment consisting of at least two independent electronic navigation units capable of providing the pilot with the information necessary to navigate the airplane within the airspace assigned by air traffic control. However, a receiver that can receive both communications and required navigational signals may be used in place of a separate communications receiver and a separate navigational signal receiver or unit.

(b) For the purposes of paragraphs (a)(1)(iv) and (a)(2) of this section, a receiver or electronic navigation unit is independent if the function of any part of it does

not depend on the functioning of any part of another receiver or electronic navigation unit.

(c) Notwithstanding the provisions of paragraph (a) of this section, a person may operate an airplane on which no passengers are carried from a place where repairs or replacement cannot be made to a place where they can be made, if not more than one of each of the dual items of radio communication and navigational equipment specified in paragraphs (a)(1) (i) through (iv) and (a)(2) of this section malfunctions or becomes inoperative.

(d) Notwithstanding the provisions of paragraph (a) of this section, when both VHF and HF communications equipment are required for the route and the airplane has two VHF transmitters and two VHF receivers for communications, only one HF transmitter and one HF receiver is required for communications.

(e) As used in this section, the term shore means that area of the land adjacent to the water which is above the high-water mark and excludes land areas which are intermittently under water.

91.513 Emergency equipment.

(a) No person may operate an airplane unless it is equipped with the emergency equipment listed in this section.

(b) Each item of equipment:

(1) Must be inspected in accordance with 91.409 to ensure its continued serviceability and immediate readiness for its intended purposes;

(2) Must be readily accessible to the crew;

(3) Must clearly indicate its method of operation; and

(4) When carried in a compartment or container, must have that compartment or container marked as to contents and date of last inspection.

(c) Hand fire extinguishers must be provided for use in crew, passenger, and cargo compartments in accordance with the following:

(1) The type and quantity of extinguishing agent must be suitable for the kinds of fires likely to occur in the compartment where the extinguisher is intended to be used.

(2) At least one hand fire extinguisher must be provided and located on or near the flight deck in a place that is readily accessible to the flight crew.

(3) At least one hand fire extinguisher must be conveniently located in the passenger compartment of each airplane accommodating more than six but less than 31 passengers, and at least two hand fire extinguishers must be conveniently located in the passenger compartment of each airplane accommodating more than 30 passengers.

(4) Hand fire extinguishers must be installed and secured in such a manner that they will not interfere with the safe operation of the airplane or adversely affect the safety of the crew and passengers. They must be readily accessible and, unless the locations of the fire extinguishers are obvious, their stowage provisions must be properly identified.

(d) First aid kits for treatment of injuries likely to occur in flight or in minor accidents must be provided.

(e) Each airplane accommodating more than 19 passengers must be equipped with a crash axe.

(f) Each passenger-carrying airplane must have a portable battery-powered megaphone or megaphones readily accessible to the crewmembers assigned to direct emergency evacuation, installed as follows:

(1) One megaphone on each airplane with a seating capacity of more than 60 but less than 100 passengers, at the most rearward location in the passenger cabin where it would be readily accessible to a normal flight attendant seat. However, the Administrator may grant a deviation from the requirements of this subparagraph if Chief Commissioner/CEO finds that a different location would be more useful for evacuation of persons during an emergency.

(2) On each airplane with a seating capacity of 100 or more passengers, one megaphone installed at the forward end and one installed at the most rearward location where it would be readily accessible to a normal flight attendant seat.

91.515 Flight altitude rules.

(a) Notwithstanding 91.119, and except as provided in paragraph (b) of this section, no person may operate an airplane under VFR at less than:

(1) One thousand feet above the surface, or 1,000 feet from any mountain, hill, or other obstruction to flight, for day operations; and

(2) The altitudes prescribed in 91.177, for night operations.

(b) This section does not apply:

(1) During takeoff or landing;

(2) When a different altitude is authorized by a waiver to this section under subpart J of this part; or

(3) When a flight is conducted under the special VFR weather minimums of 91.157 with an appropriate clearance from ATC.

91.517 Passenger information.

(a) Except as provided in paragraph (b) of this section, no person may operate an airplane carrying passengers unless it is equipped with signs that are visible to passengers and flight attendants to notify them when smoking is prohibited and when safety belts must be fastened. The signs must be so constructed that the crew can turn them on and off. They must be turned on during airplane movement on the surface, for each takeoff, for each landing, and when otherwise considered to be necessary by the pilot in command.

(b) The pilot in command of an airplane that is not required, in accordance with applicable aircraft and equipment requirements of this chapter, to be equipped as provided in paragraph (a) of this section shall ensure that the passengers are notified orally each time that it is necessary to fasten their safety belts and when smoking is prohibited.

(c) If passenger information signs are installed, no passenger or crewmember may smoke while any "no smoking" sign is lighted nor may any passenger or crewmember smoke in any lavatory.

(d) Each passenger required by 91.107(a)(3) to occupy a seat or berth shall fasten his or her safety belt about him or her and keep it fastened while any "fasten seat belt" sign is lighted.

(e) Each passenger shall comply with instructions given him or her by crewmembers regarding compliance with paragraphs (b), (c), and (d) of this section.

91.519 Passenger briefing.

(a) Before each takeoff the pilot in command of an airplane carrying passengers shall ensure that all passengers have been orally briefed on :

(1) Smoking. Each passenger shall be briefed on when, where, and under what conditions smoking is prohibited. This briefing shall include a statement, as appropriate, that the Civil Aviation Regulations require passenger compliance with lighted passenger information signs and no smoking placards, prohibit smoking in lavatories, and require compliance with crewmember instructions with regard to these items;

(2) Use of safety belts and shoulder harnesses. Each passenger shall be briefed on when, where, and under what conditions it is necessary to have his or her safety belt and, if installed, his or her shoulder harness fastened about him or her. This briefing shall include a statement, as appropriate, that Civil Aviation Regulations require passenger compliance with the lighted passenger sign and/or crewmember instructions with regard to these items;

(3) Location and means for opening the passenger entry door and emergency exits;

(4) Location of survival equipment;

(5) Ditching procedures and the use of flotation equipment required under 91.509 for a flight over water; and

(6) The normal and emergency use of oxygen equipment installed on the airplane.

(b) The oral briefing required by paragraph (a) of this section shall be given by the pilot in command or a member of the crew, but need not be given when the pilot in command determines that the passengers are familiar with the contents of the briefing. It may be supplemented by printed cards for the use of each passenger containing:

(1) A diagram of, and methods of operating, the emergency exits; and

(2) Other instructions necessary for use of emergency equipment.

(c) Each card used under paragraph (b) must be carried in convenient locations on the airplane for the use of each passenger and must contain information that is pertinent only to the type and model airplane on which it is used.

91.521 Shoulder harness.

(a) No person may operate a transport category airplane , unless it is equipped at each seat at a flight deck station with a combined safety belt and shoulder harness that meets the applicable approved standards, except that :

(1) Shoulder harnesses and combined safety belt and shoulder harnesses that were approved and installed before January 1, 1980, may continue to be used; and

(2) Safety belt and shoulder harness restraint systems may be designed to the inertia load factors established under the certification basis of the airplane.

(b) No person may operate a transport category airplane unless it is equipped at each required flight attendant seat in the passenger compartment with a combined safety belt and shoulder harness that meets the applicable approved standards, except that :

(1) Shoulder harnesses and combined safety belt and shoulder harnesses that were approved and installed before January 1, 1980, may continue to be used; and

(2) Safety belt and shoulder harness restraint systems may be designed to the inertia load factors established under the certification basis of the airplane.

91.523 Carry-on baggage.

No pilot in command of an airplane having a seating capacity of more than 19 passengers may permit a passenger to stow baggage aboard that airplane except :

(a) In a suitable baggage or cargo storage compartment, or as provided in 91.525; or

(b) Under a passenger seat in such a way that it will not slide forward under crash impacts severe enough to induce the ultimate inertia forces specified in the requirements of the regulations under which the airplane was type certificated. Restraining devices must also limit sideward motion of under-seat baggage and be designed to withstand crash impacts severe enough to induce sideward forces specified in approved standards.

91.525 Carriage of cargo.

(a) No pilot in command may permit cargo to be carried in any airplane unless :

(1) It is carried in an approved cargo rack, bin, or compartment installed in the airplane;

(2) It is secured by means approved by Chief Commissioner/CEO; or
(3) It is carried in accordance with each of the following:

(i) It is properly secured by a safety belt or other tiedown having enough strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions.

(ii) It is packaged or covered to avoid possible injury to passengers.

(iii) It does not impose any load on seats or on the floor structure that exceeds the load limitation for those components.

(iv) It is not located in a position that restricts the access to or use of any required emergency or regular exit, or the use of the aisle between the crew and the passenger compartment.

(v) It is not carried directly above seated passengers.

(b) When cargo is carried in cargo compartments that are designed to require the physical entry of a crewmember to extinguish any fire that may occur during flight, the cargo must be loaded so as to allow a crewmember to effectively reach all parts of the compartment with the contents of a hand fire extinguisher.

91.527 Operating in icing conditions.

(a) No pilot may take off an airplane that has:

(1) Frost, snow, or ice adhering to any propeller, windshield, or powerplant installation or to an airspeed, altimeter, rate of climb, or flight attitude instrument system;

(2) Snow or ice adhering to the wings or stabilizing or control surfaces; or

(3) Any frost adhering to the wings or stabilizing or control surfaces, unless that frost has been polished to make it smooth.

(b) Except for an airplane that has ice protection provisions that meet approved requirements, or those for transport category airplane type certification, no pilot may fly:

(1) Under IFR into known or forecast moderate icing conditions; or

(2) Under VFR into known light or moderate icing conditions unless the aircraft has functioning de-icing or anti-icing equipment protecting each propeller, windshield, wing, stabilizing or control surface, and each airspeed, altimeter, rate of climb, or flight attitude instrument system.

(c) Except for an airplane that has ice protection provisions that meet approved requirements, or those for transport category airplane type certification, no pilot may fly an airplane into known or forecast severe icing conditions.

(d) If current weather reports and briefing information relied upon by the pilot in command indicate that the forecast icing conditions that would otherwise prohibit the flight will not be encountered during the flight because of changed weather conditions since the forecast, the restrictions in paragraphs (b) and (c) of this section based on forecast conditions do not apply.

91.529 Flight engineer requirements.

(a) No person may operate the airplanes without a flight crewmember holding a current flight engineer certificate for which a flight engineer is required by the type certification requirements.

(b) No person may serve as a required flight engineer on an airplane unless, within the preceding 6 calendar months, that person has had at least 50 hours of flight time as a flight engineer on that type airplane or has been checked by Chief Commissioner/CEO on that type airplane and is found to be familiar and competent with all essential current information and operating procedures.

91.531 Second in command requirements.

(a) Except as provided in paragraph (b) of this section, no person may operate the following airplanes without a pilot who is designated as second in command of that airplane:

(1) A large airplane, except that a person may operate an airplane certificated without a pilot who is designated as second in command if that airplane is certificated for operation with one pilot.

(2) A turbojet-powered multiengine airplane for which two pilots are required under the type certification requirements for that airplane.

(3) A commuter category airplane, except that a person may operate a commuter category airplane notwithstanding paragraph (a)(1) of this section,

that has a passenger seating configuration, excluding pilot seats, of nine or less without a pilot who is designated as second in command if that airplane is type certificated for operations with one pilot.

(b) Chief Commissioner/CEO may issue a letter of authorization for the operation of an airplane without compliance with the requirements of paragraph (a) of this section if that airplane is designed for and type certificated with only one pilot station. The authorization contains any conditions that Chief Commissioner/CEO finds necessary for safe operation.

(c) No person may designate a pilot to serve as second in command, nor may any pilot serve as second in command, of an airplane required under this section to have two pilots unless that pilot meets the qualifications for second in command prescribed in part FCL1 of JCAR.

91.533 Flight attendant requirements.

(a) No person may operate an airplane unless at least the following number of flight attendants are on board the airplane:

(1) For airplanes having more than 19 but less than 51 passengers on board, one flight attendant.

(2) For airplanes having more than 50 but less than 101 passengers on board, two flight attendants.

(3) For airplanes having more than 100 passengers on board, two flight attendants plus one additional flight attendant for each unit (or part of a unit) of 50 passengers above 100.

(b) No person may serve as a flight attendant on an airplane when required by paragraph (a) of this section unless that person has demonstrated to the pilot in command familiarity with the necessary functions to be performed in an emergency or a situation requiring emergency evacuation and is capable of using the emergency equipment installed on that airplane.

91.535 Stowage of food, beverage, and passenger service equipment during aircraft movement on the surface, takeoff, and landing.

(a) No operator may move an aircraft on the surface, take off, or land when any food, beverage, or tableware furnished by the operator is located at any passenger seat.

(b) No operator may move an aircraft on the surface, take off, or land unless each food and beverage tray and seat back tray table is secured in its stowed position.

(c) No operator may permit an aircraft to move on the surface, take off, or land unless each passenger serving cart is secured in its stowed position.

(d) No operator may permit an aircraft to move on the surface, take off, or land unless each movie screen that extends into the aisle is stowed.

(e) Each passenger shall comply with instructions given by a crewmember with regard to compliance with this section.

91.536 - 91.599 [Reserved]

Subpart- G
Additional Equipment and Operating Requirements for Large and Transport Category Aircraft

91.601 Applicability.

This subpart applies to operation of large and transport category Jordanian-registered civil aircraft.

91.603 Aural speed warning device.

No person may operate a transport category airplane in air commerce unless that airplane is equipped with an aural speed warning device that complies with approved standards.

91.605 Transport category civil airplane weight limitations.

(a) No person may operate a turbine-engine-powered transport category airplane contrary to the Airplane Flight Manual, or take off that airplane unless:

(1) The takeoff weight does not exceed the takeoff weight specified in the Airplane Flight Manual for the elevation of the airport and for the ambient temperature existing at the time of takeoff;

(2) Normal consumption of fuel and oil in flight to the airport of intended landing and to the alternate airports will leave a weight on arrival not in excess of the landing weight specified in the Airplane Flight Manual for the

elevation of each of the airports involved and for the ambient temperatures expected at the time of landing;

(3) The takeoff weight does not exceed the weight shown in the Airplane Flight Manual to correspond with the minimum distances required for takeoff, considering the elevation of the airport, the runway to be used, the effective runway gradient, the ambient temperature and wind component at the time of takeoff, and, if operating limitations exist for the minimum distances required for takeoff from wet runways, the runway surface condition (dry or wet). Wet runway distances associated with grooved or porous friction course runways, if provided in the Airplane Flight Manual, may be used only for runways that are grooved or treated with a porous friction course (PFC) overlay, and that the operator determines are designed, constructed, and maintained in a manner acceptable to Chief Commissioner/CEO.

(4) Where the takeoff distance includes a clearway, the clearway distance is not greater than one-half of:

(i) The takeoff run, or

(ii) The runway length.

(b) No person may take off a turbine-engine-powered transport category airplane in addition to the requirements of paragraph (a) of this section:

(1) The accelerate-stop distance is no greater than the length of the runway plus the length of the stopway (if present); and

(2) The takeoff distance is no greater than the length of the runway plus the length of the clearway (if present); and

(3) The takeoff run is no greater than the length of the runway.

91.607 Emergency exits for airplanes carrying passengers for hire.

(a) Notwithstanding any other provision of this JCAR, no person may operate a large airplane (type certificated under the Civil Aviation Regulations) in passenger-carrying operations for hire, with more than the number of occupants :

(1) Allowed under Civil Aviation Regulations; or

(2) Approved under Special Civil Aviation Regulations.

However, an airplane type certificated under the Civil Aviation Regulations, may be operated with up to the approved number of occupants (including crewmembers) and the corresponding number of exits (including emergency exits and doors) approved for the emergency exit of passengers or with an occupant-exit configuration approved under paragraph (b) or (c) of this section.

(b) Occupants in addition to those authorized under paragraph (a) of this section may be carried as follows:

(1) For each additional floor-level exit at least 24 inches wide by 48 inches high, with an unobstructed 20-inch-wide access aisleway between the exit and the main passenger aisle, 12 additional occupants.

(2) For each additional window exit located over a wing that meets the requirements of the airworthiness standards under which the airplane was type certificated or that is large enough to inscribe an ellipse 19×26 inches, eight additional occupants.

(3) For each additional window exit that is not located over a wing but that otherwise complies with paragraph (b)(2) of this section, five additional occupants.

(4) For each airplane having a ratio (as computed from the table in paragraph (a) of this section) of maximum number of occupants to number of exits greater than 14:1, and for each airplane that does not have at least one full-size, door-type exit in the side of the fuselage in the rear part of the cabin, the first additional exit must be a floor-level exit that complies with paragraph (b)(1) of this section and must be located in the rear part of the cabin on the opposite side of the fuselage from the main entrance door. However, no person may operate an airplane under this section carrying more than 115 occupants unless there is such an exit on each side of the fuselage in the rear part of the cabin.

(c) No person may eliminate any approved exit except in accordance with the following:

(1) The previously authorized maximum number of occupants must be reduced by the same number of additional occupants authorized for that exit under this section.

(2) Exits must be eliminated in accordance with the following priority schedule: First, non-over-wing window exits; second, over-wing window exits; third, floor-level exits located in the forward part of the cabin; and fourth, floor-level exits located in the rear of the cabin.

(3) At least one exit must be retained on each side of the fuselage regardless of the number of occupants.

(4) No person may remove any exit that would result in a ratio of maximum number of occupants to approved exits greater than 14:1.

(d) This section does not relieve any person operating under part OPS1, of JCAR from complying with part OPS1

91.609 Flight recorders and cockpit voice recorders.

(a) No holder of an air carrier operating certificate or an operating certificate may conduct any operation under this part with an aircraft listed in the holder's operations specifications or current list of aircraft used in air transportation unless that aircraft complies with any applicable flight recorder and cockpit voice recorder requirements of the part under which its certificate is issued except that the operator may:

(1) Ferry an aircraft with an inoperative flight recorder or cockpit voice recorder from a place where repair or replacement cannot be made to a place where they can be made;

(2) Continue a flight as originally planned, if the flight recorder or cockpit voice recorder becomes inoperative after the aircraft has taken off;

(3) Conduct an airworthiness flight test during which the flight recorder or cockpit voice recorder is turned off to test it or to test any communications or electrical equipment installed in the aircraft; or

(4) Ferry a newly acquired aircraft from the place where possession of it is taken to a place where the flight recorder or cockpit voice recorder is to be installed.

(b) Notwithstanding paragraphs (c) and (e) of this section, an operator other than the holder of an air carrier or a commercial operator certificate may :

(1) Ferry an aircraft with an inoperative flight recorder or cockpit voice recorder from a place where repair or replacement cannot be made to a place where they can be made;

(2) Continue a flight as originally planned if the flight recorder or cockpit voice recorder becomes inoperative after the aircraft has taken off;

(3) Conduct an airworthiness flight test during which the flight recorder or cockpit voice recorder is turned off to test it or to test any communications or electrical equipment installed in the aircraft;

(4) Ferry a newly acquired aircraft from a place where possession of it was taken to a place where the flight recorder or cockpit voice recorder is to be installed; or

(5) Operate an aircraft:

(i) For not more than 15 days while the flight recorder and/or cockpit voice recorder is inoperative and/or removed for repair provided that the aircraft maintenance records contain an entry that indicates the date of failure, and a placard is located in view of the pilot to show that the flight recorder or cockpit voice recorder is inoperative.

(ii) For not more than an additional 15 days, provided that the requirements in paragraph (b)(5)(i) are met and that a certificated pilot, or a certificated person authorized to return an aircraft to service under 43.7 of JCAR, certifies in the aircraft maintenance records that additional time is required to complete repairs or obtain a replacement unit.

(c) No person may operate a Jordanian civil registered, multiengine, turbine-powered airplane or rotorcraft having a passenger seating configuration, excluding any pilot seats of 10 or more that has been manufactured after January 1, 1992, unless it is equipped with one or more approved flight recorders that utilize a digital method of recording and storing data and a method of readily retrieving that data from the storage medium, that are capable of recording the data specified in appendix E to this part, for an airplane, or appendix F to this part, for a rotorcraft, of this part within the range, accuracy, and recording interval specified, and that are capable of retaining no less than 8 hours of aircraft operation.

(d) Whenever a flight recorder, required by this section, is installed, it must be operated continuously from the instant the airplane begins the takeoff roll or the rotorcraft begins lift-off until the airplane has completed the landing roll or the rotorcraft has landed at its destination.

(e) Unless otherwise authorized by Chief Commissioner/CEO , no person may operate a Jordanian civil registered multiengine, turbine-powered airplane or rotorcraft having a passenger seating configuration of six passengers or more and for which two pilots are required by type certification or operating rule unless it is equipped with an approved cockpit voice recorder that:

(1) Is installed in compliance with approved standards; and

(2) Is operated continuously from the use of the checklist before the flight to completion of the final checklist at the end of the flight.

(f) In complying with this section, an approved cockpit voice recorder having an erasure feature may be used, so that at any time during the operation of the recorder, information recorded more than 15 minutes earlier may be erased or otherwise obliterated.

(g) In the event of an accident or occurrence requiring immediate notification to CARC under applicable regulations that results in the termination of the flight, any operator who has installed approved flight recorders and approved cockpit voice recorders shall keep the recorded information for at least 60 days or, if requested by Chief Commissioner/CEO, for a longer period. Information obtained from the record is used to assist in determining the cause of accidents or occurrences in connection with the investigation under applicable regulations. Chief Commissioner/CEO does not use the cockpit voice recorder record in any civil penalty or certificate action.

91.611 Authorization for ferry flight with one engine inoperative.

(a) General. The holder of an air carrier operating certificate or an operating certificate issued under JCAR may conduct a ferry flight of a four-engine airplane or a turbine-engine-powered airplane equipped with three engines, with one engine inoperative, to a base for the purpose of repairing that engine subject to the following:

(1) The airplane model has been test flown and found satisfactory for safe flight in accordance with paragraph (b) or (c) of this section, as appropriate. However, each operator who has shown that a model of airplane with an engine inoperative is satisfactory for safe flight by a test flight conducted in accordance with performance data contained in the applicable Airplane Flight Manual under paragraph (a)(2) of this section need not repeat the test flight for that model.

(2) The approved Airplane Flight Manual contains the following performance data and the flight is conducted in accordance with that data:

(i) Maximum weight.

(ii) Center of gravity limits.

(iii) Configuration of the inoperative propeller (if applicable).

(iv) Runway length for takeoff (including temperature accountability).

(v) Altitude range.

(vi) Certificate limitations.

(vii) Ranges of operational limits.

(viii) Performance information.

(ix) Operating procedures.

(3) The operator has CARC approved procedures for the safe operation of the airplane, including specific requirements for :

(i) Limiting the operating weight on any ferry flight to the minimum necessary for the flight plus the necessary reserve fuel load;

(ii) A limitation that takeoffs must be made from dry runways unless, based on a showing of actual operating takeoff techniques on wet runways with one engine inoperative, takeoffs with full controllability from wet runways have been approved for the specific model aircraft and included in the Airplane Flight Manual:

(iii) Operations from airports where the runways may require a takeoff or approach over populated areas; and

(iv) Inspection procedures for determining the operating condition of the operative engines.

(4) No person may take off an airplane under this section if :

(i) The initial climb is over thickly populated areas; or

(ii) Weather conditions at the takeoff or destination airport are less than those required for VFR flight.

(5) Persons other than required flight crewmembers shall not be carried during the flight.

(6) No person may use a flight crewmember for flight under this section unless that crewmember is thoroughly familiar with the operating procedures for one-engine inoperative ferry flight contained in the certificate holder's manual and the limitations and performance information in the Airplane Flight Manual.

(b) Flight tests: reciprocating-engine-powered airplanes. The airplane performance of a reciprocating-engine-powered airplane with one engine inoperative must be determined by flight test as follows:

(1) A speed not less than 1.3 VS1 must be chosen at which the airplane may be controlled satisfactorily in a climb with the critical engine inoperative (with its propeller removed or in a configuration desired by the operator and with all other engines operating at the maximum power determined in paragraph (b)(3) of this section.

(2) The distance required to accelerate to the speed listed in paragraph (b)(1) of this section and to climb to 50 feet must be determined with :

(i) The landing gear extended;

(ii) The critical engine inoperative and its propeller removed or in a configuration desired by the operator; and

(iii) The other engines operating at not more than maximum power established under paragraph (b)(3) of this section.

(3) The takeoff, flight and landing procedures, such as the approximate trim settings, method of power application, maximum power, and speed must be established.

(4) The performance must be determined at a maximum weight not greater than the weight that allows a rate of climb of at least 400 feet (120 meters) per minute in the en route configuration set forth in approved standards, at an altitude of 5,000 feet (1500 meters).

(5) The performance must be determined using temperature accountability for the takeoff field length, computed in accordance with approved standards.

(c) Flight tests: Turbine-engine-powered airplanes. The airplane performance of a turbine-engine-powered airplane with one engine inoperative must be determined by flight tests, including at least three takeoff tests, in accordance with the following:

(1) Takeoff speeds VR and V2, not less than the corresponding speeds under which the airplane was type certificated, must be chosen at which the airplane may be controlled satisfactorily with the critical engine inoperative (with its propeller removed or in a configuration desired by the operator, if applicable) and with all other engines operating at not more than the power selected for type certification as set forth in approved standards.

(2) The minimum takeoff field length must be the horizontal distance required to accelerate and climb to the 35-foot height at V2 speed (including any additional speed increment obtained in the tests) multiplied by 115 percent and determined with:

(i) The landing gear extended;

(ii) The critical engine inoperative and its propeller removed or in a configuration desired by the operator (if applicable); and

(iii) The other engine operating at not more than the power selected for type certification as set forth in approved standards.

(3) The takeoff, flight, and landing procedures such as the approximate trim setting, method of power application, maximum power, and speed must be established. The airplane must be satisfactorily controllable during the entire takeoff run when operated according to these procedures.

(4) The performance must be determined at a maximum weight not greater than the weight determined under approved standards but with:

(i) The actual steady gradient of the final takeoff climb requirement not less than 1.2 percent at the end of the takeoff path with two critical engines inoperative; and

(ii) The climb speed not less than the two-engine inoperative trim speed for the actual steady gradient of the final takeoff climb prescribed by paragraph (c)(4)(i) of this section.

(5) The airplane must be satisfactorily controllable in a climb with two critical engines inoperative. Climb performance may be shown by calculations based on, and equal in accuracy to, the results of testing.

(6) The performance must be determined using temperature accountability for takeoff distance and final takeoff climb computed in accordance with approved standards.

For the purpose of paragraphs (c)(4) and (5) of this section, two critical engines means two adjacent engines on one side of an airplane with four engines, and the center engine and one outboard engine on an airplane with three engines.

91.613 Materials for compartment interiors.

No person may operate an airplane that conforms to an amended or supplemental type certificate issued in accordance with JCAR for a maximum certificated takeoff weight in excess of 12,500 pounds (5700 kg) unless airplane meets the compartment interior requirements set forth in approved standards.

91.615-91.699 [Reserved]

Subpart- H

Foreign Aircraft Operations and Operations of Jordanian-Registered Civil Aircraft Outside Jordan; and Rules Governing Persons on Board Such Aircraft

91.701 Applicability.

(a) This subpart applies to the operations of civil aircraft of Jordanian registry outside of Jordan and the operations of foreign civil aircraft within Jordan.

(b) Section 91.702 of this subpart also applies to each person on board an aircraft operated as follows:

(1) A Jordanian registered civil aircraft operated outside Jordan;

(2) Any aircraft operated outside Jordan:

(i) That has its next scheduled destination or last place of departure in Jordan if the aircraft next lands in Jordan; or

(ii) If the aircraft lands in Jordan with the individual still on the aircraft regardless of whether it was a scheduled or otherwise planned landing site.

91.702 Persons on board.

Section 91.11 of this part (Prohibitions on interference with crewmembers) applies to each person on board an aircraft.

91.703 Operations of civil aircraft of Jordanian registry or operated by a Jordanian operator outside of Jordan.

(a) Any civil aircraft of Jordanian registry or operated by a Jordanian operator outside of Jordan shall:

(1) When over the high seas, comply with annex 2 (Rules of the Air) to the Convention on International Civil Aviation and with 91.117(c), 91.127, 91.129, and 91.131;

(2) When within a foreign country, comply with the regulations relating to the flight and maneuver of aircraft there in force;

(3) Except for 91.307(b), 91.309, 91.323, and 91.711, comply with this part so far as it is not inconsistent with applicable regulations of the foreign country where the aircraft is operated or annex 2 of the Convention on International Civil Aviation; and

(4) When operating within airspace designated as Minimum Navigation Performance Specifications (MNPS) airspace, comply with 91.705. When operating within airspace designated as Reduced Vertical Separation Minimum (RVSM) airspace, comply with 91.706.

(5) In case of interception, the pilot in command of a civil aircraft , when intercepted, shall comply with the interception laws or regulations of that State, any violation of such applicable laws or regulations shall be submitted to the competent authorities in accordance with its laws or regulations .

(6) Ensure the inclusion of the instructions to adhere to the aircraft interception procedures in the operation manual.

(b) Annex 2 to the Convention on International Civil Aviation, Ninth Edition , July 1990, with Amendments through Amendment 32 effective February 19, 1996, to which reference is made in this part, is available for public inspection at CARC. Annex 2 may be purchased from the International Civil Aviation Organization (Attention: Distribution

Officer), P.O. Box 400, Succursale, Place de L'Aviation International, 1000 Sherbrooke Street West, Montreal, Quebec, Canada H3A 2R2.

91.705 Damages sustained or ascertained on a Jordanian Registered Aircraft when the aircraft is in territory of another State

(a) When an aircraft of a Jordanian registry sustained damage or the damage was ascertained while the aircraft is in the territory of another State, the authorities of the other State shall be entitled to prevent the aircraft from resuming its flight on the condition that they shall advise CARC immediately, communicating to CARC all details necessary to formulate the judgment of whether the damage is of a nature such that the aircraft is no longer airworthy as defined by the appropriate airworthiness requirements.

(b) When CARC considers that the damage sustained is of a nature such that the aircraft is no longer airworthy, it shall prohibit the aircraft from resuming flight until it is restored to an airworthy condition. CARC may, however, in exceptional circumstances, prescribe particular limiting conditions to permit the aircraft to fly a non-commercial air transport operation to an aerodrome at which it will be restored to an airworthy condition. In prescribing particular limiting conditions CARC shall consider all limitations proposed by the State that had originally, in accordance with Paragraph (a), prevented the aircraft from resuming its flight. That State shall permit such flight or flights within the prescribed limitations.

When CARC considers that the damage sustained is of a nature such that the aircraft is still airworthy, the aircraft shall be allowed to resume its flight.

91.706 Operations within airspace designated as Reduced Vertical Separation Minimum Airspace.

(a) Except as provided in paragraph (b) of this section, no person may operate a civil aircraft in Jordanian airspace designated as Reduced Vertical Separation Minimum (RVSM) unless:

(1) The operator and the operator's aircraft comply with the requirements of appendix G of this part; and

(2) The operator is authorized by Chief Commissioner/CEO to conduct such operations.

(b) Notwithstanding paragraph (a)(2) for flight in RVSM airspace, the aircraft shall be authorized by state of the operator for operation in the airspace concerned.

(c) Chief Commissioner/CEO may authorize a deviation from the requirements of this section in accordance with Section 5 of appendix G to this part.

91.707 -91. 709 [Reserved].

91.711 Special rules for foreign civil aircraft.

(a) General. In addition to the other applicable regulations of this part, each person operating a foreign civil aircraft within Jordan shall comply with this section.

(b) VFR. No person may conduct VFR operations which require two-way radio communications under this part unless at least one crewmember of that aircraft is able to conduct two-way radio communications in the English language and is on duty during that operation.

(c) IFR. No person may operate a foreign civil aircraft under IFR unless:

(1) That aircraft is equipped with:

(i) Radio equipment allowing two-way radio communication with ATC when it is operated in controlled airspace; and

(ii) Radio navigational equipment appropriate to the navigational facilities to be used;

(2) Each person piloting the aircraft:

(i) Holds a current Jordanian instrument rating or is authorized by his foreign airman certificate to pilot under IFR; and

(ii) Is thoroughly familiar with Jordanian en route, holding, and letdown procedures; and

(3) At least one crewmember of that aircraft is able to conduct two-way radiotelephone communications in the English language and that crewmember is on duty while the aircraft is approaching, operating within, or leaving Jordan.

(d) Over water. Each person operating a foreign civil aircraft over water off the shores of Jordan shall give flight notification or file a flight plan in accordance with the Supplementary Procedures for the ICAO region concerned.

(e) Flight at and above FL 240. If VOR navigational equipment is required under paragraph (c)(1)(ii) of this section, no person may operate a foreign civil aircraft

within Jordan at or above FL 240, unless the aircraft is equipped with distance measuring equipment (DME) capable of receiving and indicating distance information from the VOR facilities to be used. When DME required by this paragraph fails at and above FL 240, the pilot in command of the aircraft shall notify ATC immediately and may then continue operations at and above FL 240 to the next airport of intended landing at which repairs or replacement of the equipment can be made. However, paragraph (e) of this section does not apply to foreign civil aircraft that are not equipped with DME when operated for the following purposes and if ATC is notified prior to each takeoff:

(1) Ferry flights to and from a place in Jordan where repairs or alterations are to be made.

(2) Ferry flights to a new country of registry.

(3) Flight of a new aircraft of Jordanian manufacture for the purpose of:

(i) Flight testing the aircraft;

(ii) Training foreign flight crews in the operation of the aircraft; or

(iii) Ferrying the aircraft for export delivery outside Jordan.

(4) Ferry, demonstration, and test flight of an aircraft brought to Jordan for the purpose of demonstration or testing the whole or any part thereof.

91.713 Damages sustained or ascertained on an aircraft of a foreign registry when the aircraft is in territory of Jordan

(a) When an aircraft of a foreign registry sustained damage or the damage was ascertained while the aircraft is in the territory of Jordan, CARC shall be entitled to prevent the aircraft from resuming its flight on the condition that CARC shall advise the State of Registry immediately, communicating to it all details necessary to formulate the judgment of whether the damage is of a nature such that the aircraft is no longer airworthy as defined by the appropriate airworthiness requirements.

(b) When the State of Registry considers that the damage sustained is of a nature such that the aircraft is no longer airworthy, it shall prohibit the aircraft from resuming flight until it is restored to an airworthy condition. The State of Registry may, however, in exceptional circumstances, prescribe particular limiting

conditions to permit the aircraft to fly a non-commercial air transport operation to an aerodrome at which it will be restored to an airworthy condition. In prescribing particular limiting conditions the State of Registry shall consider all limitations proposed by CARC that had originally, in accordance with paragraph (a), prevented the aircraft from resuming its flight. When such limiting conditions are established, CARC shall permit such flight or flights within the prescribed limitations.

(c) When the State of Registry considers that the damage sustained is of a nature such that the aircraft is still airworthy, the aircraft shall be allowed to resume its flight.

91.715 Special flight authorizations for foreign civil aircraft.

(a) When an application for a Special flight authorization is submitted to CARC for a foreign registered aircraft issued with a "Permit to Fly" by the State of registry of that Aircraft, the application shall include the requirements and documentations prescribed hereinafter:

(1) The aircraft certificate of registration,

(2) The Purpose of the Flight,

(3) The issued Permit to Fly and the prescribed Conditions and Limitations,

(4) The flight itinerary,

(5) The contact details of the applicant,

(6) Any other information requested by CARC and considered necessary for aircraft safe flight.

(b) CARC may consider prescription of additional conditions and limitations necessary for aircraft safe flight in Jordan Airspace before granting authorization of such flight. The additional conditions and limitations prescribed by CARC shall form part of the issued Special Flight Authorization.

91.717thru 91.799 [Reserved]

Subpart-I
Operating Noise Limits.

91.801 Applicability: Relation to applicable of JCAR.

(a) This subpart prescribes operating noise limits and related requirements that apply, as follows, to the operation of civil aircraft in Jordan.

(1) Sections 91.803, 91.805, 91.807, 91.809, and 91.811 apply to civil subsonic jet (turbojet) airplanes with maximum weights of more than 75,000 pounds(34000 kg) and :

(i) If registered, that have standard airworthiness certificates; or

(ii) If foreign registered, that would be required by JCAR have a Jordanian standard airworthiness certificate in order to conduct the operations intended for the airplane were it registered in Jordan. Those sections apply to operations to or from airports in Jordan under this part and part OPS1 of JCAR.

(2) Section 91.813 applies to Jordanian operators of civil subsonic jet (turbojet) airplanes covered by this subpart. This section applies to operators operating to or from airports in Jordan under this part OPS1 of JCAR.

(3) Sections 91.803, 91.819, and 91.821 apply to Jordanian-registered civil supersonic airplanes having standard airworthiness certificates and to foreign-registered civil supersonic airplanes that, if registered in Jordan, would be required by JCAR to have Jordanian standard airworthiness certificates in order to conduct the operations intended for the airplane. Those sections apply to operations under this part and under part OPS1 of JCAR.

(b) Unless otherwise specified, as used in this subpart " refers to applicable of JCAR, including the noise levels under appendix C of that part, notwithstanding the provisions of that part excepting certain airplanes from the specified noise requirements. For purposes of this subpart, the various stages of noise levels, the terms used to describe airplanes with respect to those levels, and the terms "subsonic airplane" and "supersonic airplane" have the meanings specified under applicable of JCAR. For purposes of this subpart, for subsonic airplanes operated in foreign air commerce in Jordan, Chief Commissioner/CEO may accept compliance with the noise requirements under annex 16 of the International Civil Aviation Organization when those requirements have been shown to be

substantially compatible with, and achieve results equivalent to those achievable under, applicable of JCAR for that airplane. Determinations made under these provisions are subject to the limitations of applicable of JCAR as if those noise levels were applicable of JCAR noise levels.

(c) Sections 91.851 through 91.877 of this subpart prescribe operating noise limits and related requirements that apply to any civil subsonic jet (turbojet) airplane (for which an airworthiness certificate other than an experimental certificate has been issued by Chief Commissioner/CEO with a maximum certificated takeoff weight of more than 75,000 pounds (34000 kg) operating to or from an airport in Jordan under this part .

(d) Section 91.877 prescribes reporting requirements that apply to any civil subsonic jet (turbojet) airplane with a maximum weight of more than 75,000 pounds (34000) operated by an air carrier or foreign air carrier between the Jordanian Airports, between any Jordanian Airport and any point outside of Jordan, under part OPS1

91.803 [Reserved].

91.805 Final compliance: Subsonic airplanes.

Except as provided in 91.809 and 91.811, on and after January 1, 2005, no person may operate to or from an airport in Jordan any subsonic airplane covered by this subpart unless that airplane has been shown to comply with Stage 2 or Stage 3 noise levels under applicable of JCAR of JCAR.

91.807 - 91.813 [Reserved]

91.815 Agricultural and fire fighting airplanes: Noise operating limitations.

(a) This section applies to propeller-driven, small airplanes having standard airworthiness certificates that are designed for "agricultural aircraft operations" (as defined in 137.3 of JCAR, as effective on January 1, 2005) or for dispensing fire fighting materials.

(b) If the Airplane Flight Manual, or other approved manual material information, markings, or placards for the airplane indicate that the airplane has not been shown to comply with the noise limits under JCAR, no person may operate that airplane, except:

(1) To the extent necessary to accomplish the work activity directly associated with the purpose for which it is designed;

(2) To provide flight crewmember training in the special purpose operation for which the airplane is designed; and

(3) To conduct "nondispensing aerial work operations" in accordance with the requirements of JCAR.

91.817 Civil aircraft sonic boom.

(a) No person may operate a civil aircraft in Jordan at a true flight Mach number greater than one except in compliance with conditions and limitations in an authorization to exceed Mach one issued to the operator under appendix B of this part.
(b) In addition, no person may operate a civil aircraft for which the maximum operating limit speed MM0 exceeds a Mach number of one, to or from an airport in Jordan, unless:

(1) Information available to the flight crew includes flight limitations that ensure that flights entering or leaving Jordan will not cause a sonic boom to reach the surface within Jordan; and

(2) The operator complies with the flight limitations prescribed in paragraph (b)(1) of this section or complies with conditions and limitations in an authorization to exceed Mach one issued under appendix B of this part.

91.819 Civil supersonic airplanes that do not comply with applicable of JCAR.

(a) Applicability. This section applies to civil supersonic airplanes that have not been shown to comply with the Stage 2 noise limits of applicable JCAR, using applicable trade-off provisions, and that are operated in the Jordan, after January1, 1980.

(b) Airport use. Except in an emergency, the following apply to each person who operates a civil supersonic airplane to or from an airport in Jordan:

(1) Regardless of whether a type design change approval is applied for under part 21 of JCAR, no person may land or take off an airplane covered by this section for which the type design is changed, after January1, 1980, in a manner constituting an "acoustical change" under 21.93 unless the acoustical change requirements of applicable of JCAR are complied with.

(2) No flight may be scheduled, or otherwise planned, for takeoff or landing after 10 p.m. and before 7 a.m. local time.

91.821 Civil supersonic airplanes: Noise limits.

No person may operate in Jordan, a civil supersonic airplane that does not comply with Stage 2 noise limits of applicable JCAR.

91.823-91.849 [Reserved].

91.851 Definitions.

For the purposes of 91.851 through 91.877 of this subpart:

Fleet: means those civil subsonic jet (turbojet) airplanes with a maximum certificated weight of more than 75,000 pounds (34,000 kg) that are listed on an operator's operations specifications as eligible for operation in Jordan.
Import : means a change in ownership of an airplane from a non-Jordanian person to Jordanian person when the airplane is brought into Jordan for operation.

Operations specifications: means an enumeration of airplanes by type, model, series, and serial number operated by the operator or foreign air carrier on a given day, regardless of how or whether such airplanes are formally listed or designated by the operator.

Owner : means any person that has indicia of ownership sufficient to register the airplane in Jordan pursuant to part 47 of JCAR.

New entrant: means an air carrier or foreign air carrier that, on or before January 1.2005, did not conduct operations under part OPS1of JCAR using an airplane covered by this subpart to or from any airport in , but that initiates such operation after that date.

Stage 2 noise levels: mean the requirements for Stage 2 noise levels as defined in applicable of JCAR.

Stage 3 noise levels: mean the requirements for Stage 3 noise levels as defined in applicable of JCAR.

Stage 2 airplane: means a civil subsonic jet (turbojet) airplane with a maximum certificated weight of 75,000 pounds (34000 kg) or more that complies with Stage 2 noise levels as defined in applicable of JCAR.

Stage 3 airplane : means a civil subsonic jet (turbojet) airplane with a maximum certificated weight of 75,000 pounds (34000 kg) or more that complies with Stage 3 noise levels as defined in applicable of JCAR.

91.853 Final compliance: Civil subsonic airplanes.

Except as provided in 91.873, after December 31, 2004, no person shall operate to or from any airport in Jordan any airplane subject to 91.801(c) of this subpart, unless that airplane has been shown to comply with Stage 3 noise levels.

91.855 Entry and nonaddition rule.

No person may operate any airplane subject to 91.801(c) of this subpart to or from an airport in Jordan unless one or more of the following apply:

(a) The airplane complies with Stage 3 noise levels.
(b) The airplane complies with Stage 2 noise levels and was owned by a Jordanian person on and since January 1, 1990. Stage 2 airplanes that meet these criteria and are leased to foreign airlines are also subject to the return provisions of paragraph (e) of this section.

(c) The airplane complies with Stage 2 noise levels, is owned by a non-Jordanian person, and is the subject of a binding lease to a Jordanian- person effective before and on January 1, 1992. Any such airplane may be operated for the term of the lease in effect on that date, and any extensions thereof provided for in that lease.

(d) The airplane complies with Stage 2 noise levels and is operated by a foreign air carrier.

(e) The airplane complies with Stage 2 noise levels and is operated by a foreign operator other than for the purpose of foreign air commerce.

(f) The airplane complies with Stage 2 noise levels and:

(1) On January 1, 1990, was owned by:

(i) A corporation, trust, or partnership organized under the laws and regulations of Jordan;

(ii) An individual who is a Jordanian citizen ; or

(iii) An entity owned or controlled by a corporation, trust, partnership, or individual described in paragraph (f)(1) (i) or (ii) of this section; and

(2) Enters into Jordan not later than 6 months after the expiration of a lease agreement (including any extensions thereof) between an owner described in paragraph (f)(1) of this section and a foreign airline.

(g) The airplane complies with Stage 2 noise levels and was purchased by the importer under a written contract executed before January 1. 1990.

91.857 Stage 2 operations outside of Jordan.

An operator of a Stage 2 airplane that is operating only between points outside Jordan on or after January 1, 2005, must include in its operations specifications a statement that such airplane may not be used to provide air transportation to or from any airport in Jordan.

91.858 Special flight authorizations for non-revenue Stage 2 operations.

(a) After December 31, 2004, any operator of a Stage 2 airplane over 75,000 pounds (34000 kg) may operate that airplane in nonrevenue service in Jordan only for the following purposes:

(1) Sell, lease, or scrap the airplane;

(2) Obtain modifications to meet Stage 3 noise levels;

(3) Obtain scheduled heavy maintenance or significant modifications;

(4) Deliver the airplane to a lessee or return it to a lessor;

(5) Park or store the airplane; and

(6) Prepare the airplane for any of the purposes listed in paragraph (a)(1) thru (a)(5) of this section.

(b) An operator of a Stage 2 airplane that needs to operate in Jordan for any of the purposes listed above may apply to CARC for a special flight authorization. The applicant must file in advance. Applications are due 30 days in advance of the planned flight and must provide the information necessary for the CARC to determine that the planned flight is within the limits prescribed in law and regulations .

91.859- 91.871 [Reserved]

91.873 Waivers from final compliance.

(a) A Jordanian air carrier or a foreign air carrier may apply for a waiver from the prohibition contained in 91.853 of this part for its remaining Stage 2 airplanes, provided that, by July 1, 2005, at least 75 percent of the airplanes used by the carrier to provide service to or from an airport in Jordan will comply with the Stage 3 noise levels.

(b) An application for the waiver described in paragraph (a) of this section must be filed with the Chief Commissioner/CEO no later than April 1, 2005, or, in the case of a foreign air carrier, no later than July 1, 2005. Such application must include a plan with firm orders for replacing or modifying all airplanes to comply with Stage 3 noise levels at the earliest practicable time.

(c) To be eligible to apply for the waiver under this section, a new entrant Jordanian air carrier must initiate service no later than January 1, 2005, and must comply fully with all provisions of this section.
(d) Chief Commissioner/CEO may grant a waiver under this section if Chief Commissioner/CEO finds that granting such waiver is in the public interest. In making such a finding, Chief Commissioner/CEO shall include consideration of the effect of granting such waiver on competition in the air carrier industry and the effect on small community air service, and any other information submitted by the applicant that Chief Commissioner/CEO considers relevant.

(e) The term of any waiver granted under this section shall be determined by the circumstances presented in the application, but in no case will the waiver permit the operation of any Stage 2 airplane covered by this JCAR in Jordan December 31. 2005.

91.875 - 91.899 [Reserved].

Subpart- J
Waivers

91.901 [Reserved]

91.903 Policy and procedures.

(a) The Chief Commissioner/CEO may issue a certificate of waiver authorizing the operation of aircraft in deviation from any rule listed in this subpart if Chief

Commissioner/CEO finds that the proposed operation can be safely conducted under the terms of that certificate of waiver.

(b) An application for a certificate of waiver under this part is made on a form and in a manner prescribed by the Chief Commissioner/CEO and may be submitted to any CARC office.

(c) A certificate of waiver is effective as specified in that certificate of waiver.

91.905 List of rules subject to waivers.

Sec.

91.107 Use of safety belts.
91.111 Operating near other aircraft.
91.113 Right-of-way rules: Except water operations.
91.115 Right-of-way rules: Water operations.
91.117 Aircraft speed.
91.119 Minimum safe altitudes: General.
91.121, Altimeter settings.
91.123 Compliance with ATC clearances and instructions.
91.125 ATC light signals.
91.126 Operating on or in the vicinity of an airport in Class G airspace.
91.130 Operations in Class C airspace.
91.133 Restricted and prohibited areas.
91.135 Operations in Class A airspace.
91.137 Temporary flight restrictions.
91.141 Flight restrictions in the proximity of the Royal flight and other parties.
91.143 Flight limitation in the proximity of space flight operations.
91.153 VFR flight plan: Information required.
91.155 Basic VFR weather minimums
91.157 Special VFR weather minimums.
91.159 VFR cruising altitude or flight level.
91.169 IFR flight plan: Information required.
91.173 ATC clearance and flight plan required.
91.175 Takeoff and landing under IFR.
91.177 Minimum altitudes for IFR operations.
91.179 IFR cruising altitude or flight level.
91.181 Course to be flown.
91.183 IFR radio communications.
91.185 IFR operations: Two-way radio communications failure.
91.187 Operation under IFR in controlled airspace: Malfunction reports.
91.209 Aircraft lights.
91.303 Aerobatic flights.

91.305 Flight test areas.
91.311 Towing: Other than under 91.309.
91.313(e) Restricted category civil aircraft: Operating limitations.
91.515 Flight altitude rules.
91.705 Operations within airspace designated as Minimum Navigation Performance Specification Airspace.

Appendix -A

Category II Operations: Manual, Instruments, Equipment, and Maintenance

1. Category II Manual

(a) ***Application for approval***. An applicant for approval of a Category II manual or an amendment to an approved Category II manual must submit the proposed manual or amendment to Chief Commissioner/CEO. If the application requests an evaluation program, it must include the following:

(1) The location of the aircraft and the place where the demonstrations are to be conducted; and

(2) The date the demonstrations are to commence (at least 10 days after filing the application).

(b) ***Contents***. Each Category II manual must contain:

(1) The registration number, make, and model of the aircraft to which it applies;

(2) A maintenance program as specified in section 4 of this appendix; and

(3) The procedures and instructions related to recognition of decision height, use of runway visual range information, approach monitoring, the decision region (the region between the middle marker and the decision height), the maximum permissible deviations of the basic ILS indicator within the decision region, a missed approach, use of airborne low approach equipment, minimum altitude for the use of the autopilot, instrument and equipment failure warning systems, instrument failure, and other procedures, instructions, and limitations that may be found necessary by Chief Commissioner/CEO.

2. Required Instruments and Equipment

The instruments and equipment listed in this section must be installed in each aircraft operated in a Category II operation. This section does not require duplication of instruments and equipment required by Sec.91.205 or any other provisions of this chapter.

(a) ***Group I***.

(1) Two localizer and glide slope receiving systems. Each system must 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.

(2) A communications system that does not affect the operation of at least one of the ILS systems.

(3) A marker beacon receiver that provides distinctive aural and visual indications of the outer and the middle markers.

(4) Two gyroscopic pitch and bank indicating systems.

(5) Two gyroscopic direction indicating systems.

(6) Two airspeed indicators.

(7) 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.

(8) Two vertical speed indicators.

(9) A flight control guidance system that consists of either an automatic approach coupler or a flight director system. A flight director system must display computed information as steering command in relation to an ILS localizer and, on the same instrument, either computed information as 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 subparagraph (1) of this paragraph.

(10) For Category II operations with decision heights below 150 feet (45 meters) either a marker beacon receiver providing aural and visual indications of the inner marker or a radio altimeter.

(b) ***Group II.***

(1) Warning systems for immediate detection by the pilot of system faults in items(1), (4), (5), and (9) of Group I and, if installed for use in Category III operations, the radio altimeter and auto throttle system.

(2) Dual controls.

(3) An externally vented static pressure system with an alternate static pressure source.

(4) A windshield wiper or equivalent means of providing adequate cockpit visibility for a safe visual transition by either pilot to touchdown and rollout.

(5) A heat source for each airspeed system pitot tube installed or an equivalent means of preventing malfunctioning due to icing of the pitot system.

3. Instruments and Equipment Approval

(a) ***General***. The instruments and equipment required by section 2 of this appendix must be approved as provided in this section before being used in Category II operations. Before presenting an aircraft for approval of the instruments and equipment, it must be shown that since the beginning of the 12th calendar month before the date of submission :

(1) The ILS localizer and glide slope equipment were bench checked according to the manufacturer's instructions.

(2) The altimeters and the static pressure systems were tested and inspected in accordance with applicable of JCAR; and

(3) All other instruments and items of equipment specified in section 2(a) of this appendix that are listed in the proposed maintenance program were bench checked and found to meet the manufacturer's specifications.

(b) ***Flight control guidance system.*** All components of the flight control guidance system must be approved as installed by the evaluation program specified in paragraph (e) of this section if they have not been approved for Category III operations under applicable type or supplemental type certification procedures. In addition, subsequent changes to make, model, or design of the components must be approved under this paragraph. Related systems or devices, such as the autothrottle and computed missed approach guidance system, must be approved in the same manner if they are to be used for Category II operations.

(c) ***Radio altimeter***. A radio altimeter must meet the performance criteria of this paragraph for original approval and after each subsequent alteration.

(1) It must display to the flight crew clearly and positively the wheel height of the main landing gear above the terrain.

(2) It must display wheel height above the terrain to an accuracy of plus or minus 5 feet (1.5 meters) or 5 percent, whichever is greater, under the following conditions:

(i) Pitch angles of zero to plus or minus 5 degrees about the mean approach attitude.

(ii) Roll angles of zero to 20 degrees in either direction.

(iii) Forward velocities from minimum approach speed up to 200 knots.

(iv) Sink rates from zero to 15 feet (4.5 meters) per second at altitudes from 100 to 200 feet (30-60 meters).

(3) Over level ground, it must track the actual altitude of the aircraft without significant lag or oscillation.

(4) With the aircraft at an altitude of 200 feet (60 meters) or less, any abrupt change in terrain representing no more than 10 percent of the aircraft's altitude must not cause the altimeter to unlock, and indicator response to such changes must not exceed 0.1 seconds and, in addition, if the system unlocks for greater changes, it must reacquire the signal in less than 1 second.

(5) Systems that contain a push-to-test feature must test the entire system (with or without an antenna) at a simulated altitude of less than 500 feet (150 meters).

(6) The system must provide to the flight crew a positive failure warning display any time there is a loss of power or an absence of ground return signals within the designed range of operating altitudes.

(d) ***Other instruments and equipment.*** All other instruments and items of equipment required by Sec.2 of this appendix must be capable of performing as necessary for Category II operations.

Approval is also required after each subsequent alteration to these instruments and items of equipment.

(e) ***Evaluation program***

(1) *Application.* Approval by evaluation is requested as a part of the application for approval of the Category II manual.

(2) *Demonstrations.* Unless otherwise authorized by Chief Commissioner/CEO, the evaluation program for each aircraft requires the demonstrations specified in this paragraph. At least 50 ILS approaches must be flown with at least five approaches on each of three different ILS facilities and no more than one half of the total approaches on any one ILS facility. All approaches shall be flown under simulated instrument conditions to a 100-foot (30-meter) decision height and 90 percent of the total approaches made must be successful. A successful approach is one in which :

(i) At the 100-foot decision height (30-meter), the indicated airspeed and heading are satisfactory for a normal flare and landing (speed must be plus or minus 5 knots of programmed airspeed, but may not be less than computed threshold speed if autothrottles are used);

(ii) The aircraft at the 100-foot (30 meter)decision height, is positioned so that the cockpit is within, and tracking so as to remain within, the lateral confines of the runway extended;

(iii) Deviation from glide slope after leaving the outer marker does not exceed 50 percent of full-scale deflection as displayed on the ILS indicator;

(iv) No unusual roughness or excessive attitude changes occur after leaving the middle marker; and

(v) In the case of an aircraft equipped with an approach coupler, the aircraft is sufficiently in trim when the approach coupler is disconnected at the decision height to allow for the continuation of a normal approach and landing.

(3) *Records.* During the evaluation program the following information must be maintained by the applicant for the aircraft with respect to each approach and made available to Chief Commissioner/CEO upon request:

(i) Each deficiency in airborne instruments and equipment that prevented the initiation of an approach.

(ii) The reasons for discontinuing an approach, including the altitude above the runway at which it was discontinued.

(iii) Speed control at the 100-foot (30-meter) decision height if auto throttles are used.

(iv) Trim condition of the aircraft upon disconnecting the auto coupler with respect to continuation to flare and landing.

(v) Position of the aircraft at the middle marker and at the decision height indicated both on a diagram of the basic ILS display and a diagram of the runway extended to the middle marker. Estimated touchdown point must be indicated on the runway diagram.

(vi) Compatibility of flight director with the auto coupler, if applicable.

(vii) Quality of overall system performance.

(4) *Evaluation.* A final evaluation of the flight control guidance system is made upon successful completion of the demonstrations. If no hazardous tendencies have been displayed or are otherwise known to exist, the system is approved as installed.

4. Maintenance program

(a) Each maintenance program must contain the following:

(1) A list of each instrument and item of equipment specified in Sec.2 of this appendix that is installed in the aircraft and approved for Category II operations, including the make and model of those specified in Sec.2(a).

(2) A schedule that provides for the performance of inspections under subparagraph (5) of this paragraph within 3 calendar months after the date of the previous inspection. The inspection must be performed by a person authorized by part applicable of JCAR, except that each alternate inspection may be replaced by a functional flight check. This functional flight check must be performed by a pilot holding a Category II pilot authorization for the type aircraft checked.

(3) A schedule that provides for the performance of bench checks for each listed instrument and item of equipment that is specified in section 2(a) within 12 calendar months after the date of the previous bench check.

(4) A schedule that provides for the performance of a test and inspection of each static pressure system in accordance with applicable of JCAR within 12 calendar months after the date of the previous test and inspection.

(5) The procedures for the performance of the periodic inspections and functional flight checks to determine the ability of each listed instrument and item of equipment specified in section 2(a) of this appendix to perform as approved for Category II operations including a procedure for recording functional flight checks.

(6) A procedure for assuring that the pilot is informed of all defects in listed instruments and items of equipment.

(7) A procedure for assuring that the condition of each listed instrument and item of equipment upon which maintenance is performed is at least equal to its Category II approval condition before it is returned to service for Category II operations.

(8) A procedure for an entry in the maintenance records required by applicable of JCAR that shows the date, airport, and reasons for each discontinued Category II operation because of a malfunction of a listed instrument or item of equipment.

(b) ***Bench check***. A bench check required by this section must comply with this paragraph.

(1) It must be performed by a certificated repair station holding one of the following ratings as appropriate to the equipment checked:

(i) An instrument rating.

(ii) A radio rating.

(iii) A rating issued under subpart D of part 145 of JCAR.

(2) It must consist of removal of an instrument or item of equipment and performance of the following:

(i) A visual inspection for cleanliness, impending failure, and the need for lubrication, repair, or replacement of parts;

(ii) Correction of items found by that visual inspection; and

(iii) Calibration to at least the manufacturer's specifications unless otherwise specified in the approved Category II manual for the aircraft in which the instrument or item of equipment is installed.

(c) ***Extensions***. After the completion of one maintenance cycle of 12 calendar months, a request to extend the period for checks, tests, and inspections is approved if it is shown that the performance of particular equipment justifies the requested extension.

Appendix- B
Authorizations to Exceed Mach 1 (Sec.91.817)

Section 1. Application

(a) An applicant for an authorization to exceed Mach one must apply in a form and manner prescribed by Chief Commissioner/CEO and must comply with this appendix.

(b) In addition, each application for an authorization to exceed Mach 1 covered by section 2(a) of this appendix must contain all information requested by Chief Commissioner/CEO necessary to assist him in determining whether the designation of a particular test area or issuance of a particular authorization is a "major action significantly affecting the quality of the human environment" .

(c) In addition, each application for an authorization to exceed Mach one covered by section 2(a) of this appendix must contain :

(1) Information showing that operation at a speed greater than Mach one is necessary to accomplish one or more of the purposes specified in section 2(a) of this appendix, including a showing that the purpose of the test cannot be safely or properly accomplished by **over-ocean** testing;

(2) A description of the test area proposed by the applicant, including an environmental analysis of that area meeting the requirements of paragraph (b) of this section; and

(3) Conditions and limitations that will ensure that no measurable sonic boom overpressure will reach the surface outside of the designated test area.

(d) An application is denied if Chief Commissioner/CEO finds that such action is necessary to protect or enhance the environment.

Section 2. Issuance

(a) For a flight in a designated test area, an authorization to exceed Mach 1 may be issued when the Chief Commissioner/CEO has taken the environmental protective actions specified in section 1(b) of this appendix and the applicant shows one or more of the following:

(1) The flight is necessary to show compliance with airworthiness requirements.

(2) The flight is necessary to determine the sonic boom characteristics of the airplane or to establish means of reducing or eliminating the effects of sonic boom.

(3) The flight is necessary to demonstrate the conditions and limitations under which speeds greater than a true flight Mach number of 1 will not cause a measurable sonic boom overpressure to reach the surface.

(b) For a flight outside of a designated test area, an authorization to exceed Mach 1 may be issued if the applicant shows conservatively under paragraph (a)(3) of this section that :

(1) The flight will not cause a measurable sonic boom overpressure to reach the surface when the aircraft is operated under conditions and limitations demonstrated under paragraph (a)(3) of this section; and

(2) Those conditions and limitations represent all foreseeable operating conditions.

Section 3. Duration.

(a) An authorization to exceed Mach 1 is effective until it expires or is surrendered, or until it is suspended or terminated by Chief Commissioner/CEO. Such an authorization may be amended or suspended by the Chief Commissioner/CEO at any time if Chief Commissioner/CEO finds that such action is necessary to protect the environment. Within 30 days of notification of amendment, the holder of the authorization must request reconsideration or the amendment becomes final. Within 30 days of notification of suspension, the holder of the authorization must request reconsideration or the authorization is automatically terminated. If reconsideration is requested within the 30-day period, the amendment or suspension continues until the holder shows why the authorization should not be amended or terminated. Upon such showing, Chief Commissioner/CEO may terminate or amend the authorization if Chief Commissioner/CEO finds that such action is necessary to protect the environment, or he may reinstate the authorization without amendment if he finds that termination or amendment is not necessary to protect the environment.

(b) Findings and actions by Chief Commissioner/CEO under this section do not affect any certificate issued under any other regulations

Appendix -C

Metric Conversion Factors and Table

(a) Approximate conversion factors for distance.

FROM UNITS IN	**MULTIPLY BY**	**TO UNITS IN**
Feet (ft.)	0.3	Meters (m).
Statute Miles (ml).	1.6	Kilometers (km.)
Meters (m.)	3.3	Feet (ft.)
Kilometers (km.)	0.6	Statute miles (ml.)

(b) Temperature conversions.

FROM UNITS IN	**MULTIPLY BY**	**TO UNITS IN**
Fahrenheit (F)	5/9 (after subtracting 32	Celsius (C)
Celsius (C)	9/5 (Then add 32)	Fahrenheit (F)

(c)The metric equivalents in the following table are applicable to takeoff and landing minima and other distance values prescribed in this part.

Feet	Meters	Feet	Meters
100	30	1600	480
150	50	1700	510
200	60	1800	540
250	75	1900	570
300	90	2000	600
400	120	2100	630
500	150	2200	670
600	180	2300	690
700	200	2400	720
800	240	2500	750
900	270	2600	780
1000	300	3000	900
1100	330	3200	980
1200	350	4000	1200
1300	390	4500	1380
1400	420	5000	1500
1500	450	6000	1800

Appendix D
Interception of Civil Aircraft

1. Principles to be observed by States

1.1 To achieve the uniformity in regulations which is necessary for the safety of navigation of civil aircraft due regard shall be had by Contracting States to the following principles when developing regulations and administrative directives:

(a) interception of civil aircraft will be undertaken only as a last resort;

(b) if undertaken, an interception will be limited to determining the identity of the aircraft, unless it is necessary to return the aircraft to its planned track, direct it beyond the boundaries of national airspace, guide it away from a prohibited, restricted or danger area or instruct it to effect a landing at a designated aerodrome;

(c) practice interception of civil aircraft will not be undertaken;

(d) navigational guidance and related information will be given to an intercepted aircraft by radiotelephony, whenever radio contact can be established; and

(e) in the case where an intercepted civil aircraft is required to land in the territory overflown, the aerodrome designated for the landing is to be suitable for the safe landing of the aircraft type concerned.

1.2 Contracting States shall publish a standard method that has been established for the maneuvering of aircraft intercepting a civil aircraft. Such method shall be designed to avoid any hazard for the intercepted aircraft.

1.3 Contracting States shall ensure that provision is made for the use of secondary surveillance radar, where available, to identify civil aircraft in areas where they may be subject to interception.

2. Action by intercepted aircraft

2.1 An aircraft which is intercepted by another aircraft shall immediately:

(a) follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in Table A-2, and Table A-3 ;

(b) notify, if possible, the appropriate air traffic services unit;

(c) attempt to establish radio-communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5 MHz, giving the identity of the intercepted aircraft and the nature of the flight; and if no contact has been established and if practicable, repeating this call on the emergency frequency 243 MHz;

(d) if equipped with SSR transponder, select Mode A, Code 7700, unless otherwise instructed by the appropriate air traffic services unit.

2.2 If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft.

2.3 If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.

3. Radio communication during interception If radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgement of instructions and essential information by using the phrases and pronunciations in Table 2.1 and transmitting each phrase twice:

Table A-1

Phrases for use by INTERCEPTING aircraft			**Phrases for use by INTERCEPTED aircraft**		
Phrase	*Pronunciation*	*Meaning*	*Phrase*	*Pronunciation*	*Meaning*
CALL SIGN	KOL SA-IN	What is your call sign?	CALL SIGN (call sign)1	KOL SA-IN (call sign)	My call sign is (call sign)
FOLLOW	FOL-LO	Follow me	WILCO	VILL-KO	Understood Will comply
DESCEND	DEE-SEND	Descend for landing	CAN NOT	KANN NOTT	Unable to comply
YOU LAND	YOU LAAND	Land at this aerodrome	REPEAT	REE-PEET	Repeat your instruction
PROCEED	PRO-SEED	You may proceed	AM LOST	AM LOSST	Position unknown
			MAYDAY	MAYDAY	I am in distress
			HIJACK2	HI-JACK	I have been hijacked
			LAND (place name)	LAAND (place name)	I request to land at (place name)
			DESCEN	D DEE-SEND	I require descent

1. The call sign required to be given is that used in radiotelephony communications with air traffic services units and corresponding to the aircraft identification in the flight plan.

2. Circumstances may not always permit, nor make desirable, the use of the phrase "HIJACK".

SIGNALS FOR USE IN THE EVENT OF INTERCEPTION

Table A-2 . Signals initiated by intercepting aircraft and responses by intercepted aircraft

Series	*INTERCEPTING Aircraft Signals*	*Meaning*	INTERCEPTED Aircraft Responds	*Meaning*
1	DAY or NIGHT — Rocking aircraft and flashing navigational lights at irregular intervals (and landing lights in the case of a helicopter) from a position slightly above and ahead of, and normally to the left of, the intercepted aircraft (or to the right if the intercepted aircraft is a helicopter) and, after acknowledgement, a slow level turn, normally to the left, (or to the right in the case of a helicopter) on the desired heading. Note 1.— Meteorological conditions or terrain may require the intercepting aircraft to reverse the positions and direction of turn *given above in Series 1* . Note 2.— If the intercepted aircraft is not able to keep pace with the intercepting aircraft, the latter is expected to fly a series of racetrack *patterns*	You have been intercepted. Follow me.	DAY or NIGHT — Rocking aircraft, flashing navigational lights at irregular intervals and following.	Understood, will comply.

	and to rock the aircraft each time it passes the intercepted aircraft.			
2	DAY or NIGHT — An abrupt break-away manoeuvre from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted aircraft	You may proceed.	DAY or NIGHT — Rocking the aircraft.	Understood, will comply
3	DAY or NIGHT — Lowering landing gear (if fitted), showing steady landing lights and overflying runway in use or, if the intercepted aircraft is a helicopter, overflying the helicopter landing area. In the case of helicopters, the intercepting helicopter makes a landing approach, coming to hover near to the landing area.	Land at this aerodrome.	DAY or NIGHT — Lowering landing gear, (if fitted), showing steady landing lights and following the intercepting aircraft and, if, after overflying the runway in use or helicopter landing area, landing is considered safe, proceeding to land	Understood, will comply

Table A-3 Signals initiated by intercepted aircraft and responses by intercepting aircraft

Series	*INTERCEPTED Aircraft Signals*	*Meaning*	*INTERCEPTING Aircraft Responds*	*Meaning*
4	DAY or NIGHT — Raising landing gear (if fitted) and flashing landing lights while passing over runway in use or helicopter landing area at a height exceeding 300 m (1 000 ft) but not exceeding 600 m (2 000 ft) (in the case of a helicopter, at a height exceeding 50 m (170 ft) but not exceeding 100 m (330 ft)) above the aerodrome level, and continuing to circle runway in use or helicopter landing area. If unable to flash landing lights, flash any other lights available.	Aerodrome you have designated is inadequate.	DAY or NIGHT — If it is desired that the intercepted aircraft follow the intercepting aircraft to an alternate aerodrome, the intercepting aircraft raises its landing gear (if fitted) and uses the Series 1 signals prescribed for intercepting aircraft. If it is decided to release the intercepted aircraft, the intercepting aircraft uses the Series 2 signals prescribed for intercepting aircraft.	Understood, follow me. Understood, you may proceed.
5	5 DAY or NIGHT — Regular switching on and off of all	Cannot comply.	DAY or NIGHT — Use Series 2 signals prescribed for	Understood.

	available lights but in such a manner as to be distinct from flashing lights.		intercepting aircraft.	
6	6 DAY or NIGHT — Irregular flashing of all available lights.	In distress.	DAY or NIGHT — Use Series 2 signals prescribed for intercepting aircraft.	Understood.

Appendix-E
Airplane Flight Recorder Specifications

Parameters	**Range**	**Installed system** (1)	**Sampling interval per second**	**Resolution Readout**
Relative Time (From Recorded on Prior to Takeoff).	8 hr minimum	±0.125% per	1	1sec.
Indicated Airspeed	Vso to VD (KIAS)	±5% or ±10 kts., whichever is greater Resolution 2 kts. Below 175 KIAS..	1	1% (3)
Altitude	-1,000 ft. to max cert. alt. of A/C.	±100 to ±700 ft.(see Table 1, TSO C51-a).	11	25 to 150 ft
Magnetic Heading	360 deg…..	±5 deg.	1	1 deg.
Vertical Acceleration....	-3g to +6g	± 0.2g in addition to ± 0.3g maximum datum.	4	0.03g.
Longitudinal Acceleration	± 1.0g…		2.	0.01g.
Pitch Attitude	100% of usable…	± 2 deg.	1	0.8 deg.
Roll Attitude	±60° or 100% of usable range whichever is greater.	± 2 deg.	1	0.8 deg
Stabilizer Trim Position,	Full Range.	± 3% Unless higher uniquely required.	1	1% (3)
Pitch Control Position				1% (3)
Engine Power, Each Engine:	Full Range..	± 3% Unless higher uniquely required.	1	1% (3)
Fan or N<SUP>1<SUP> Speed or EPR or Cockpit indications Used for Aircraft Certification OR.	Maximum Range	±5%	1	1% (3)
Prop. speed and Torque (Sample Once/Sec as Close together as Practicable).	……	……	1 (prop speed)	1% (3)
Altitude Rate (2) (need depends on altitude resolution).	± 8,000 fpm.			250 fpm . below 12,000
Parameters	**Range**	**Installed system**	**Sampling interval per second**	**Resolution Readout**
Angle of Attack (2) (need depends on	-20 deg. To 40 deg. Or 100% of usable		1	

altitude resolution).	range.			
Radio Transmitter Keying(Discrete).	On/Off …….		1	1% (3)
TE Flaps (Discrete or Analog)...	Analog 0-100% rang . Each discrete position (U, D, T/O, AAP) OR.	…….	1	1% (3)
LE Flaps (Discrete or Analog)...	Analog 0-100% range. Each discrete position (U, D, T/O, AAP) OR.	……		
Thrust Reverser, Each Engine (Discrete)	Analog 0-100% range Stowed or full reverse.	±3°	1	1% (3)
Spoiler/Speedbrake (Discrete)...	Stowed or out.....	……..	1	
Autopilot Engaged (Discrete)	Engaged or Disengaged.	……	1	

(1) When data sources are aircraft instruments (except altimeters) of acceptable quality to fly the aircraft the recording system excluding these sensors (but including all other characteristics of the recording system) shall contribute no more than half of the values in this column.

(2) If data from the altitude encoding altimeter (100 ft. resolution) is used, then either one of these parameters should also be recorded. If however, altitude is recorded at a minimum resolution of 25 feet, then these two parameters can be omitted.

(3) Percent of full range.

Appendix- F
Helicopter Flight Recorder Specifications

Parameters	**Range**	**Installed system**(1) **minimum accuracy**	**Sampling interval per second**	**Resolution Readout**
Relative Time (From Recorded on Prior to Takeoff).	4 hr minimum.....	±0.125% per hour.	1	1sec.
Indicated Airspeed	VM to VD (KIAS) minimum airspeed signal attainable with installed pilot-static system).	±5% or ±10 kts., whichever is greater.	1.	1Kt.
Altitude	-1,000 ft. to 20,000ft pressure attitude.	±100 to ±700 ft.	1	25 to 150 ft
Magnetic Heading	360 deg…..	±5 deg.	1	1 deg.
Vertical Acceleration....	-3g to +6g	± 0.2g in addition to ± 0.3g maximum datum. Error of ±5%	4… (or per second where peaks, ref. To 1g are recorded).	0.05g.
Longitudinal Acceleration	± 1.0g…	±1.5% max. range excluding datum error of ±5%.	2	0.03g.
Pitch Attitude	100% of usable range.	± 2 deg.	1	0.8 deg.
Roll Attitude	±60° or 100% of usable range whichever is greater.	± 2 deg.		0.8 deg
Alttitude Rate	± 8,000 fpm	± 10% Resolution 250, fpm below 12,000 ft. indicated.	1	250 ft 12,0
Engine Power, Each Engine:				
Main Rotor Speed..	Maximum Range.....	±5%	1	1% (2).
Free or Power Turbine	Maximum Range.....	±5%	1	1% (2).
Engine Torque	Maximum Range.....	±5%	1	1% (2).
Flight Control Hydraulic Pressure				
Primary (Discrete)....	High/Low.....	……	1	
Parameters	**Range**	**Installed system minimum accuracy**	**Sampling interval per second**	**Resolution Readout**
Secondary_if	High/Low.....		1	

applicable (Discrete).				
Radio Transmitter Keying (Discrete).	On/Off.....	……..	1	
Autopilot Engaged (Discrete)....	Engaged or Disengaged.	……..	1	
SAS Status-Engaged (Discrete)...	Engaged or Disengaged	……..	1	
SAS Fault Status (Discrete)..... Flight Controls	Fault/OK.....	……..	1	
Collective.....	Full range.....	±3%	2	1% (2)
Pedal Position.....	Full range.....	±3%	2	1% (2)
Lat. Cyclic.....	Full range.....	±3%	2	1% (2)
Long. Cyclic	Full range.....	±3%	2	1% (2)
Controllable Stabilator Position	Full range.....	±3%	2	1% (2)

(1) When data sources are aircraft instruments (except altimeters) of acceptable quality to fly the aircraft the recording system excluding these sensors (but including all other characteristics of the recording system)
shall contribute no more than half of the values in this column.

(2)Percent of full range.

Appendix- G
Operations in Reduced Vertical Separation Minimum (RVSM) Airspace

Section 1. Definitions.

Reduced Vertical Separation Minimum (RVSM) Airspace. Within RVSM airspace, air traffic control (ATC) separates aircraft by a minimum of 1,000 feet (300 meters) vertically between flight level (FL) 290 and FL 410 inclusive. RVSM airspace is special qualification airspace; the operator and the aircraft used by the operator must be approved by Chief Commissioner/CEO. Air-traffic control notifies operators of RVSM by providing route planning information.

RVSM Group Aircraft. Aircraft within a group of aircraft, approved as a group by the Chief Commissioner/CEO**,** in which each of the aircraft satisfy each of the following:

(a) The aircraft have been manufactured to the same design, and have been approved under the same type certificate, amended type certificate, or supplemental type certificate.

(b) The static system of each aircraft is installed in a manner and position that is the same as those of the other aircraft in the group. The same static source error correction is incorporated in each aircraft of the group.

(c) The avionics units installed in each aircraft to meet the minimum RVSM equipment requirements of this appendix are:

(1) Manufactured to the same manufacturer specification and have the same part number; or

(2) Of a different manufacturer or part number, if the applicant demonstrates that the equipment provides equivalent system performance.

RVSM Nongroup Aircraft. An aircraft that is approved for RVSM operations as an individual aircraft.
RVSM Flight envelope. An RVSM flight envelope includes the range of Mach number, weight divided by atmospheric pressure ratio, and altitudes over which an aircraft is approved to be operated in cruising flight within RVSM airspace. RVSM flight envelopes are defined as follows:

(a) The *full RVSM flight envelope* is bounded as follows:

(1) The altitude flight envelope extends from FL 290 upward to the lowest altitude of the following:

(i) FL 410 (the RVSM altitude limit);

(ii) The maximum certificated altitude for the aircraft; or

(iii) The altitude limited by cruise thrust, buffet, or other flight limitations.

(2) The airspeed flight envelope extends:

(i) From the airspeed of the slats/flaps-up maximum endurance (holding) airspeed, or the maneuvering airspeed, whichever is lower;

(ii) To the maximum operating airspeed (Vmo/Mmo), or airspeed limited by cruise thrust buffet, or other flight limitations, whichever is lower.

(3) All permissible gross weights within the flight envelopes defined in paragraphs (1) and (2) of this definition.

(b) The *basic RVSM flight envelope* is the same as the full RVSM flight envelope except that the airspeed flight envelope extends:
(1) From the airspeed of the slats/flaps-up maximum endurance (holding) airspeed, or the maneuver airspeed, whichever is lower;

(2) To the upper Mach/airspeed boundary defined for the full RVSM flight envelope, or a specified lower value not less than the long-range cruise Mach number plus .04 Mach, unless further limited by available cruise thrust, buffet, or other flight limitations.

Section 2. Aircraft Approval

(a) An operator may be authorized to conduct RVSM operations if Chief Commissioner/CEO finds that its aircraft comply with this section.

(b) The applicant for authorization shall submit the appropriate data package for aircraft approval. The package must consist of at least the following:

(1) An identification of the RVSM aircraft group or the nongroup aircraft;

(2) A definition of the RVSM flight envelopes applicable to the subject aircraft;

(3) Documentation that establishes compliance with the applicable RVSM aircraft requirements of this section; and

(4) The conformity tests used to ensure that aircraft approved with the data package meet the RVSM aircraft requirements.

(c) *Altitude-keeping equipment: All aircraft.* To approve an aircraft group or a nongroup aircraft, Chief Commissioner/CEO must find that the aircraft meets the following requirements:

(1) The aircraft must be equipped with two operational independent altitude measurement systems.

(2) The aircraft must be equipped with at least one automatic altitude control system that controls the aircraft altitude :

(i) Within a tolerance band of ±65 feet about an acquired altitude when the aircraft is operated in straight and level flight under nonturbulent, nongust conditions; or

(ii) Within a tolerance band of ±130 feet under nonturbulent, nongust conditions when the aircraft equipped with an automatic altitude control system with flight management/performance system inputs.

(3) The aircraft must be equipped with an altitude alert system that signals an alert when the altitude displayed to the flight crew deviates from the selected altitude by more than ±200 feet.

(d) *Altimetry system error containment:* To approve group aircraft for which application for type certification was made on or before January 1, 1998, Chief Commissioner/CEO must find that the altimetry system error (ASE) is contained as follows:

(1) At the point in the basic RVSM flight envelope where mean ASE reaches its largest absolute value, the absolute value may not exceed 80 feet.

(2) At the point in the basic RVSM flight envelope where mean ASE plus three standard deviations reaches its largest absolute value, the absolute value may not exceed 200 feet.

(3) At the point in the full RVSM flight envelope where mean ASE reaches its largest absolute value, the absolute value may not exceed 120 feet.

(4) At the point in the full RVSM flight envelope where mean ASE plus three standard deviations reaches its largest absolute value, the absolute value may not exceed 245 feet.

(5) *Necessary operating restrictions.* If the applicant demonstrates that its aircraft otherwise comply with the ASE containment requirements, Chief Commissioner/CEO may establish an operating restriction on that applicant's aircraft to restrict the aircraft from operating in areas of the basic RVSM flight envelope where the absolute value of mean ASE exceeds 80 feet, and/or the absolute value of mean ASE plus three standard deviations exceeds 200 feet; or from operating in areas of the full RVSM flight envelope where the absolute value of the mean ASE exceeds 120 feet (36 meters) and/or the absolute value of the mean ASE plus three standard deviations exceeds 245 feet (7.5meters).

(e) *Altimetry system error containment:* To approve group aircraft for which application for type certification is made after January 1, 1998, Chief Commissioner/CEO must find that the altimetry system error (ASE) is contained as follows:

(1) At the point in the full RVSM flight envelope where mean ASE reaches its largest absolute value, the absolute value may not exceed 80 feet (24 meters).

(2) At the point in the full RVSM flight envelope where mean ASE plus three standard deviations reaches its largest absolute value, the absolute value may not exceed 200 (60 meters) feet.

(f) *Altimetry system error containment: Nongroup aircraft.* To approve a nongroup aircraft, the Chief Commissioner/CEO must find that the altimetry system error (ASE) is contained as follows:

(1) For each condition in the basic RVSM flight envelope, the largest combined absolute value for residual static source error plus the avionics error may not exceed 160 feet (48 meters).

(2) For each condition in the full RVSM flight envelope, the largest combined absolute value for residual static source error plus the avionics error may not exceed 200 feet (60 meters).

(g) Traffic Alert and Collision Avoidance System (TCAS) Compatibility With RVSM Operations: All aircraft. After April 1, 2002, unless otherwise authorized by Chief Commissioner/CEO, if you operate an aircraft that is equipped with TCAS II in RVSM airspace, it must be a TCAS II that meets the approved standards.

(h) If Chief Commissioner/CEO finds that the applicant's aircraft comply with this section, the Chief Commissioner/CEO notifies the applicant in writing.

Section 3. Operator Authorization

(a) Authority for an operator to conduct flight in airspace where RVSM is applied is issued in operations specifications or a Letter of Authorization, as appropriate. To issue an RVSM authorization, Chief Commissioner/CEO must find that the operator's aircraft have been approved in accordance with Section 2 of this appendix and that the operator complies with this section.

(b) An applicant for authorization to operate within RVSM airspace shall apply in a form and manner prescribed by Chief Commissioner/CEO. The application must include the following:

(1) An approved RVSM maintenance program outlining procedures to maintain RVSM aircraft in accordance with the requirements of this appendix. Each program must contain the following:

(i) Periodic inspections, functional flight tests, and maintenance and inspection procedures, with acceptable maintenance practices, for ensuring continued compliance with the RVSM aircraft requirements.

(ii) A quality assurance program for ensuring continuing accuracy and reliability of test equipment used for testing aircraft to determine compliance with the RVSM aircraft requirements.

(iii) Procedures for returning noncompliant aircraft to service.

(2) For an applicant who operates under part 121 or 135, initial and recurring pilot training requirements.

(3) Policies and Procedures. An applicant who operates under part OPS1 shall submit RVSM policies and procedures that will enable it to conduct RVSM operations safely.

(c) Validation and Demonstration. In a manner prescribed by Chief Commissioner/CEO, the operator must provide evidence that:

(1) It is capable to operate and maintain each aircraft or aircraft group for which it applies for approval to operate in RVSM airspace; and

(2) Each pilot has an adequate knowledge of RVSM requirements, policies, and procedures.

Section 4. RVSM Operations

(a) Each person requesting a clearance to operate within RVSM airspace shall correctly annotate the flight plan filed with air traffic control with the status of the operator and aircraft with regard to RVSM approval. Each operator shall verify RVSM applicability for the flight planned route through the appropriate flight planning information sources.

(b) No person may show, on the flight plan filed with air traffic control, an operator or aircraft as approved for RVSM operations, or operate on a route or in an area where RVSM approval is required, unless:

(1) The operator is authorized by Chief Commissioner/CEO to perform such operations; and

(2) The aircraft has been approved and complies with the requirements of Section 2 of this appendix.

Section 5. Deviation Authority Approval

Chief Commissioner/CEO may authorize an aircraft operator to deviate from the requirements of Sec.91.706 for a specific flight in RVSM airspace if that operator has not been approved in accordance with Section 3 of this appendix, and if:

(a) The operator submits an appropriate request with the air traffic control center controlling the airspace, (request should be made at least 48 hours in advance of the operation unless prevented by exceptional circumstances); and

(b) At the time of filing the flight plan for that flight, ATC determines that the aircraft may be provided appropriate separation and that the flight will not interfere with, or impose a burden on, the operations of operators who have been approved for RVSM operations in accordance with Section 3 of this appendix.

Section 6. Reporting Altitude-Keeping Errors

Each operator shall report to Chief Commissioner/CEO each event in which the operator's aircraft has
exhibited the following altitude-keeping performance:

(a) Total vertical error of 300 feet (90 meters) or more;

(b) Altimetry system error of 245 feet (74 meters)or more; or

(c) Assigned altitude deviation of 200 feet (60 meters)or more.

Section 7. Removal or Amendment of Authority

Chief Commissioner/CEO may amend operations specifications to revoke or restrict an RVSM authorization, or may revoke or restrict an RVSM letter of authorization, if Chief Commissioner/CEO determines that the operator is not complying, or is unable to comply, with this appendix or subpart H of this part. Examples of reasons for amendment, revocation, or restriction include, but are not limited to, an operator's:

(a) Committing one or more altitude-keeping errors in RVSM airspace;

(b) Failing to make an effective and timely response to identify and correct an altitude-keeping error; or

(c) Failing to report an altitude-keeping error.

Appendix- H
Table of cruising levels

The cruising levels to be observed when so required by this Appendix are as follows:

a) In areas where, on the basis of regional air navigation agreement and in accordance with conditions specified therein, a vertical separation minimum (VSM) of 300 m (1 000 ft) is applied between FL 290 and FL 410 inclusive:*

TRACK**											
From 000 degrees to 179 degrees						**From 180 degrees to 359 degrees*** **					
IFR Flights Altitude			**VFR Flights Altitude**			**IFR Flights Altitude**			**VFR Flights Altitude**		
FL	Meters	Feet	FL	Meters	Feet	FL	Meters	Feet	FL	Meters	Feet
–90			-	-	-	0			-	-	-
10	300	1000	-	-	-	20	600	2000	-	-	-
30	900	3000	35	1050	3500	40	1200	4000	45	1 350	4 500
50	1500	5000	55	1700	5500	60	1850	6000	65	2 000	6 500
70	2150	7000	75	2300	7500	80	2450	8000	85	2 600	8 500
90	2750	9000	95	2900	9500	100	3050	10000	105	3 200	10 500
110	3350	11000	115	3500	11500	120	3650	12000	125	3 800	12 500
130	3950	13000	135	4100	13500	140	4250	14000	145	4 400	14 500
150	4550	15000	155	4700	15500	160	4900	16000	165	5 050	16 500
170	5200	1700	175	5350	17500	180	5500	18000	185	5 650	18 500
190	5800	19000	192	5950	19500	200	6100	20000	205	6 250	20 500
210	6400	21000	215	6550	21500	220	6700	22000	225	6 850	22 500
230	7000	23000	235	7150	23500	240	7300	24000	245	7 450	24 500
250	7600	25000	255	7750	25500	260	7900	26000	265	8 100	24 500
270	8250	27000	275	8400	27500	280	8550	28000	285	8 700	28 500
290	8850	29000				3000	9150	30000			
310	9450	31000				320	9750	32000			
330	10050	33000				340	10350	34000			
350	10650	35000				360	10950	36000			
370	11300	37000				380	11600	38000			
390	11900	39000				400	12200	40000			
410	12500	4100				430	13100	43000			
450	13700	450000				470	14350	47000			
490	14950	49000				510	15550	51000			
etc	etc	etc				etc	etc	Etc			

* Except when, on the basis of regional air navigation agreements, a modified table of cruising levels based on a nominal vertical separation minimum of 300 m (1 000 ft) is prescribed for use, under specified conditions, by aircraft operating above FL 410 within designated portions of the airspace.

** Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

*** Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

b) In other areas:

TRACK*

From 000 degrees to 179 degrees**			**From 180 degrees to 359 degrees****		
IFR Flights Altitude		**VFR Flights Altitude**	**IFR Flights Altitude**		**VFR Flights Altitude**
FL	*Meters*	*Feet*	*FL*	*Meters*	*Feet*
-90			-	-	-
10	300	1000	-	-	-
30	900	3000	35	1050	3500
50	1500	5000	55	1700	5500
70	2150	7000	75	2300	7500
90	2750	9000	95	2900	9500
110	3350	11000	115	3500	11500
130	3950	13000	135	4100	13500
150	4550	15000	155	4700	15500
170	5200	17000	175	5350	17500
190	5800	19000	195	5950	19500
210	6400	21000	215	6550	215000
230	7000	23000	235	7150	23500
250	7600	25000	255	7750	25500
270	8250	27000	275	8400	27500

From 000 degrees to 179 degrees**			**From 180 degrees to 359 degrees****		
IFR Flights Altitude		**VFR Flights Altitude**	**IFR Flights Altitude**		**VFR Flights Altitude**
FL	*Meters*	*Feet*	*FL*	*Meters*	*Feet*
0			-	-	-
20	600	2000	-	-	-
40	1200	4000	45	1 350	4500
60	1850	6000	65	2000	6500
80	2450	8000	85	2600	8500
100	3050	10000	105	3200	10500
120	3650	12000	125	3800	12500
140	4250	140000	145	4400	14500
160	4900	160000	165	51050	16500
180	5500	18000	185	5650	18500
200	6100	20000	205	6250	20500
220	6700	22000	225	6850	22500
240	7300	24000	245	7450	24500
260	7900	26000	265	8100	26500
280	8550	28000	285	8700	28500

290	8850	29000	300	9150	30000	310	9450	31000	320	9750	32000
330	10050	33000	340	10350	34000	350	10650	35000	360	10950	36000
370	11300	37000	380	11600	380000	390	11900	390000	400	12200	40000
410	125000	41000	420	12800	42000	430	13100	43000	440	13400	44000
450	13700	45000	460	140000	460000	470	14350	47000	480	14650	48000
490	14950	490000	500	15250	50000	510	15550	51000	520	15850	52000
etc	etc	etc	etc	etc	etc	etc	etc	etc	etc	etc	etc

* Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

** Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

APPENDIX-I
SIGNALS

1. SIGNAL FOR USE IN THE EVENT OF INTERCEPTION.

1.1 Signals Initiated By Intercepted Aircraft And Responses By Intercepting Aircraft.

Series	Intercepting aircraft signals	Meaning	Intercepted aircraft responds	Meaning
4-	DAY or NIGHT — Raising landing gear (if fitted) and flashing landing lights while passing over runway in use or helicopter landing area at a height exceeding 300 m (1 000 ft) but not exceeding 600 m (2 000 ft) (in the case of a helicopter, at a height exceeding 50 m (170 ft) but not exceeding 100 m (330 ft)) above the aerodrome level, and continuing to circle runway in use or helicopter landing area. If unable to flash landing lights, flash any other lights available.	Aerodrome you have designated is Inadequate.	DAY or NIGHT — If it is desired that the intercepted aircraft follow the intercepting aircraft to an alternate aerodrome, the intercepting aircraft raises its landing gear (if fitted) and uses the Series 1 signals prescribed for intercepting aircraft. If it is decided to release the intercepted aircraft, the intercepting aircraft uses the Series 2 signals prescribed for intercepting aircraft.	Understood follow me. Understood,you may proceed.
5-	DAY or NIGHT — Regular switching on and off of all available lights but in such a manner as to be distinct from flashing lights.	Cannot comply	DAY or NIGHT — Use Series 2 signals prescribed for intercepting aircraft.	Understood
6-	DAY or NIGHT — Irregular flashing of all available lights.	In distress	DAY or NIGHT — Use Series 2 signals prescribed for intercepting aircraft.	Understood

2. VISUAL SIGNALS USED TO WARN AN UNAUTHORIZED AIRCRAFT FLYING IN, OR ABOUT TO ENTER A RESTRICTED, PROHIBITED OR DANGER AREA.

By day and by night, a series of projectiles discharged from the ground at intervals of 10 seconds, each showing, on bursting, red and green lights or stars will indicate to an unauthorized aircraft that it is flying in or about to enter a restricted, prohibited or danger area, and that the aircraft is to take such remedial action as may be necessary.

3. SIGNALS FOR AERODROME TRAFFIC.

3.1 Light and pyrotechnic signals.

Table-1

Light	From aerodrome control to:	
	Aircraft in flight	Aircraft on the ground

Directed towards aircraft concerned(see figure A1-1)	Steady green Steady red Series of green flashes Series of red flashes Series of white flashes	Cleared to land Give way to other aircraft and continue circling Return for landing* Aerodrome unsafe, do not land Land at this aerodrome and proceed to apron* Notwithstanding any previous instructions, do not land for the time being	Cleared for take-off Stop Cleared to taxi Taxi clear of landing area in use Return to starting point on the aerodrome
Red pyrotechnic			

* Clearances to land and to taxi will be given in due course.

Table-2

Color and type of Signal	**Meaning with respect to Aircraft Flight**	**Meaning with respect to Aircraft On Ground**
Steady Green	Cleared to land	Cleared for takeoff
Steady Red	Give way to other aircraft And continue circling	Stop
Green Flashes	Return to landing	Cleared to taxi
Red Flashes	Airport unsafe-do not land	Taxi clear of landing area in use
White Flashes	Land at this airport and Proceed to apron	Return to starting point on airport
Red Pyrotechnic	Not withstanding any previous instructions do not land for the time being	