



ICAO ANNEX References for Ramp Inspections Guidance

Note: The references below are for only turbine powered aeroplanes and are provided as an aid to assist the inspector when conducting the inspection. Prior to finalizing any inspection report the inspector should verify the ICAO requirement/wording as contained in the appropriate current Annex. The references to ICAO Annexes are valid as of the Amendment number indicated below:

Annex 1 to Amendment Number 170

Annex 6 to Amendment Number 34

Annex 7 to Amendment Number 5

Annex 8 to Amendment Number 102

Annex 9 to Amendment Number 22

Annex 15 to Amendment Number 36

Annex 18 to Amendment Number 10



A	Flight Deck	References
A2	Emergency Exit	Annex 8, Part III-A, 4.1.7 – Emergency landing provisions (with similar provisions in other Parts of Annex 8)
		4.1.7.1 Provisions shall be made in the design of the aeroplane to protect the occupants, in the event of an emergency landing, from fire and from the direct effects of deceleration forces as well as from injuries arising from the effect of deceleration forces on the aeroplane’s interior equipment.
		4.1.7.2 Facilities shall be provided for the rapid evacuation of the aeroplane in conditions likely to occur following an emergency landing. Such facilities shall be related to the passenger and crew capacity of the aeroplane.
		4.1.7.3 The interior layout of the cabin and the position and number of emergency exits, including the means of locating and illuminating the escape paths and exits, shall be such as to facilitate rapid evacuation of the aeroplane in conditions likely to occur following an emergency landing.
		4.1.7.4 On aeroplane certificated for ditching conditions, provisions shall be made in the design to give maximum practicable assurance that safe evacuation from the aeroplane of passengers and crew can be executed in case of ditching.
A3	Equipment	
	Altimeters:	Annex 6, Part I 6.9.1.c) 6.9 All aeroplanes operated in accordance with instrument flight rules
		6.9.1 All aeroplanes when operated in accordance with the instrument flight rules, or when the aeroplane cannot be maintained in a desired attitude without reference to one or more flight instruments, shall be equipped with: a) a magnetic compass; b) an accurate timepiece indicating the time in hours, minutes and seconds; c) two sensitive pressure altimeters with counter drumpointer or equivalent presentation; <i>Note.— Neither three-pointer nor drum-pointer altimeters satisfy the requirement in 6.9.1 c).</i> d) an airspeed indicating system with means of preventing malfunctioning due to either condensation or icing; e) a turn and slip indicator; f) an attitude indicator (artificial horizon); g) a heading indicator (directional gyroscope); <i>Note.— The requirements of 6.9.1 e), f) and g) may be met by combinations of instruments or by integrated flight director systems provided that the safeguards against total failure, inherent in the three separate instruments, are retained.</i> h) a means of indicating whether the power supply to the gyroscopic instrument is adequate; i) a means of indicating in the flight crew compartment the outside air temperature; j) a rate-of-climb and descent indicator; and k) such additional instruments or equipment as may be prescribed by the appropriate authority.
	ACAS II	Annex 6, Part I
		6.18 Aeroplanes required to be equipped with an airborne collision avoidance system (ACAS II)
		6.18.2 all turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than 19 passengers shall be equipped with an airborne collision avoidance system (ACAS II).



A	Flight Deck	References
	CVR & FDR	Annex 6, Part I
		6.3 Flight recorders
		<i>Note 1.— Crash protected flight recorders comprise four systems: a flight data recorder (FDR), a cockpit voice recorder (CVR), an airborne image recorder (AIR) and a data link recorder (DLR). Image and data link information may be recorded on either the CVR or the FDR.</i>
		<i>Note 2.— Lightweight flight recorders comprise four systems: an aircraft data recording system (ADRS), a cockpit audio recording system (CARS), an airborne image recording system (AIRS) and a data link recording system (DLRS). Image and data link information may be recorded on either the CARS or the ADRS.</i>
		<i>Note 3.— Detailed guidance on flight recorders is contained in Appendix 8.</i>
		6.3.1.1 Flight data recorders — types
		6.3.1.1.1 A Type I and IA FDR shall record the parameters required to determine accurately the aeroplane flight path, speed, attitude, engine power, configuration and operation.
		6.3.1.1.2 Types II and IIA FDRs shall record the parameters required to determine accurately the aeroplane flight path, speed, attitude, engine power and configuration of lift and drag devices.
		6.3.1.3.1 The use of engraving metal foil FDRs shall be discontinued.
		6.3.1.3.4 The use of photographic film FDRs shall be discontinued.
		6.3.3.1.1 All aeroplanes for which the individual certificate of airworthiness is first issued on or after 1 January 2016, which utilize any of the data link communications applications listed in 5.1.2 of Appendix 9 and are required to carry a CVR, shall record on a flight recorder the data link communications messages.
		6.3.1.1.1 Types I and IA FDR shall record the parameters required to determine accurately the aeroplane flight path, speed, attitude, engine power, configuration and operation.
		6.3.1.4 Flight data recorders — Duration All FDRs shall be capable of retaining the information recorded during at least the last 25 hours of their operation, except for the Type IIA FDR which shall be capable of retaining the information recorded during at least the last 30 minutes of its operation.
		6.3.1.2.3 All aeroplanes of a maximum certificated take-off mass of over 27000 kg for which the individual certificate of airworthiness is first issued on or after 1 January 1989 shall be equipped with a Type I FDR.
		6.3.1.2.4 All aeroplanes of a maximum certificated take-off mass of over 5 700 kg, up to and including 27 000 kg, for which the individual certificate of airworthiness is first issued on or after 1 January 1989, shall be equipped with a Type II FDR
		6.3.1.2.6 All turbine-engined aeroplanes, for which the individual certificate of airworthiness was first issued on or after 1 January 1987 but before 1 January 1989, with a maximum certificated take-off mass of over 5 700 kg, except those in 6.3.1.2.8, shall be equipped with an FDR which shall record time, altitude, airspeed, normal acceleration and heading



A	Flight Deck	References
		6.3.1.2.8 All turbine-engined aeroplanes, for which the individual certificate of airworthiness was first issued on or after 1 January 1987 but before 1 January 1989, with a maximum certificated take-off mass of over 27 000 kg that are of types of which the prototype was certificated by the appropriate national authority after 30 September 1969 shall be equipped with a Type II FDR.
	FDR	6.3.1.2.9 All turbine-engined aeroplanes, for which the individual certificate of airworthiness was first issued before 1 January 1987, with a maximum certificated take-off mass of over 5 700 kg shall be equipped with an FDR which shall record time, altitude, airspeed, normal acceleration and heading.
	CVR	6.3.2.1.4 Cockpit voice recorders — All aeroplanes of a maximum certificated take-off mass of over 5 700 kg for which the individual certificate of airworthiness is first issued on or after 1 January 1987 shall be equipped with a CVR.
		6.3.2.1.5 Cockpit voice recorders — All turbine-engined aeroplanes, for which the individual certificate of airworthiness was first issued before 1 January 1987, with a maximum certificated take-off mass of over 27 000 kg that are of types of which the prototype was certificated by the appropriate national authority after 30 September 1969 shall be equipped with a CVR.
		6.3.2.3 Cockpit voice recorders — Duration
		6.3.2.3.1. All CVRs shall be capable of retaining the information recorded during at least the last 30 minutes of their operation.
		6.3.2.1.3 All aeroplanes of a maximum certificated take-off mass of over 5 700 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2003, shall be equipped with a CVR capable of retaining the information recorded during at least the last two hours of its operation.
	GPWS	Annex 6 Part I, 6.15
		6.15 Aeroplanes required to be equipped with ground proximity warning systems (GPWS)
		6.15.4 From 1 January 2007, all turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than nine passengers, shall be equipped with a ground proximity warning system which has a forward looking terrain avoidance function.
		6.15.7 A ground proximity warning system shall provide automatically a timely and distinctive warning to the flight crew when the aeroplane is in potentially hazardous proximity to the earth's surface.
		6.15.8 A ground proximity warning system shall provide, unless otherwise specified herein, warnings of the following circumstances: a) excessive descent rate; b) excessive terrain closure rate; c) excessive altitude loss after take-off or go-around; d) unsafe terrain clearance while not in landing configuration; 1) gear not locked down; 2) flaps not in a landing position; and e) excessive descent below the instrument glide path.
	ELT	Annex 6 Part I, 6.17
		6.17 Emergency locator transmitter (ELT)
		6.17.2 Except as provided for in 6.17.3, from 1 July 2008, all aeroplanes authorized to carry more than 19 passengers shall be equipped with at least one automatic ELT or two ELTs of any type.



A	Flight Deck	References
		6.17.3 All aeroplanes authorized to carry more than 19 passengers for which the individual certificate of airworthiness is first issued after 1 July 2008 shall be equipped with at least two ELTs, one of which shall be automatic.
		6.17.4 Except as provided for in 6.17.5, from 1 July 2008, all aeroplanes authorized to carry 19 passengers or less shall be equipped with at least one ELT of any type.
		6.17.5 All aeroplanes authorized to carry 19 passengers or less for which the individual certificate of airworthiness is first issued after 1 July 2008 shall be equipped with at least one automatic ELT.
	Database	Annex 6, Part I, 7.4.2
		7.4 Electronic navigation data management
		7.4.1 An operator shall not employ electronic navigation data productsunless the State of the Operator has approved the operator's procedures for ensuring that the process applied and the products delivered have met acceptable standards of integrity and that the products are compatible with the intended function of the equipment that will use them. The State of the Operator shall ensure that the operator continues to monitor both process and products.
		7.4.2 An operator shall implement procedures that ensure the timely distribution and insertion of current and unaltered electronic navigation data to all aircraft that require it.
A4	Manuals	All requirement manuals <i>Note: Manuals may be in an electronic format if authorized by the States of the Operator</i>
	Flight Manual	Annex 6, Part I, 6.2.3, 11.1
		6.2.3 An aeroplane shall carry: a) the operations manual prescribed in 4.2.3, or those parts of it that pertain to flight operations; b) the flight manual for the aeroplane, or other documents containing performance data required for the application of Chapter 5 and any other information necessary for the operation of the aeroplane within the terms of its certificate of airworthiness, unless these data are available in the operations manual; and c) current and suitable charts to cover the route of the proposed flight and any route along which it is reasonable to expect that the flight may be diverted.
		11.1 Flight Manual
		<i>Note.— The flight manual contains the information specified in Annex 8.</i> 11.1 The flight manual shall be updated by implementing changes made mandatory by the State of Registry.
	Aircraft Operating Manual	Annex 6, Part I, 6.1.4
		6.1.4 The operator shall provide operations staff and flight crew with an aircraft operating manual, for each aircraft type operated, containing the normal, abnormal and emergency procedures relating to the operation of the aircraft. The manual shall include details of the aircraft systems and of the checklists to be used. The design of the manual shall observe Human Factors principles
A5.	Checklists	Annex 6, Part I, 6.1.4



A	Flight Deck	References
	Flight crew checklists:	6.1.4 The operator shall provide operations staff and flight crew with an aircraft operating manual, for each aircraft type operated, containing the normal, abnormal and emergency procedures relating to the operation of the aircraft. The manual shall include details of the aircraft systems and of the checklists to be used. The design of the manual shall observe Human Factors principles
	Aircraft search procedure checklist	Annex 6, Part I, 13.3
		<p>13.3 Aeroplane search procedure checklist</p> <p>An operator shall ensure that there is on board a checklist of the procedures to be followed in searching for a bomb in case of suspected sabotage and for inspecting aeroplanes for concealed weapons, explosives or other dangerous devices when a well-founded suspicion exists that the aeroplane may be the object of an act of unlawful interference. The checklist shall be supported by guidance on the appropriate course of action to be taken should a bomb or suspicious object be found and information on the least-risk bomb location specific to the aeroplane.</p>
	Checklist of emergency and safety equipment and instructions for its use	Annex 6, Part I, Appendix 2, 2.2.10
A6	Route Guide	Annex 6, Part I, 6.2.3
		6.2.3 An aeroplane shall carry:
		<p>.....</p> <p>c) current and suitable charts to cover the route of the proposed flight and any route along which it is reasonable to expect that the flight may be diverted.</p>
A7.	Minimum Equipment List (MEL) and deferred defect rectification	Annex 6, Part I, 6.1.3
		6.1.3 The operator shall include in the operations manual a minimum equipment list (MEL), approved by the State of the Operator which will enable the pilot-in-command to determine whether a flight may be commenced or continued from any intermediate stop should any instrument, equipment or systems become inoperative. Where the State of the Operator is not the State of Registry, the State of the Operator shall ensure that the MEL does not affect the aeroplane's compliance with the airworthiness requirements applicable in the State of Registry.
A8	Documents required to be carried on board	
	Certificate of registration	Annex 7, 7
		<p>7.1 The certificate of registration, in wording and arrangement, shall be a replica of the certificate shown in Figure 1 of Annex 7.</p> <p><i>Note.— The size of the form is at the discretion of the State of Registry or common mark registering authority</i></p>



A	Flight Deck	References
		<p>7.2 When certificates of registration are issued in a language other than English, they shall include an English translation.</p> <p><i>Note.</i>— Article 29 of the Convention on International Civil Aviation requires that the certificate of registration be carried on board every aircraft engaged in international air navigation.</p>

*	State or Common mark registering authority Ministry Department or Service	*
CERTIFICATE OF REGISTRATION		
1. Nationality or common mark and registration mark	2. Manufacturer and manufacturer's designation of aircraft	3. Aircraft serial no.
4. Name of owner		
5. Address of owner		
6. It is hereby certified that the above described aircraft has been duly entered on the in accordance with the Convention on International Civil (name of register) Aviation dated 7 December 1944 and with the (†)		
(Signature)		
Date of issue		
(†) Insert reference to applicable regulations.		
*		

* For use by the State of Registry or common mark registering authority.

Figure 1. Certificate of Registration

A	Flight Deck	References
A8	Identification Plate	Annex 7, 8.
		<p>8. Identification Plate</p> <p>An aircraft shall carry an identification plate inscribed with at least its nationality or common mark and registration mark. The plate shall be made of fireproof metal or other fireproof material of suitable physical properties and shall be secured to the aircraft in a prominent position near the main entrance or, in the case of an unmanned free balloon, affixed conspicuously to the exterior of the payload.</p>
A8	Certificate of Airworthiness	Annex 8 Part II, Chapter 3
		<p><i>Note.</i>— The Certificate of Airworthiness as used in these Standards is the Certificate of Airworthiness referred to in Article 31 of the Convention</p>



A	Flight Deck	References
		<p>3.1 Applicability The Standards of this chapter are applicable in respect of all aircraft, except 3.3 and 3.4 which are not applicable in respect of all aircraft that are of a type of which the prototype was submitted to appropriate national authorities for certification before 13 June 1960.</p>
		<p>3.2 Issuance and continued validity of a Certificate of Airworthiness</p>
		<p>3.2.1 A Certificate of Airworthiness shall be issued by a Contracting State on the basis of satisfactory evidence that the aircraft complies with the design aspects of the appropriate airworthiness requirements.</p>
		<p>3.2.2 A Contracting State shall not issue or render valid a Certificate of Airworthiness for which it intends to claim recognition pursuant to Article 33 of the Convention on International Civil Aviation unless it has satisfactory evidence that the aircraft complies with the applicable Standards of this Annex through compliance with appropriate airworthiness requirements.</p>
		<p>3.2.3 A Certificate of Airworthiness shall be renewed or shall remain valid, subject to the laws of the State of Registry, provided that the State of Registry shall require that the continuing airworthiness of the aircraft shall be determined by a periodical inspection at appropriate intervals having regard to lapse of time and type of service or, alternatively, by means of a system of inspection, approved by the State, that will produce at least an equivalent result.</p>
		<p>3.2.4 When an aircraft possessing a valid Certificate of Airworthiness issued by a Contracting State is entered on the register of another Contracting State, the new State of Registry, when issuing its Certificate of Airworthiness may consider the previous Certificate of Airworthiness as satisfactory evidence, in whole or in part, that the aircraft complies with the applicable Standards of this Annex through compliance with the appropriate airworthiness requirements.</p>
		<p><i>Note.</i> — <i>Some Contracting States facilitate the transfer of aircraft onto the register of another State by the issue of an “Export Certificate of Airworthiness” or similarly titled document. While not valid for the purpose of flight, such a document provides confirmation by the exporting State of a recent satisfactory review of the airworthiness status of the aircraft. Guidance on the issue of an “Export Certificate of Airworthiness” is contained in the Airworthiness Manual (Doc 9760)</i></p>
		<p>3.2.5 When a State of Registry renders valid a Certificate of Airworthiness issued by another Contracting State, as an alternative to issuance of its own Certificate of Airworthiness, it shall establish validity by suitable authorization to be carried with the former Certificate of Airworthiness accepting it as the equivalent of the latter. The validity of the authorization shall not extend beyond the period of validity of the Certificate of Airworthiness being rendered valid. The State of Registry shall ensure that the continuing airworthiness of the aircraft is determined in accordance with 3.2.3.</p>
		<p>3.3 Standard form of Certificate of Airworthiness</p>
		<p>3.3.1 The Certificate of Airworthiness shall contain the information shown in Figure 1 and shall be generally similar to it.</p>
		<p>3.3.2 When Certificates of Airworthiness are issued in a language other than English, they shall include an English translation. <i>Note.</i>— <i>Article 29 of the Convention on International Civil Aviation requires that the Certificate of Airworthiness be carried on board every aircraft engaged in international air navigation.</i></p>



A	Flight Deck	References
		<p>3.4 Aircraft limitations and information Each aircraft shall be provided with a flight manual, placards or other documents stating the approved limitations within which the aircraft is considered airworthy as defined by the appropriate airworthiness requirements and additional instructions and information necessary for the safe operation of the aircraft.</p>
		<p>3.5 Temporary loss of airworthiness Any failure to maintain an aircraft in an airworthy condition as defined by the appropriate airworthiness requirements shall render the aircraft ineligible for operation until the aircraft is restored to an airworthy condition.</p>
		<p>3.6 Damage to aircraft</p>
		<p>3.6.1 When an aircraft has sustained damage, the State of Registry shall judge whether the damage is of a nature such that the aircraft is no longer airworthy as defined by the appropriate airworthiness requirements</p>
		<p>3.6.2 If the damage is sustained or ascertained when the aircraft is in the territory of another Contracting State, the authorities of the other Contracting State shall be entitled to prevent the aircraft from resuming its flight on the condition that they shall advise the State of Registry immediately, communicating to it all details necessary to formulate the judgement referred to in 3.6.1.</p>
		<p>3.6.3 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 the Contracting State that had originally, in accordance with 3.6.2, prevented the aircraft from resuming its flight. That Contracting State shall permit such flight or flights within the prescribed limitations.</p>
		<p>3.6.4 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</p>



*	<i>State of Registry Issuing Authority</i>		*
CERTIFICATE OF AIRWORTHINESS			
1. Nationality and registration marks 	2. Manufacturer and manufacturer's designation of aircraft** 	3. Aircraft serial number 	
4. Categories and/or operation***.....			
5. This Certificate of Airworthiness is issued pursuant to the Convention on International Civil Aviation dated 7 December 1944 and †..... in respect of the above-mentioned aircraft which is considered to be airworthy when maintained and operated in accordance with the foregoing and the pertinent operating limitations. Date of issue Signature..... † Insert reference to appropriate Airworthiness Code.			
6. ****			

- * For use of the State of Registry.
- ** Manufacturer's designation of aircraft should contain the aircraft type and model.
- *** This space is normally used to indicate the certification basis, i.e. certification code, with which the particular aircraft complies and/or its permitted operational category, e.g. commercial air transportation, aerial work or private.
- **** This space shall be used either for periodic endorsement (giving date of expiry) or for a statement that the aircraft is being maintained under a system of continuous inspection.

Figure 1

A	Flight Deck	References
A8		Documents required to be carried on board (cont)
	d) Crew Member Licences	Annex 1, 1.2.1, 1.2.5.1, 1.2.9, 2.1.3, 2.1.7 and Chapter 5 Annex 6 Part I, 9.4.4
		1.2.1 Authority to act as a flight crew member. A person shall not act as a flight crew member of an aircraft unless a valid licence is held showing compliance with the specifications of this Annex and appropriate to the duties to be performed by that person. The licence shall have been issued by the State of Registry of that aircraft or by any other Contracting State and rendered valid by the State of Registry of that aircraft.
		<i>Note.— Article 29 of the Convention on International Civil Aviation requires that the flight crew members carry their appropriate licences on board every aircraft engaged in international navigation.</i>
		1.2.5.1 A Contracting State, having issued a licence, shall ensure that the privileges granted by that licence, or by related ratings, are not exercised unless the holder maintains competency and meets the requirements for recent experience established by that State
		1.2.9 Language proficiency
		1.2.9.4 As of 5 March 2008, aeroplane, airship, helicopter and powered-lift pilots, air traffic controllers and aeronautical station operators shall demonstrate the ability to speak and understand the language used for radiotelephony communications to the level specified in the language proficiency requirements in Appendix 1 of Annex 1.



A	Flight Deck	References
		2.1.3 Class and type ratings
		2.1.3.1 Class ratings shall be established for aeroplanes certificated for single-pilot operation and shall comprise: a) single-engine, land; b) single-engine, sea; c) multi-engine, land; d) multi-engine, sea.
		<i>Note.— The provisions of this paragraph do not preclude the establishment of other class ratings within this basic structure.</i>
		2.1.3.2 Type ratings shall be established for: a) aircraft certificated for operation with a minimum crew of at least two pilots; b) helicopters and powered-lifts certificated for single-pilot operation except where a class rating has been issued under 2.1.3.1.1; and c) any aircraft whenever considered necessary by the Licensing Authority.
		2.1.3.3 When an applicant demonstrates skill and knowledge for the initial issue of a pilot licence, the category and the ratings appropriate to the class or type of aircraft used in the demonstration shall be entered on the licence.
		2.1.7 Circumstances in which an instrument rating is required. A Contracting State, having issued a pilot licence, shall not permit the holder thereof to act either as pilot-in-command or as co-pilot of an aircraft under instrument flight rules (IFR) unless such holder has received proper authorization from such Contracting State. Proper authorization shall comprise an instrument rating appropriate to the aircraft category.
		Chapter 5. Specifications for Personnel Licences
		5.1 Personnel licences issued by a Contracting State in accordance with the relevant provisions of this Annex shall conform to the following specifications:
		5.1.1 <i>Detail</i>
		5.1.1.1 A Contracting State having issued a licence shall ensure that other States are able to easily determine the licence privileges and validity of ratings.
		<i>Note.— Operator records or a flight crew member's personal log book, in which maintenance of competency and recent experience may be satisfactorily recorded, are not normally carried on international flights.</i>



A	Flight Deck	References
		<p>5.1.1.2 The following details shall appear on the licence: I) Name of State (in bold type); II) Title of licence (in very bold type); III) Serial number of the licence, in Arabic numerals, given by the authority issuing the licence; IV) Name of holder in full (in Roman alphabet also if script of national language is other than Roman); IVa) Date of birth; V) Address of holder if desired by the State; VI) Nationality of holder; VII) Signature of holder; VIII) Authority and, where necessary, conditions under which the licence is issued; IX) Certification concerning validity and authorization for holder to exercise privileges appropriate to licence; X) Signature of officer issuing the licence and the date of such issue; XI) Seal or stamp of authority issuing the licence; XII) Ratings, e.g. category, class, type of aircraft, airframe, aerodrome control, etc.; XIII) Remarks, i.e. special endorsements relating to limitations and endorsements for privileges, including from 5 March 2008 an endorsement of language proficiency, and other information required in pursuance to Article 39 of the Chicago Convention; XIV) Any other details desired by the State issuing the licence.</p>
		<p>5.1.2 Material First quality paper or other suitable material, including plastic cards, shall be used and the items mentioned in 5.1.1.2 shown clearly thereon.</p>
		<p>5.1.3 Language When licences are issued in a language other than English, the licence shall include an English translation of at least items I), II), VI), IX), XII), XIII) and XIV). When provided in a language other than English, authorizations issued in accordance with 1.2.2.1 shall include an English translation of the name of the State issuing the authorization, the limit of validity of the authorization and any restriction or limitation that may be established.</p>
		<p>5.1.4 Arrangement of items Item headings on the licence shall be uniformly numbered in roman numerals as indicated in 5.1.1, so that on any licence the number will, under any arrangement, refer to the same item heading.</p>
		<p>Annex 6 Part I, 9.4.4</p>
		<p>9.4.4 Pilot proficiency checks</p>
		<p>9.4.4.1 An operator shall ensure that piloting technique and the ability to execute emergency procedures is checked in such a way as to demonstrate the pilot's competence on each type or variant of a type of aeroplane. Where the operation may be conducted under instrument flight rules, an operator shall ensure that the pilot's competence to comply with such rules is demonstrated to either a check pilot of the operator or to a representative of the State of the Operator. Such checks shall be performed twice within any period of one year. Any two such checks which are similar and which occur within a period of four consecutive months shall not alone satisfy this requirement.</p>



A	Flight Deck	References
		9.4.4.2 When an operator schedules flight crew on several variants of the same type of aeroplane or different types of aeroplanes with similar characteristics in terms of operating procedures, systems and handling, the State shall decide under which conditions the requirements of 9.4.4.1 for each variant or each type of aeroplane can be combined.
		9.4.5 Single pilot operations under the instrument flight rules (IFR) or at night
		9.4.5.1 The State of the Operator shall prescribe requirements of experience, recency and training applicable to single pilot operations intended to be carried out under the IFR or at night.
		9.4.5.3 The initial and recurrent flight training and proficiency checks indicated in 9.3.1 and 9.4.4 shall be performed by the pilot-in-command in the single pilot role on the class of aeroplane in an environment representative of the operation.
A8	Journey log book or technical log and voyage report	Annex 6, Part I, 4.3.1 and 11.4
		4.3.1 A flight shall not be commenced until flight preparation forms have been completed certifying that the pilot-in-command is satisfied that: a) the aeroplane is airworthy; b) the instruments and equipment prescribed in Chapter 6, for the particular type of operation to be undertaken, are installed and are sufficient for the flight; c) a maintenance release as prescribed in 8.8 has been issued in respect of the aeroplane; d) the mass of the aeroplane and centre of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected; e) any load carried is properly distributed and safely secured; f) a check has been completed indicating that the operating limitations of Chapter 5 can be complied with for the flight to be undertaken; and g) the Standards of 4.3.3 relating to operational flight planning have been complied with.
A8	Radio Station licenses	Annex 6, Part I, 7.1
		7.1 Communication equipment
		7.1.1 c) conducting two-way communication at any time during flight with at least one aeronautical station and with such other aeronautical stations and on such frequencies as may be prescribed by the appropriate authority.
		7.1.2 The radio communication equipment required in accordance with 7.1.1 shall provide for communications on the aeronautical emergency frequency 121.5 MHz.
		7.1.3 For flights in defined portions of airspace or on routes where an RCP type has been prescribed, an aeroplane shall, in addition to the requirements specified in 7.1.1: a) be provided with communication equipment which will enable it to operate in accordance with the prescribed RCP type(s); and b) be authorized by the State of the Operator for operations in such airspace.
A8	Noise certification document of statement, where applicable	Annex 6, Part I, 6.13 Annex 16 Volume I, Part I and II



A	Flight Deck	References
		<p>6.13 All aeroplanes complying with the noise certification Standards in Annex 16, Volume I An aeroplane shall carry a document attesting noise certification. When the document, or a suitable statement attesting noise certification as contained in another document approved by the State of Registry, is issued in a language other than English, it shall include an English translation. <i>Note.— The attestation may be contained in any document, carried on board, approved by the State of Registry</i></p>
		<p>Annex 16 Part II. Aircraft Noise Certification</p>
		<p>Chapter 1. Administration</p>
		<p>1.1 The provisions of 1.2 to 1.6 shall apply to all aircraft included in the classifications defined for noise certification purposes in Chapters 2, 3, 4, 5, 6, 8, 10, 11 and 12 of this part where such aircraft are engaged in international air navigation.</p>
		<p>1.2 Noise certification shall be granted or validated by the State of Registry of an aircraft on the basis of satisfactory evidence that the aircraft complies with requirements that are at least equal to the applicable Standards specified in Annex 16.</p>
		<p>1.3 If noise recertification is requested, it shall be granted or validated by the State of Registry of an aircraft on the basis of satisfactory evidence that the aircraft complies with requirements that are at least equal to the applicable Standards specified in this Annex. The date used by a certifying authority to determine the recertification basis shall be the date of acceptance of the first application for recertification.</p>
		<p>1.4 The documents attesting noise certification shall be approved by the State of Registry and shall be required by that State to be carried on the aircraft.</p>
		<p><i>Note.— See Annex 6, Part I, 6.13, concerning the translation into English of documents attesting noise certification.</i></p>



A	Flight Deck	References
	Contents of Noise Certification	<p>1.5 The documents attesting noise certification for an aircraft shall provide at least the following information:</p> <p>Item 1. Name of State.</p> <p>Item 2. Title of the noise document.</p> <p>Item 3. Number of the document.</p> <p>Item 4. Nationality or common mark and registration marks.</p> <p>Item 5. Manufacturer and manufacturer's designation of aircraft.</p> <p>Item 6. Aircraft serial number.</p> <p>Item 7. Engine manufacturer, type and model.</p> <p>Item 8. Propeller type and model for propeller-driven aeroplanes.</p> <p>Item 9. Maximum take-off mass in kilograms.</p> <p>Item 10. Maximum landing mass, in kilograms, for certificates issued under Chapters 2, 3, 4, 5 and 12 of this Annex.</p> <p>Item 11. The chapter and section of this Annex according to which the aircraft was certificated.</p> <p>Item 12. Additional modifications incorporated for the purpose of compliance with the applicable noise certification Standards.</p> <p>Item 13. The lateral/full-power noise level in the corresponding unit for documents issued under Chapters 2, 3, 4, 5 and 12 of this Annex.</p> <p>Item 14. The approach noise level in the corresponding unit for documents issued under Chapters 2, 3, 4, 5, 8 and 12 of this Annex</p> <p>Item 15. The flyover noise level in the corresponding unit for documents issued under Chapters 2, 3, 4, 5 and 12 of this Annex.</p> <p>Item 16. The overflight noise level in the corresponding unit for documents issued under Chapters 6, 8 and 11 of this Annex.</p> <p>Item 17. The take-off noise level in the corresponding unit for documents issued under Chapters 8 and 10 of this Annex.</p> <p>Item 18. Statement of compliance, including a reference to Annex 16, Volume I.</p> <p>Item 19. Date of issuance of the noise certification document.</p> <p>Item 20. Signature of the officer issuing it</p>
		<p>1.6 Item headings on the noise certification documents shall be uniformly numbered in Arabic numerals, as indicated in 1.5, so that on any noise certification document the number will, under any arrangement, refer to the same item heading, except where the information in Items 1 through 6 and Items 18 through 20 is given in the certificate of airworthiness, in which case the numbering system of the certificate of airworthiness according to Annex 8 shall prevail.</p>
		<p>1.7 An administrative system for implementation of noise certification documentation shall be developed by the State of Registry.</p>
		<p>1.8 Contracting States shall recognize as valid a noise certification granted by another Contracting State provided that the requirements under which such certification was granted are at least equal to the applicable Standards specified in Annex 16.</p>
		<p>1.9 A Contracting State shall suspend or revoke the noise certification of an aircraft on its register if the aircraft ceases to comply with the applicable noise Standards. The State of Registry shall not remove the suspension of a noise certification or grant a new noise certification unless the aircraft is found, on reassessment, to comply with the applicable noise Standards.</p>



A	Flight Deck	References
A8	Air Operator Certificate (certified true copy) Operations Specifications (copy)	Annex 6, Part I, 4.2.1, 6.1.2
		4.2.1 The air operator certificate
	Requirement for AOC	4.2.1.1 An operator shall not engage in commercial air transport operations unless in possession of a valid air operator certificate issued by the State of the Operator.
		4.2.1.2 The air operator certificate shall authorize the operator to conduct commercial air transport operations in accordance with the operations specifications.
		4.2.1.3 The issue of an air operator certificate by the State of the Operator shall be dependent upon the operator demonstrating an adequate organization, method of control and supervision of flight operations, training programme as well as ground handling and maintenance arrangements consistent with the nature and extent of the operations specified.
		4.2.1.4 The continued validity of an air operator certificate shall depend upon the operator maintaining the requirements of 4.2.1.3 under the supervision of the State of the Operator.
	Contents of AOC	4.2.1.5 The air operator certificate shall contain at least the following information and, from 1 January 2010, shall follow the layout of Appendix 6, paragraph 2: a) the State of the Operator and the issuing authority; b) the air operator certificate number and its expiration date; c) the operator name, trading name (if different) and address of the principal place of business; d) the date of issue and the name, signature and title of the authority representative; and e) the location, in a controlled document carried on board, where the contact details of operational management can be found.
	Contents of Operations Specifications	4.2.1.6 The operations specifications associated with the air operator certificate shall contain at least the information listed in Appendix 6, paragraph 3, and, from 1 January 2010, shall follow the layout of Appendix 6, paragraph 3.
		4.2.1.7 Air operator certificates and their associated operations specifications first issued from 20 November 2008 shall follow the layouts of Appendix 6, paragraphs 2 and 3.
	Certified True Copy of AOC Copy of Operations Specifications Language of Certificates	6.1.2 An aeroplane shall carry a certified true copy of the air operator certificate specified in 4.2.1, and a copy of the operations specifications relevant to the aeroplane type, issued in conjunction with the certificate. When the certificate and the associated operations specifications are issued by the State of the Operator in a language other than English, an English translation shall be included.
A9	Operational flight plan	Annex 6, Part I, 4.3.3
		4.3.3 Operational flight planning



A	Flight Deck	References
		4.3.3.1 An operational flight plan shall be completed for every intended flight. The operational flight plan shall be approved and signed by the pilot-in-command and, where applicable, signed by the flight operations officer/flight dispatcher, and a copy shall be filed with the operator or a designated agent, or, if these procedures are not possible, it shall be left with the aerodrome authority or on record in a suitable place at the point of departure.
		4.3.3.2 The operations manual must describe the content and use of the operational flight plan.
A10	Mass and balance sheet	Annex 6, Part I, 4.3.1
		4.3.1 A flight shall not be commenced until flight preparation forms have been completed certifying that the pilot-in-command is satisfied that: a) the aeroplane is airworthy; b) the instruments and equipment prescribed in Chapter 6, for the particular type of operation to be undertaken, are installed and are sufficient for the flight; c) a maintenance release as prescribed in 8.8 has been issued in respect of the aeroplane; d) the mass of the aeroplane and centre of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected; e) any load carried is properly distributed and safely secured; f) a check has been completed indicating that the operating limitations of Chapter 5 can be complied with for the flight to be undertaken; and g) the Standards of 4.3.3 relating to operational flight planning have been complied with.
A11	Aircraft performance limitations using current route, airport obstacles and runway analysis data	Annex 6, Part I, 5.1, 5.2 and 5.3
		5.1 General
		5.1.1 Aeroplanes shall be operated in accordance with a comprehensive and detailed code of performance established by the State of Registry in compliance with the applicable Standards of this chapter.
		5.1.2 Except as provided in 5.4, single-engine aeroplanes shall only be operated in conditions of weather and light, and over such routes and diversions therefrom, that permit a safe forced landing to be executed in the event of engine failure.
		5.2 Applicable to aeroplanes certificated in accordance with Parts IIIA and IIIB of Annex 8
		5.2.1 The Standards contained in 5.2.2 to 5.2.11 inclusive are applicable to the large aeroplanes to which Parts IIIA and IIIB of Annex 8 are applicable.
		5.2.2 The level of performance defined by the appropriate parts of the comprehensive and detailed national code referred to in 5.1.1 for the aeroplanes designated in 5.2.1 shall be at least substantially equivalent to the overall level embodied in the Standards of this chapter.
		5.2.3 An aeroplane shall be operated in compliance with the terms of its certificate of airworthiness and within the approved operating limitations contained in its flight manual.



A	Flight Deck	References
		5.2.4 The State of Registry shall take such precautions as are reasonably possible to ensure that the general level of safety contemplated by these provisions is maintained under all expected operating conditions, including those not covered specifically by the provisions of this chapter.
		5.2.5 A flight shall not be commenced unless the performance information provided in the flight manual, supplemented as necessary with other data acceptable to the State of the Operator, indicates that the Standards of 5.2.6 to 5.2.11 can be complied with for the flight to be undertaken.
		5.2.6 In applying the Standards of this chapter, account shall be taken of all factors that significantly affect the performance of the aeroplane (such as: mass, operating procedures, the pressure-altitude appropriate to the elevation of the aerodrome, temperature, wind, runway gradient and condition of runway, i.e. presence of slush, water and/or ice for landplanes, water surface condition for seaplanes). Such factors shall be taken into account directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data or in the comprehensive and detailed code of performance in accordance with which the aeroplane is being operated.
	Mass limitations	<p>5.2.7 Mass limitations</p> <p>a) The mass of the aeroplane at the start of take-off shall not exceed the mass at which 5.2.8 is complied with, nor the mass at which 5.2.9, 5.2.10 and 5.2.11 are complied with, allowing for expected reductions in mass as the flight proceeds, and for such fuel jettisoning as is envisaged in applying 5.2.9 and 5.2.10 and, in respect of alternate aerodromes, 5.2.7 c) and 5.2.11.</p> <p>b) In no case shall the mass at the start of take-off exceed the maximum take-off mass specified in the flight manual for the pressure-altitude appropriate to the elevation of the aerodrome, and, if used as a parameter to determine the maximum take-off mass, any other local atmospheric condition.</p> <p>c) In no case shall the estimated mass for the expected time of landing at the aerodrome of intended landing and at any destination alternate aerodrome, exceed the maximum landing mass specified in the flight manual for the pressure-altitude appropriate to the elevation of those aerodromes, and if used as a parameter to determine the maximum landing mass, any other local atmospheric condition.</p> <p>d) In no case shall the mass at the start of take-off, or at the expected time of landing at the aerodrome of intended landing and at any destination alternate aerodrome, exceed the relevant maximum masses at which compliance has been demonstrated with the applicable noise certification Standards in Annex 16, Volume I, unless otherwise authorized in exceptional circumstances for a certain aerodrome or a runway where there is no noise disturbance problem, by the competent authority of the State in which the aerodrome is situated.</p>
	<i>Take-off</i>	5.2.8 <i>Take-off.</i> The aeroplane shall be able, in the event of a critical engine failing at any point in the take-off, either to discontinue the take-off and stop within the accelerate-stop distance available, or to continue the take-off and clear all obstacles along the flight path by an adequate vertical or horizontal distance until the aeroplane is in a position to comply with 5.2.9. When determining the resulting take-off obstacle accountability area, the operating conditions, such as the crosswind component and navigation accuracy, must be taken into account.
		5.2.8.1 In determining the length of the runway available, account shall be taken of the loss, if any, of runway length due to alignment of the aeroplane prior to take-off.



A	Flight Deck	References
	<i>En route — one power-unit inoperative.</i>	5.2.9 <i>En route — one engine inoperative.</i> The aeroplane shall be able, in the event of the critical engine becoming inoperative at any point along the route or planned diversions therefrom, to continue the flight to an aerodrome at which the Standard of 5.2.11 can be met, without flying below the minimum flight altitude at any point.
	<i>En route — two power-units inoperative</i>	5.2.10 <i>En route — two engines inoperative.</i> In the case of aeroplanes having three or more engines, on any part of a route where the location of en-route alternate aerodromes and the total duration of the flight are such that the probability of a second engine becoming inoperative must be allowed for if the general level of safety implied by the Standards of this chapter is to be maintained, the aeroplane shall be able, in the event of any two engines becoming inoperative, to continue the flight to an en-route alternate aerodrome and land.
	<i>Landing</i>	5.2.11 <i>Landing.</i> The aeroplane shall, at the aerodrome of intended landing and at any alternate aerodrome, after clearing all obstacles in the approach path by a safe margin, be able to land, with assurance that it can come to a stop or, for a seaplane, to a satisfactorily low speed, within the landing distance available. Allowance shall be made for expected variations in the approach and landing techniques, if such allowance has not been made in the scheduling of performance data.
A12	Cargo and manifest and, if applicable, passenger manifest	Annex 9, 2.13, 2.14 and 4.14
		2.13 Contracting States shall not normally require the presentation of a Passenger Manifest. On those occasions when a Passenger Manifest is required, the information requirements shall be limited to the elements indicated in Appendix 2 of Annex 9. The information shall be accepted in either electronic or paper form.
		2.14 When a Contracting State requires the presentation of the Cargo Manifest in paper form, it shall accept either: a) the form shown in Annex 9, Appendix 3, completed according to the instructions; or b) the form shown in Annex 9, Appendix 3, partially completed, with a copy of each air waybill representing the cargo on board the aircraft.
		4.14 The production and presentation of the Cargo Manifest and the air waybill(s) shall be the responsibility of the aircraft operator or his authorized agent. The production and presentation of the other documents required for the clearance of the goods shall be the responsibility of the declarant
A13	Pre-flight inspection	Annex 6, Part I, 4.3
		4.3 Flight preparation



A	Flight Deck	References
		<p>4.3.1 A flight shall not be commenced until flight preparation forms have been completed certifying that the pilot-in-command is satisfied that:</p> <ul style="list-style-type: none"> a) the aeroplane is airworthy; b) the instruments and equipment prescribed in Chapter 6, for the particular type of operation to be undertaken, are installed and are sufficient for the flight; c) a maintenance release as prescribed in 8.8 has been issued in respect of the aeroplane; d) the mass of the aeroplane and centre of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected; e) any load carried is properly distributed and safely secured; f) a check has been completed indicating that the operating limitations of Chapter 5 can be complied with for the flight to be undertaken; and g) the Standards of 4.3.3 relating to operational flight planning have been complied with.
	<i>Operational flight planning</i>	4.3.3 Operational flight planning
		4.3.3.1 An operational flight plan shall be completed for every intended flight. The operational flight plan shall be approved and signed by the pilot-in-command and, where applicable, signed by the flight operations officer/flight dispatcher, and a copy shall be filed with the operator or a designated agent, or, if these procedures are not possible, it shall be left with the aerodrome authority or on record in a suitable place at the point of departure.
		4.3.3.2 The operations manual must describe the content and use of the operational flight plan.
	Alternate aerodromes	4.3.4 Alternate aerodromes
	<i>Take-off alternate aerodrome</i>	4.3.4.1 <i>Take-off alternate aerodrome</i>
		4.3.4.1.1 A take-off alternate aerodrome shall be selected and specified in the operational flight plan if the weather conditions at the aerodrome of departure are at or below the applicable aerodrome operating minima or it would not be possible to return to the aerodrome of departure for other reasons.
		4.3.4.1.2 The take-off alternate aerodrome shall be located within the following distance from the aerodrome of departure:
		a) aeroplanes having two engines. Not more than a distance equivalent to a flight time of one hour at the single-engine cruise speed; and
		b) aeroplanes having three or more engines. Not more than a distance equivalent to a flight time of two hours at the one-engine inoperative cruise speed.
		4.3.4.1.3 For an aerodrome to be selected as a take-off alternate the available information shall indicate that, at the estimated time of use, the conditions will be at or above the aerodrome operating minima for that operation.
	<i>En-route alternate aerodromes</i>	4.3.4.2 <i>En-route alternate aerodromes</i> En-route alternate aerodromes, required by 4.7 for extended range operations by aeroplanes with two turbine engines, shall be selected and specified in the operational and air traffic services (ATS) flight plans.



A	Flight Deck	References
	<i>Destination alternate aerodromes</i>	4.3.4.3 <i>Destination alternate aerodromes</i> . For a flight to be conducted in accordance with the instrument flight rules, at least one destination alternate aerodrome shall be selected and specified in the operational and ATS flight plans, unless: a) the duration of the flight and the meteorological conditions prevailing are such that there is reasonable certainty that, at the estimated time of arrival at the aerodrome of intended landing, and for a reasonable period before and after such time, the approach and landing may be made under visual meteorological conditions; or b) the aerodrome of intended landing is isolated and there is no suitable destination alternate aerodrome.
	<i>Weather conditions</i>	4.3.5 Weather conditions
		4.3.5.1 A flight to be conducted in accordance with the visual flight rules shall not be commenced unless current meteorological reports or a combination of current reports and forecasts indicate that the meteorological conditions along the route or that part of the route to be flown under the visual flight rules will, at the appropriate time, be such as to render compliance with these rules possible.
		4.3.5.2 A flight to be conducted in accordance with instrument flight rules shall not be commenced unless information is available which indicates that conditions at the aerodrome of intended landing or, where a destination alternate is required, at least one destination alternate aerodrome will, at the estimated time of arrival, be at or above the aerodrome operating minima.
		4.3.5.3 A flight to be operated in known or expected icing conditions shall not be commenced unless the aeroplane is certificated and equipped to cope with such conditions.
		4.3.5.4 A flight to be planned or expected to operate in suspected or known ground icing conditions shall not take off unless the aeroplane has been inspected for icing and, if necessary, has been given appropriate de-icing/anti-icing treatment. Accumulation of ice or other naturally occurring contaminants shall be removed so that the aeroplane is kept in an airworthy condition prior to take-off.
	<i>Fuel and oil supply</i>	4.3.6 Fuel and oil supply
	<i>All aeroplanes</i>	4.3.6.1 <i>All aeroplanes</i> . A flight shall not be commenced unless, taking into account both the meteorological conditions and any delays that are expected in flight, the aeroplane carries sufficient fuel and oil to ensure that it can safely complete the flight. In addition, a reserve shall be carried to provide for contingencies.
	<i>Piston-engined aeroplanes</i>	4.3.6.2 <i>Piston-engined aeroplanes</i> . The fuel and oil carried in order to comply with 4.3.6.1 shall, in the case of piston-engined aeroplanes, be at least the amount sufficient to allow the aeroplane:
		4.3.6.2.1 When a destination alternate aerodrome is required, either: a) to fly to the aerodrome to which the flight is planned thence to the most critical (in terms of fuel consumption) alternate aerodrome specified in the operational and ATS flight plans and thereafter for a period of 45 minutes; or b) to fly to the alternate aerodrome via any predetermined point and thereafter for 45 minutes, provided that this shall not be less than the amount required to fly to the aerodrome to which the flight is planned and thereafter for: 1) 45 minutes plus 15 per cent of the flight time planned to be spent at the cruising level(s), or 2) two hours, whichever is less.



A	Flight Deck	References
		<p>4.3.6.2.2 When a destination alternate aerodrome is not required:</p> <p>a) in terms of 4.3.4.3 a), to fly to the aerodrome to which the flight is planned and thereafter for a period of 45 minutes; or</p> <p>b) in terms of 4.3.4.3 b), to fly to the aerodrome to which the flight is planned and thereafter for:</p> <ol style="list-style-type: none"> 1) 45 minutes plus 15 per cent of the flight time planned to be spent at the cruising level(s), or 2) two hours, whichever is less.
	<i>Turbine-engined aeroplanes</i>	<p>4.3.6.3 <i>Turbine-engined aeroplanes.</i> The fuel and oil carried in order to comply with 4.3.6.1 shall, in the case of turbine-engined aeroplanes, be at least the amount sufficient to allow the aeroplane:</p>
		<p>4.3.6.3.1 When a destination alternate aerodrome is required, either:</p> <p>a) to fly to and execute an approach, and a missed approach, at the aerodrome to which the flight is planned, and thereafter:</p> <ol style="list-style-type: none"> 1) to fly to the alternate aerodrome specified in the operational and ATS flight plans; and then 2) to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the alternate aerodrome under standard temperature conditions, and approach and land; and 3) to have an additional amount of fuel sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the State of the Operator; or <p>b) to fly to the alternate aerodrome via any predetermined point and thereafter for 30 minutes at 450 m (1 500 ft) above the alternate aerodrome, due provision having been made for an additional amount of fuel sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the State of the Operator; provided that fuel shall not be less than the amount of fuel required to fly to the aerodrome to which the flight is planned and thereafter for two hours at normal cruise consumption.</p>
		<p>4.3.6.3.2 When a destination alternate aerodrome is not required:</p> <p>a) in terms of 4.3.4.3 a), to fly to the aerodrome to which the flight is planned and additionally:</p> <ol style="list-style-type: none"> 1) to fly 30 minutes at holding speed at 450 m (1 500 ft) above the aerodrome to which the flight is planned under standard temperature conditions; and 2) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the State of the Operator; and <p>b) in terms of 4.3.4.3 b), to fly to the aerodrome to which the flight is planned and thereafter for a period of two hours at normal cruise consumption.</p>



A	Flight Deck	References
		<p>4.3.6.4 In computing the fuel and oil required in 4.3.6.1 at least the following shall be considered:</p> <ul style="list-style-type: none"> a) meteorological conditions forecast; b) expected air traffic control routings and traffic delays; c) for IFR flight, one instrument approach at the destination aerodrome, including a missed approach; d) the procedures prescribed in the operations manual for loss of pressurization, where applicable, or failure of one engine while en route; and e) any other conditions that may delay the landing of the aeroplane or increase fuel and/or oil consumption.
		<p><i>Note.</i>— Nothing in 4.3.6 precludes amendment of a flight plan in flight in order to replan the flight to another aerodrome, provided that the requirements of 4.3.6 can be complied with from the point where the flight has been replanned.</p>
	<p><i>Refuelling with passengers on board</i></p>	<p>4.3.7 Refuelling with passengers on board</p>
		<p>4.3.7.1 An aeroplane shall not be refuelled when passengers are embarking, on board or disembarking unless it is properly attended by qualified personnel ready to initiate and direct an evacuation of the aeroplane by the most practical and expeditious means available.</p>
		<p>4.3.7.2 When refuelling with passengers embarking, on board or disembarking, two-way communication shall be maintained by the aeroplane's inter-communication system or other suitable means between the ground crew supervising the refuelling and the qualified personnel on board the aeroplane.</p>
		<p><i>Note 1.</i>— The provisions of 4.3.7.1 do not necessarily require the deployment of integral aeroplane stairs or the opening of emergency exits as a prerequisite to refuelling.</p> <p><i>Note 2.</i>— Provisions concerning aircraft refuelling are contained in Annex 14, Volume I, and guidance on safe refuelling practices is contained in the Airport Services Manual, (Doc 9137), Parts 1 and 8.</p> <p><i>Note 3.</i>— Additional precautions are required when refuelling with fuels other than aviation kerosene or when refuelling results in a mixture of aviation kerosene with other aviation turbine fuels, or when an open line is used</p>
	<p>Duties of pilot-in-command</p>	<p>4.5 Duties of pilot-in-command</p>
		<p>4.5.4 The pilot-in-command shall be responsible for reporting all known or suspected defects in the aeroplane, to the operator, at the termination of the flight.</p>
		<p>4.5.5 The pilot-in-command shall be responsible for the journey log book or the general declaration containing the information listed in 11.4.1.</p> <p><i>Note.</i>— By virtue of Resolution A10-36 of the Tenth Session of the Assembly (Caracas, June–July 1956) “the General Declaration, [described in Annex 9] when prepared so as to contain all the information required by Article 34 [of the Convention on International Civil Aviation] with respect to the journey log book, may be considered by Contracting States to be an acceptable form of journey log book”.</p>
	<p>Duties of flight operations officer/ flight dispatcher</p>	<p>4.6 Duties of flight operations officer/ flight dispatcher</p>



A	Flight Deck	References
		<p>4.6.1 A flight operations officer/flight dispatcher in conjunction with a method of control and supervision of flight operations in accordance with 4.2.1.3 shall:</p> <ul style="list-style-type: none"> a) assist the pilot-in-command in flight preparation and provide the relevant information; b) assist the pilot-in-command in preparing the operational and ATS flight plans, sign when applicable and file the ATS flight plan with the appropriate ATS unit; and c) furnish the pilot-in-command while in flight, by appropriate means, with information which may be necessary for the safe conduct of the flight.
		<p>4.6.2 In the event of an emergency, a flight operations officer/flight dispatcher shall:</p> <ul style="list-style-type: none"> a) initiate such procedures as outlined in the operations manual while avoiding taking any action that would conflict with ATC procedures; and b) convey safety-related information to the pilot-in-command that may be necessary for the safe conduct of the flight, including information related to any amendments to the flight plan that become necessary in the course of the flight.
	Additional requirements for ETOPS	4.7 Additional requirements for extended range operations by aeroplanes with two turbine power-units (ETOPS)
		<p>4.7.1 Unless the operation has been specifically approved by the State of the Operator, an aeroplane with two turbine engines shall not, except as provided in 4.7.4, be operated on a route where the flight time at single-engine cruise speed to an adequate en-route alternate aerodrome exceeds a threshold time established for such operations by that State.</p>
		<p>4.7.2 In approving the operation, the State of the Operator shall ensure that:</p> <ul style="list-style-type: none"> a) the airworthiness certification of the aeroplane type; b) the reliability of the propulsion system; and c) the operator's maintenance procedures, operating practices, flight dispatch procedures and crew training programmes; provide the overall level of safety intended by the provisions of Annexes 6 and 8. In making this assessment, account shall be taken of the route to be flown, the anticipated operating conditions and the location of adequate en-route alternate aerodromes.
		<p>4.7.3 A flight to be conducted in accordance with 4.7.1 shall not be commenced unless, during the possible period of arrival, the required en-route alternate aerodrome(s) will be available and the available information indicates that conditions at those aerodromes will be at or above the aerodrome operating minima approved for the operation.</p>
A14	Weather reports and forecasts	Annex 6, Part I, 4.3.5.2
		<p>4.3.5.2 A flight to be conducted in accordance with instrument flight rules shall not be commenced unless information is available which indicates that conditions at the aerodrome of intended landing or, where a destination alternate is required, at least one destination alternate aerodrome will, at the estimated time of arrival, be at or above the aerodrome operating minima.</p>
A15	NOTAMs (Notice to Airman)	Annex 15, Chapter 5 and Annex 6, Part I, 4.3.3.1, 4.6.1 c)
		4.3.3 Operational flight planning



A	Flight Deck	References
		4.3.3.1 An operational flight plan shall be completed for every intended flight. The operational flight plan shall be approved and signed by the pilot-in-command and, where applicable, signed by the flight operations officer/flight dispatcher, and a copy shall be filed with the operator or a designated agent, or, if these procedures are not possible, it shall be left with the aerodrome authority or on record in a suitable place at the point of departure.
		Definition : <i>Operational flight plan</i> . The operator's plan for the safe conduct of the flight based on considerations of aeroplane performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes concerned.
A16	Portable Fire Extinguishers	Annex 6, Part I, 6.2.2 b)
		6.2.2 An aeroplane shall be equipped with: b) portable fire extinguishers of a type which, when discharged, will not cause dangerous contamination of the air within the aeroplane. At least one shall be located in: 1) the pilot's compartment; and 2) each passenger compartment that is separate from the pilot's compartment and that is not readily accessible to the flight crew;
		<i>Note.</i> — Any portable fire extinguisher so fitted in accordance with the certificate of airworthiness of the aeroplane may count as one prescribed.
A17	Life jackets/Flotation devices	Annex 6, Part I, 6.5
		6.5.2 Landplanes –see B8
A18	Safety Harness	Annex 6, Part I, 6.2.2 c)
		6.2.2 An aeroplane shall be equipped with: c) 1) a seat or berth for each person over an age to be determined by the State of the Operator; 2) a seat belt for each seat and restraining belts for each berth; and 3) a safety harness for each flight crew seat. The safety harness for each pilot seat shall incorporate a device which will automatically restrain the occupant's torso in the event of rapid deceleration;
A19	Oxygen equipment	Annex 6, Part I, 4.3.8
		<i>See also B9.</i>
		4.4.5 Use of oxygen
		4.4.5.2 All flight crew members of pressurized aeroplanes operating above an altitude where the atmospheric pressure is less than 376 hPa (25,000 feet) shall have available at the flight duty station a quick-donning type of oxygen mask which will readily supply oxygen upon demand.
A20	Emergency Flashlight	Annex 6, Part I, 6.10
		6.10 All aeroplanes when operated at night
	an electric torch for each crew member station.



B	Cabin/Safety	References
B1	General Condition	Annex 8, Part IIIA, 8.3
		8.3 Safety and survival equipment Prescribed safety and survival equipment that the crew or passengers are expected to use or operate at the time of an emergency shall be reliable, readily accessible and easily identified, and its method of operation shall be plainly marked.
		.
B2	Cabin crew seats and safety harness	Annex 6, Part I, 6.16
		6.16 Aeroplanes carrying passengers — cabin crew seats
		6.16.1 Aeroplanes for which the individual certificate of airworthiness is first issued on or after 1 January 1981 - All aeroplanes shall be equipped with a forward or rearward facing (within 15 degrees of the longitudinal axis of the aeroplane) seat, fitted with a safety harness for the use of each cabin crew member required to satisfy the intent of 12.1 in respect of emergency evacuation.
		6.16.3 Cabin crew seats provided in accordance with 6.16.1 and 6.16.2 shall be located near floor level and other emergency exits as required by the State of Registry for emergency evacuation
B3	First Aid kit/Emergency Medical kit	Annex 6, Part I, 6.2.2
		6.2.2 An aeroplane shall be equipped with: a) accessible and adequate medical supplies appropriate to the number of passengers the aeroplane is authorized to carry;
B4	Portable Fire Extinguishers	Annex 6, Part I, 6.2.2
		6.2.2 An aeroplane shall be equipped with: b) portable fire extinguishers of a type which, when discharged, will not cause dangerous contamination of the air within the aeroplane. At least one shall be located in: 1) the pilot's compartment; and 2) each passenger compartment that is separate from the pilot's compartment and that is not readily accessible to the flight crew;
B5	Lift jackets/Flotation device	Annex 6, Part I, 6.5
		<i>See B8</i>
B6	Seat belts	Annex 6, Part I, 6.2.2



B	Cabin/Safety	References
		<p>6.2.2 An aeroplane shall be equipped with:</p> <p>c) 1) a seat or berth for each person over an age to be determined by the State of the Operator;</p> <p>2) a seat belt for each seat and restraining belts for each berth; and</p> <p>d) means of ensuring that the following information and instructions are conveyed to passengers:</p> <p>1) when seat belts are to be fastened;</p> <p>2) when and how oxygen equipment is to be used if the carriage of oxygen is required;</p> <p>3) restrictions on smoking;</p> <p>4) location and use of life jackets or equivalent individual flotation devices where their carriage is required; and</p> <p>5) location and method of opening emergency exits; and</p> <p>e) spare electrical fuses of appropriate ratings for replacement of those accessible in flight.</p>
B7	Emergency exit lighting and marking, emergency flashlights	<p>Annex 6, Part I, 6.10 Annex 8, Part IIIA, 4.1.7.3 and Part IIIB, 4.6.</p>
		<p>6.10 All aeroplanes when operated at night</p> <p>..</p> <p>f) an electric torch for each crew member station.</p>
		<p>4.1.7 (or D.6) Emergency landing provisions</p>
		<p>4.1.7.3 (or D.6.3) The interior layout of the cabin and the position and number of emergency exits, including the means of locating and illuminating the escape paths and exits, shall be such as to facilitate rapid evacuation of the aeroplane in conditions likely to occur following an emergency landing.</p>
B8	Slides/Life Rafts and pyrotechnical distress signalling devices	<p>Annex 6, Part I, 6.5, 6.6 and Annex 8, Part IIIA, 4.1.7 (and Part IIIB, 4.6)</p>
	<i>All flights over water</i>	<p>6.5 All aeroplanes on flights over water</p>
		<p>6.5.2.1 Landplanes shall carry the equipment prescribed in 6.5.2.2:</p> <p>a) when flying over water and at a distance of more than 93 km (50 NM) away from the shore, in the case of landplanes operated in accordance with 5.2.9 or 5.2.10;</p> <p>b) when flying en route over water beyond gliding distance from the shore, in the case of all other landplanes; and</p> <p>c) when taking off or landing at an aerodrome where, in the opinion of the State of the Operator, the take-off or approach path is so disposed over water that in the event of a mishap there would be a likelihood of a ditching.</p>
		<p>6.5.2.2 The equipment referred to in 6.5.2.1 shall comprise one life jacket or equivalent individual flotation device for each person on board, stowed in a position easily accessible from the seat or berth of the person for whose use it is provided.</p>
	<i>Long-range over-water flights</i>	<p>6.5.3 All aeroplanes on long-range over-water flights</p>



B	Cabin/Safety	References
		6.5.3.1 In addition to the equipment prescribed in 6.5.1 or 6.5.2 whichever is applicable, the following equipment shall be installed in all aeroplanes when used over routes on which the aeroplane may be over water and at more than a distance corresponding to 120 minutes at cruising speed or 740 km (400 NM), whichever is the lesser, away from land suitable for making an emergency landing in the case of aircraft operated in accordance with 5.2.9 or 5.2.10, and 30 minutes or 185 km (100 NM), whichever is the lesser, for all other aeroplanes: a) life-saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency, provided with such life-saving equipment including means of sustaining life as is appropriate to the flight to be undertaken; and b) equipment for making the pyrotechnical distress signals described in Annex 2.
		6.5.3.2 Each life jacket and equivalent individual flotation device, shall be equipped with a means of electric illumination for the purpose of facilitating the location of persons, except where the requirement of 6.5.2.1 c) is met by the provision of individual flotation devices other than life jackets.
	<i>Flights over designated land areas</i>	6.6 All aeroplanes on flights over designated land areas Aeroplanes, when operated across land areas which have been designated by the State concerned as areas in which search and rescue would be especially difficult, shall be equipped with such signalling devices and life-saving equipment (including means of sustaining life) as may be appropriate to the area overflown.
	Emergency Landing	4.1.7 Emergency landing provisions
		4.1.7.1 Provisions shall be made in the design of the aeroplane to protect the occupants, in the event of an emergency landing, from fire and from the direct effects of deceleration forces as well as from injuries arising from the effect of deceleration forces on the aeroplane's interior equipment.
		4.1.7.2 Facilities shall be provided for the rapid evacuation of the aeroplane in conditions likely to occur following an emergency landing. Such facilities shall be related to the passenger and crew capacity of the aeroplane.
		4.1.7.3 The interior layout of the cabin and the position and number of emergency exits, including the means of locating and illuminating the escape paths and exits, shall be such as to facilitate rapid evacuation of the aeroplane in conditions likely to occur following an emergency landing.
		4.1.7.4 On aeroplanes certificated for ditching conditions, provisions shall be made in the design to give maximum practicable assurance that safe evacuation from the aeroplane of passengers and crew can be executed in case of ditching.
		IIIB 4.6 Emergency landing provisions
		4.6.1 Same as Part IIIA 4.1.7.1 above.
		4.6.2 Facilities shall be provided for the rapid evacuation of the aeroplane in conditions likely to occur following an emergency landing. Such facilities shall be related to the passenger and crew capacity of the aeroplane and shall be shown to be suitable for their intended purpose.
		4.6.3 Same as 4.1.7.3 above.
		4.6.4 Same as 4.1.7.4 above.
B9	Oxygen Supply (Cabin crew & Passengers)	Annex 6, Part I, 4.3.8 and 6.7
		4.3.8 Oxygen supply



B	Cabin/Safety	References
		<p><i>Note.</i>— Approximate altitudes in the Standard Atmosphere corresponding to the values of absolute pressure used in the text are as follows: Absolute pressure Metres (Feet) 700 hPa 3 000 (10 000) 620 hPa 4 000 (13 000) 376 hPa 7 600 (25 000)</p>
		<p>4.3.8.1 A flight to be operated at flight altitudes at which the atmospheric pressure in personnel compartments will be less than 700 hPa shall not be commenced unless sufficient stored breathing oxygen is carried to supply: a) all crew members and 10 per cent of the passengers for any period in excess of 30 minutes that the pressure in compartments occupied by them will be between 700 hPa and 620 hPa; and b) the crew and passengers for any period that the atmospheric pressure in compartments occupied by them will be less than 620 hPa.</p>
		<p>4.3.8.2 A flight to be operated with a pressurized aeroplane shall not be commenced unless a sufficient quantity of stored breathing oxygen is carried to supply all the crew members and passengers, as is appropriate to the circumstances of the flight being undertaken, in the event of loss of pressurization, for any period that the atmospheric pressure in any compartment occupied by them would be less than 700 hPa. In addition, when an aeroplane is operated at flight altitudes at which the atmospheric pressure is less than 376 hPa, or which, if operated at flight altitudes at which the atmospheric pressure is more than 376 hPa and cannot descend safely within four minutes to a flight altitude at which the atmospheric pressure is equal to 620 hPa, there shall be no less than a 10-minute supply for the occupants of the passenger compartment (6.7.5) and for which the individual certificate of airworthiness is first issued on or after 9 November 1998, shall be provided with automatically deployable oxygen equipment to satisfy the requirements of 4.3.8.2. The total number of oxygen dispensing units shall exceed the number of passenger and cabin crew seats by at least 10 per cent.</p>
B10	Emergency Briefing Cards	Annex 6, Part I, 6.2.2
		<p>6.2.2 d) means of ensuring that the following information and instructions are conveyed to passengers: 1) when seat belts are to be fastened; 2) when and how oxygen equipment is to be used if the carriage of oxygen is required; 3) restrictions on smoking; 4) location and use of life jackets or equivalent individual flotation devices where their carriage is required; and 5) location and method of opening emergency exits;</p>
B11	Cabin crew members	Annex 6, Part I, 12.1



B	Cabin/Safety	References
		<p>12.1 Assignment of emergency duties An operator shall establish, to the satisfaction of the State of the Operator, the minimum number of cabin crew required for each type of aeroplane, based on seating capacity or the number of passengers carried, in order to effect a safe and expeditious evacuation of the aeroplane, and the necessary functions to be performed in an emergency or a situation requiring emergency evacuation. The operator shall assign these functions for each type of aeroplane.</p>
B12	Access to Emergency Exits	Annex 8, Part IIIA, 4.1.7 (and Part III D.6.2 and D.6.3)
		4.1.7.2 Facilities shall be provided for the rapid evacuation of the aeroplane in conditions likely to occur following an emergency landing. Such facilities shall be related to the passenger and crew capacity of the aeroplane.
		4.1.7.3 The interior layout of the cabin and the position and number of emergency exits, including the means of locating and illuminating the escape paths and exits, shall be such as to facilitate rapid evacuation of the aeroplane in conditions likely to occur following an emergency landing.
		4.1.7.4 On aeroplanes certificated for ditching conditions, provisions shall be made in the design to give maximum practicable assurance that safe evacuation from the aeroplane of passengers and crew can be executed in case of ditching.
B13	Safety of cabin baggage	Annex 6, Part I, 4.8
		4.8 Carry-on baggage
		The operator shall ensure that all baggage carried onto an aeroplane and taken into the passenger cabin is adequately and securely stowed.
B14	Seat Capacity	Annex 6, Part I, 6.2.2
		6.2.2 An aeroplane shall be equipped with: c) 1) a seat or berth for each person over an age to be determined by the State of the Operator; 2) a seat belt for each seat and restraining belts for each berth; and
B15	Security of the flight crew compartment door (if applicable)	Annex 6, Part I, 13.2
		13.2 Security of the flight crew compartment
		13.2.1 In all aeroplanes which are equipped with a flight crew compartment door, this door shall be capable of being locked, and means shall be provided by which cabin crew can discreetly notify the flight crew in the event of suspicious activity or security breaches in the cabin.
		13.2.2 From 1 November 2003, all passenger-carrying aeroplanes of a maximum certificated take-off mass in excess of 45 500 kg or with a passenger seating capacity greater than 60 shall be equipped with an approved flight crew compartment door that is designed to resist penetration by small arms fire and grenade shrapnel, and to resist forcible intrusions by unauthorized persons. This door shall be capable of being locked and unlocked from either pilot's station.



B	Cabin/Safety	References
		<p>13.2.3 In all aeroplanes which are equipped with a flight crew compartment door in accordance with 13.2.2:</p> <p>a) this door shall be closed and locked from the time all external doors are closed following embarkation until any such door is opened for disembarkation, except when necessary to permit access and egress by authorized persons; and</p> <p>b) means shall be provided for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behaviour or potential threat.</p>

C	Aircraft External Condition	References
C11	Obvious un-repaired damage	Annex 8, Part II, 3.6
		3.6 Damage to aircraft
		3.6.1 When an aircraft has sustained damage, the State of Registry shall judge whether the damage is of a nature such that the aircraft is no longer airworthy as defined by the appropriate airworthiness requirements.
		3.6.2 If the damage is sustained or ascertained when the aircraft is in the territory of another Contracting State, the authorities of the other Contracting State shall be entitled to prevent the aircraft from resuming its flight on the condition that they shall advise the State of Registry immediately, communicating to it all details necessary to formulate the judgment referred to in 3.6.1.
		3.6.3 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 the Contracting State that had originally, in accordance with 3.6.2, prevented the aircraft from resuming its flight. That Contracting State shall permit such flight or flights within the prescribed limitations.
		3.6.4 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.

D	Cargo	References
D2	Dangerous Goods	Annex 18, 9.1 and 9.2
		9.1 Information to pilot-in-command The operator of an aircraft in which dangerous goods are to be carried shall provide the pilot-in-command as early as practicable before departure of the aircraft with written information as specified in the Technical Instructions.
		9.2 Information and instructions to flight crew members The operator shall provide such information in the Operations Manual as will enable the flight crew to carry out its responsibilities with regard to the transport of dangerous goods and shall provide instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.



D	Cargo	References
D3	Safety of cargo on board	Annex 6, Part I, 4.3.1
		4.3 Flight preparation
		4.3.1 A flight shall not be commenced until flight preparation forms have been completed certifying that the pilot-in-command is satisfied that: d) the mass of the aeroplane and centre of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected; e) any load carried is properly distributed and safely secured;

E	General	References
E	Refuelling	Annex 6, Part I, 4.3.7
		4.3.7 Refuelling with passengers on board
		4.3.7.1 An aeroplane shall not be refuelled when passengers are embarking, on board or disembarking unless it is properly attended by qualified personnel ready to initiate and direct an evacuation of the aeroplane by the most practical and expeditious means available.
		4.3.7.2 When refuelling with passengers embarking, on board or disembarking, two-way communication shall be maintained by the aeroplane's inter-communication system or other suitable means between the ground crew supervising the refuelling and the qualified personnel on board the aeroplane.
		<i>Note 1.— The provisions of 4.3.7.1 do not necessarily require the deployment of integral aeroplane stairs or the opening of emergency exits as a prerequisite to refuelling.</i>
E	English Language	Annex I. 1.2.9 SEE A8