

COVER SHEET TO AMENDMENT 172

**INTERNATIONAL STANDARDS
AND RECOMMENDED PRACTICES**

PERSONNEL LICENSING

**ANNEX 1
TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION**

ELEVENTH EDITION — JULY 2011

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Checklist of Amendments to Annex 1

	<i>Effective date</i>	<i>Date of applicability</i>
Eleventh Edition (incorporates Amendments 1 to 170)	18 July 2011	17 November 2011
Amendment 171 (adopted by the Council on 25 February 2013)	15 July 2013	14 November 2013
Amendment 172 (adopted by the Council on 3 March 2014) Replacement pages (xii), (xiii), 1-12, 1-13, 2-1, 2-3, 2-4, 2-5, 2-15 to 2-21, 2-23, 2-24, 2-34 and 5-1.	14 July 2014	13 November 2014



Transmittal note

Amendment 172

to the

International Standards
and Recommended Practices

PERSONNEL LICENSING

(Annex 1 to the Convention on International Civil Aviation)

1. Insert the following replacement pages in Annex 1 (Eleventh Edition) to incorporate Amendment 172 which becomes applicable on 13 November 2014:
 - a) Pages (xii) and (xiii) — Foreword
 - b) Pages 1-12 and 1-13 — Chapter 1
 - c) Pages 2-1 to 2-5, 2-15 to 2-24, and 2-34 — Chapter 2
 - d) Page 5-1 — Chapter 5
2. Record the entry of this amendment on page (iii).

<i>Amendment</i>	<i>Source(s)</i>	<i>Subject(s)</i>	<i>Adopted Effective Applicable</i>
159 (8th Edition)	Second, Third and Fourth Meetings of the Personnel Licensing and Training (PELT) Panel; November 1983, April 1985, May 1986. Air Navigation Commission.	Amendment of SARPs dealing with the licensing of flight crew members. Deletion of the senior commercial pilot licence — aeroplane, the controlled VFR rating, the flight radio operator licence and the flight instructor rating for gliders and free balloons. The dividing line of 5 700 kg maximum take-off mass is replaced by a dividing line based on the crew complement required by certification. All helicopter provisions have the status of Standards. The requirements for the issue of a type rating for aircraft certificated for two-pilot operation are strengthened. The provisions for the issue of each licence and rating have been updated. Flight instruction requirements are established for the private, commercial, glider and free balloon pilot licences and for the instrument and flight instructor ratings.	28 March 1988 31 July 1988 16 November 1989
160	Air Navigation Commission.	Amendment of SARPs for air traffic controllers, aeronautical station operators and flight operations officers.	24 March 1993 26 July 1993 10 November 1994
161	Air Navigation Commission.	Amendment of SARPs for aircraft maintenance technicians/engineers/mechanics and Specifications for Personnel Licences.	10 March 1997 21 July 1997 5 November 1998
162	First, Second, Third and Fourth Meetings of the Prevention of Substance Abuse in the Workplace Study Group (PSAWSG); December 1993, August 1994, January 1995, May 1995. Air Navigation Commission.	Amendment of SARPs dealing with the use of psychoactive substances by aviation personnel.	25 February 1998 20 July 1998 5 November 1998
163 (9th Edition)	Flight Safety and Human Factors Study Group (FSHFSG); May 1995. Vision and Colour Perception Study Group (VCPSG); June 1997 to May 1998. Air Navigation Commission.	Human Factors knowledge requirements; visual and colour perception requirements; the language used in personnel licences; deletion of the Attachment.	19 February 2001 16 July 2001 1 November 2001
164	32nd Session of the Assembly, MET Divisional Meeting (2002), Air Navigation Commission.	Amendment of definitions; new provisions requiring language proficiency for aeroplane and helicopter pilots, navigators using radiotelephony, air traffic controllers and aeronautical station operators; introduction of a Note on qualification and training for aeronautical meteorology personnel; amendment to the Human Factors knowledge requirements for Aircraft Maintenance Engineer.	5 March 2003 14 July 2003 27 November 2003
165	Air Navigation Commission.	Endorsement of type rating with a limitation of privileges to the cruise phase of the flight.	25 February 2004 12 July 2004 25 November 2004
166	Air Navigation Commission; Medical Provisions Study Group (MPSG); Flight Crew Licensing and Training Panel (FCLTP).	Amendment to the medical provisions; new provisions on approved training organizations.	21 February 2005 11 July 2005 24 November 2005

<i>Amendment</i>	<i>Source(s)</i>	<i>Subject(s)</i>	<i>Adopted Effective Applicable</i>
167 (10th Edition)	Air Navigation Commission studies; Second meeting of the Flight Crew Licensing and Training Panel.	Revised and new medical provisions on the upper age limits for flight crew members; new personnel licensing requirements for airships and powered-lifts; introduction of the multi-crew pilot licence; amendments to the details of existing flight crew licensing Standards; amendments to the provisions on the role of flight simulation training devices in acquiring or maintaining the competencies required for the various levels of licences and ratings.	10 March 2006 17 July 2006 23 November 2006
168	Air Navigation Commission study.	The amendment concerns: <ul style="list-style-type: none"> a) the replacement of the approach and area radar control ratings by approach and area control surveillance ratings to reflect the fact that surveillance systems are not limited to radar; b) the harmonization of the Human Factors knowledge requirements for air traffic controllers with those recently adopted as part of Amendment 167 to Annex 1 for flight crew; c) the applicability of the existing Standards on approved training for flight crew (Annex 1, 1.2.8 and Appendix 2) to the approved training required for the air traffic controller licence and ratings; and d) new provisions for student air traffic controllers receiving instruction in an operational environment. 	23 February 2007 16 July 2007 22 November 2007
169-A	Secretariat with the assistance of the Medical Provisions Study Group	Amendment introducing some new concepts in the field of aviation medicine to better address current aeromedical risks to flight safety.	2 March 2009 20 July 2009 19 November 2009
169-B	Secretariat	Amendment concerning the development of harmonized provisions relating to safety management by introducing a framework for the implementation and maintenance of a State safety programme as of 18 November 2010.	2 March 2009 20 July 2009 18 November 2010
170	Secretariat with the assistance of the Next Generation of Aviation Professionals (NGAP) Task Force and the International Air Transport Association (IATA) Training and Qualifications Initiative (ITQI)	<ul style="list-style-type: none"> a) an enabler for an alternative means of compliance with the experience requirements for the aircraft maintenance technician licence when approved competency-based training programmes are used; b) an amendment to the definitions of approved training and approved training organization to simplify their wording and to relocate in new Standards the requirement that training for certain categories of personnel is to be conducted in an approved training organization; c) a harmonization of threat and error management (TEM) requirements for certain licensed personnel with those for flight crew licences; d) an extension of the transitional measures for licensing requirements for powered-lift aircraft; and e) various editorial amendments. 	4 March 2011 18 July 2011 17 November 2011
171	Special Meeting (SMP/SM/1) of the Safety Management Panel (SMP)	The transfer of safety management provisions to Annex 19.	25 February 2013 15 July 2013 14 November 2013

<i>Amendment</i>	<i>Source(s)</i>	<i>Subject(s)</i>	<i>Adopted Effective Applicable</i>
172	Secretariat	a) Upper age limit for pilots engaged in international commercial air transport operations; b) Upset prevention and recovery training provisions; c) Streamlining of the language proficiency requirements with no change in content; and d) Extension of the validity of the transitional measures related to powered-lift category.	3 March 2014 14 July 2014 13 November 2014

Note.— The periods of validity listed above are based on the age of the applicant at the time of undergoing the medical examination.

1.2.5.2.6 *Circumstances in which a medical examination may be deferred.* The prescribed re-examination of a licence holder operating in an area distant from designated medical examination facilities may be deferred at the discretion of the Licensing Authority, provided that such deferment shall only be made as an exception and shall not exceed:

- a) a single period of six months in the case of a flight crew member of an aircraft engaged in non-commercial operations;
- b) two consecutive periods each of three months in the case of a flight crew member of an aircraft engaged in commercial operations provided that in each case a favourable medical report is obtained after examination by a designated medical examiner of the area concerned, or, in cases where such a designated medical examiner is not available, by a physician legally qualified to practise medicine in that area. A report of the medical examination shall be sent to the Licensing Authority where the licence was issued;
- c) in the case of a private pilot, a single period not exceeding 24 months where the medical examination is carried out by an examiner designated under 1.2.4.5 by the Contracting State in which the applicant is temporarily located. A report of the medical examination shall be sent to the Licensing Authority where the licence was issued.

1.2.6 Decrease in medical fitness

1.2.6.1 Holders of licences provided for in this Annex shall not exercise the privileges of their licences and related ratings at any time when they are aware of any decrease in their medical fitness which might render them unable to safely and properly exercise these privileges.

1.2.6.1.1 **Recommendation.**— *States should ensure that licence holders are provided with clear guidelines on medical conditions that may be relevant to flight safety and when to seek clarification or guidance from a medical examiner or Licensing Authority.*

Note.— Guidance on physical and mental conditions and treatments that are relevant to flight safety about which information may need to be forwarded to the Licensing Authority is contained in the Manual of Civil Aviation Medicine (Doc 8984).

1.2.6.1.2 **Recommendation.**— *Each Contracting State should, as far as practicable, ensure that licence holders do not exercise the privileges of their licences and related ratings during any period in which their medical fitness has, from any cause, decreased to an extent that would have prevented the issue or renewal of their Medical Assessment.*

1.2.7 Use of psychoactive substances

1.2.7.1 Holders of licences provided for in this Annex shall not exercise the privileges of their licences and related ratings while under the influence of any psychoactive substance which might render them unable to safely and properly exercise these privileges.

1.2.7.2 Holders of licences provided for in this Annex shall not engage in any problematic use of substances.

1.2.7.3 **Recommendation.**— *Contracting States should ensure, as far as practicable, that all licence holders who engage in any kind of problematic use of substances are identified and removed from their safety-critical functions. Return to the safety-critical functions may be considered after successful treatment or, in cases where no treatment is necessary, after cessation of the problematic use of substances and upon determination that the person's continued performance of the function is unlikely to jeopardize safety.*

Note.— Guidance on suitable methods of identification (which may include biochemical testing on such occasions as pre-employment, upon reasonable suspicion, after accidents/incidents, at intervals, and at random) and on other prevention topics is contained in the Manual on Prevention of Problematic Use of Substances in the Aviation Workplace (Doc 9654).

1.2.8 Approved training and approved training organization

Note.— The qualifications required for the issue of personnel licences can be more readily and speedily acquired by applicants who undergo closely supervised, systematic and continuous courses of training, conforming to a planned syllabus or curriculum. Provision has accordingly been made for some reduction in the experience requirements for the issue of certain licences and ratings prescribed in these Standards and Recommended Practices, in respect of an applicant who has satisfactorily completed a course of approved training.

1.2.8.1 Approved training shall provide a level of competency at least equal to that provided by the minimum experience requirements for personnel not receiving such approved training.

1.2.8.2 The approval of a training organization by a State shall be dependent upon the applicant demonstrating compliance with the requirements of Appendix 2 to this Annex and the relevant provisions contained in Annex 19.

Note 1.— Annex 19 includes safety management provisions for an approved training organization that is exposed to safety risks related to aircraft operations during the provision of its services. Further guidance is contained in the Safety Management Manual (SMM) (Doc 9859).

Note 2.— Guidance on approval of a training organization can be found in the Manual on the Approval of Training Organizations (Doc 9841).

1.2.8.3 Approved training for flight crew and air traffic controllers shall be conducted within an approved training organization.

Note.— The approved training considered in 1.2.8.3 relates primarily to approved training for the issuance of an Annex 1 licence or rating. It is not intended to include approved training for the maintenance of competence or for an operational qualification after the initial issuance of a licence or rating, as may be required for air traffic controllers or for flight crew, such as the approved training under Annex 6 — Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes, 9.3, or Part III — International Operations — Helicopters, Section II, 7.3.

1.2.8.4 Competency-based approved training for aircraft maintenance personnel shall be conducted within an approved training organization.

Note.— A comprehensive training scheme for the aircraft maintenance (technician/engineer/mechanic) licence, including the various levels of competency, is contained in the Procedures for Air Navigation Services — Training (Doc 9868, PANS-TRG).

1.2.9 Language proficiency

1.2.9.1 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.

1.2.9.2 **Recommendation.**— *Flight engineers, and glider and free balloon pilots should have the ability to speak and understand the language used for radiotelephony communications.*

1.2.9.3 Flight navigators required to use the radiotelephone aboard an aircraft shall demonstrate the ability to speak and understand the language used for radiotelephony communications.

1.2.9.4 **Recommendation.**— *Flight navigators required to use the radiotelephone aboard an aircraft should 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.*

1.2.9.5 The language proficiency of aeroplane, airship, helicopter and powered-lift pilots, air traffic controllers and aeronautical station operators who demonstrate proficiency below the Expert Level (Level 6) shall be formally evaluated at intervals in accordance with an individual's demonstrated proficiency level.

1.2.9.6 **Recommendation.**— *The language proficiency of aeroplane, airship, helicopter and powered-lift pilots, flight navigators required to use the radiotelephone aboard an aircraft, air traffic controllers and aeronautical station operators who demonstrate proficiency below the Expert Level (Level 6) should be formally evaluated at intervals in accordance with an individual's demonstrated proficiency level, as follows:*

- a) those demonstrating language proficiency at the Operational Level (Level 4) should be evaluated at least once every three years; and*
- b) those demonstrating language proficiency at the Extended Level (Level 5) should be evaluated at least once every six years.*

Note 1.— Formal evaluation is not required for applicants who demonstrate expert language proficiency, e.g. native and very proficient non-native speakers with a dialect or accent intelligible to the international aeronautical community.

Note 2.— The provisions of 1.2.9 refer to Annex 10, Volume II, Chapter 5, whereby the language used for radiotelephony communications may be the language normally used by the station on the ground or English. In practice, therefore, there will be situations whereby flight crew members will only need to speak the language normally used by the station on the ground.

CHAPTER 2. LICENCES AND RATINGS FOR PILOTS

2.1 General rules concerning pilot licences and ratings

2.1.1 General licensing specifications

2.1.1.1 A person shall not act either as pilot-in-command or as co-pilot of an aircraft in any of the following categories unless that person is the holder of a pilot licence issued in accordance with the provisions of this Chapter:

- aeroplane
- airship of a volume of more than 4 600 cubic metres
- free balloon
- glider
- helicopter
- powered-lift.

2.1.1.2 The category of aircraft shall be included in the title of the licence itself, or endorsed as a category rating on the licence.

2.1.1.2.1 When the holder of a pilot licence seeks a licence for an additional category of aircraft, the Licensing Authority shall either:

- a) issue the licence holder with an additional pilot licence for that category of aircraft; or
- b) endorse the original licence with the new category rating, subject to the conditions of 2.1.2.

Note.— The requirements for category ratings are given in terms of licensing specifications for pilots and at levels appropriate to the privileges to be granted to the licence holder.

2.1.1.3 An applicant shall, before being issued with any pilot licence or rating, meet such requirements in respect of age, knowledge, experience, flight instruction, skill and medical fitness, as are specified for that licence or rating.

2.1.1.3.1 An applicant for any pilot licence or rating shall demonstrate, in a manner determined by the Licensing Authority, such requirements for knowledge and skill as are specified for that licence or rating.

2.1.1.4 *Transitional measures related to the powered-lift category*

Until 5 March 2022, the Licensing Authority may endorse a type rating for aircraft of the powered-lift category on an aeroplane or helicopter pilot licence. The endorsement of the rating on the licence shall indicate that the aircraft is part of the powered-lift

category. The training for the type rating in the powered-lift category shall be completed during a course of approved training, shall take into account the previous experience of the applicant in an aeroplane or a helicopter as appropriate and incorporate all relevant aspects of operating an aircraft of the powered-lift category.

2.1.2 Category ratings

2.1.2.1 When established, category ratings shall be for categories of aircraft listed in 2.1.1.1.

2.1.2.2 Category ratings shall not be endorsed on a licence when the category is included in the title of the licence itself.

2.1.2.3 Any additional category rating endorsed on a pilot licence shall indicate the level of licensing privileges at which the category rating is granted.

2.1.2.4 The holder of a pilot licence seeking additional category ratings shall meet the requirements of this Annex appropriate to the privileges for which the category rating is sought.

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.

Note.— The provisions of this paragraph do not preclude the establishment of other class ratings within this basic structure.

2.1.3.1.1 **Recommendation.**— *Contracting States should consider establishing a class rating for those helicopters and powered-lifts certificated for single-pilot operations and which have comparable handling, performance and other characteristics.*

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.

Note 1.— Where a common type rating is established, it shall be only for aircraft with similar characteristics in terms of operating procedures, systems and handling.

Note 2.— Requirements for class and type ratings for gliders and free balloons have not been determined.

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.

2.1.4 Circumstances in which class and type ratings are required

2.1.4.1 A Contracting State having issued a pilot licence shall not permit the holder of such licence to act either as pilot-in-command or as co-pilot of an aeroplane, an airship, a helicopter or a powered-lift unless the holder has received authorization as follows:

- a) the appropriate class rating specified in 2.1.3.1; or
- b) a type rating when required in accordance with the provisions of 2.1.3.2.

2.1.4.1.1 When a type rating is issued limiting the privileges to act as co-pilot, or limiting the privileges to act as pilot only during the cruise phase of the flight, such limitation shall be endorsed on the rating.

2.1.4.2 For the purpose of training, testing, or specific special purpose non-revenue, non-passenger carrying flights, special authorization may be provided in writing to the licence holder by the Licensing Authority in place of issuing the class or type rating in accordance with 2.1.4.1. This authorization shall be limited in validity to the time needed to complete the specific flight.

2.1.5 Requirements for the issue of class and type ratings

2.1.5.1 Class rating

The applicant shall have demonstrated a degree of skill appropriate to the licence in an aircraft of the class for which the rating is sought.

2.1.5.2 Type rating as required by 2.1.3.2 a)

The applicant shall have:

- a) gained, under appropriate supervision, experience in the applicable type of aircraft and/or flight simulator in the following:
 - normal flight procedures and manoeuvres during all phases of flight;
 - abnormal and emergency procedures and manoeuvres in the event of failures and malfunctions of equipment, such as engine, systems and airframe;
 - where applicable, instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure;
 - for the issue of an aeroplane category type rating, upset prevention and recovery training; and

Note 1.— Procedures for upset prevention and recovery training are contained in the Procedures for Air Navigation Services — Training (PANS TRG, Doc 9868).

Note 2.— Guidance on upset prevention and recovery training is contained in the Manual on Aeroplane Upset Prevention and Recovery Training (Doc 10011).

Note 3.— The Manual of Criteria for the Qualification of Flight Simulation Training Devices (Doc 9625) provides guidance on the approval of flight simulation training devices for upset prevention and recovery training.

Note 4.— The aeroplane upset prevention and recovery training may be integrated in the type rating programme or be conducted immediately after, as an additional module.

- procedures for crew incapacitation and crew coordination including allocation of pilot tasks; crew cooperation and use of checklists;

Note.— Attention is called to 2.1.8.1 on the qualifications required for pilots giving flight training.

- b) demonstrated the skill and knowledge required for the safe operation of the applicable type of aircraft, relevant to the duties of a pilot-in-command or a co-pilot as applicable; and
- c) demonstrated, at the airline transport pilot licence level, an extent of knowledge determined by the Licensing Authority on the basis of the requirements specified in 2.6.1.2.

Note.— See the Manual of Procedures for Establishment and Management of a State's Personnel Licensing System (Doc 9379) for guidance of a general nature on cross-crew qualification and cross-credit.

2.1.5.3 Type rating as required by 2.1.3.2 b) and c)

The applicant shall have demonstrated the skill and knowledge required for the safe operation of the applicable type of aircraft, relevant to the licensing requirements and piloting functions of the applicant.

2.1.6 Use of a flight simulation training device for acquisition of experience and demonstration of skill

The use of a flight simulation training device for acquiring the experience or performing any manoeuvre required during the demonstration of skill for the issue of a licence or rating shall be approved by the Licensing Authority, which shall ensure that the flight simulation training device used is appropriate to the task.

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.

Note.— The instrument rating is included in the airline transport pilot licence — aeroplane or powered-lift category, multi-crew pilot licence, and commercial pilot licence — airship category. The provisions of 2.1.7 do not preclude the issue of a licence having the instrument rating as an integral part thereof.

2.1.8 Circumstances in which authorization to conduct instruction is required

2.1.8.1 A Contracting State, having issued a pilot licence, shall not permit the holder thereof to carry out flight instruction required for the issue of a pilot licence or rating, unless such holder has received proper authorization from such Contracting State. Proper authorization shall comprise:

- a) a flight instructor rating on the holder's licence; or
- b) the authority to act as an agent of an approved organization authorized by the Licensing Authority to carry out flight instruction; or
- c) a specific authorization granted by the Contracting State which issued the licence.

2.1.8.2 A Contracting State shall not permit a person to carry out instruction on a flight simulation training device required for the issue of a pilot licence or rating unless such person holds or has held an appropriate licence or has appropriate flight training and flight experience and has received proper authorization from such Contracting State.

2.1.9 Crediting of flight time

2.1.9.1 A student pilot or the holder of a pilot licence shall be entitled to be credited in full with all solo, dual instruction and pilot-in-command flight time towards the total flight time required for the initial issue of a pilot licence or the issue of a higher grade of pilot licence.

2.1.9.2 The holder of a pilot licence, when acting as co-pilot at a pilot station of an aircraft certificated for operation by a single pilot but required by a Contracting State to be operated with a co-pilot, shall be entitled to be credited with not more than 50 per cent of the co-pilot flight time towards the total flight time required for a higher grade of pilot licence. The Contracting State may authorize that flight time be credited in full towards the total flight time required if the aircraft is equipped to be operated by a co-pilot and the aircraft is operated in a multi-crew operation.

2.1.9.3 The holder of a pilot licence, when acting as co-pilot at a pilot station of an aircraft certificated to be operated with a co-pilot, shall be entitled to be credited in full with this flight time towards the total flight time required for a higher grade of pilot licence.

2.1.9.4 The holder of a pilot licence, when acting as pilot-in-command under supervision, shall be entitled to be credited in full with this flight time towards the total flight time required for a higher grade of pilot licence.

2.1.10 Limitation of privileges of pilots who have attained their 60th birthday and curtailment of privileges of pilots who have attained their 65th birthday

A Contracting State, having issued pilot licences, shall not permit the holders thereof to act as pilot of an aircraft engaged in international commercial air transport operations if the licence holders have attained their 60th birthday or, in the case of operations with more than one pilot, their 65th birthday.

Note.— Attention is drawn to 1.2.5.2.3 on the validity period of Medical Assessments for pilots over the age of 60 who are engaged in commercial air transport operations.

2.2 Student pilot

2.2.1 A student pilot shall meet requirements prescribed by the Contracting State concerned. In prescribing such requirements, Contracting States shall ensure that the privileges granted would not permit student pilots to constitute a hazard to air navigation.

2.2.2 A student pilot shall not fly solo unless under the supervision of, or with the authority of, an authorized flight instructor.

2.2.2.1 A student pilot shall not fly solo in an aircraft on an international flight unless by special or general arrangement between the Contracting States concerned.

2.2.3 Medical fitness

A Contracting State shall not permit a student pilot to fly solo unless that student pilot holds a current Class 2 Medical Assessment.

2.3 Private pilot licence

2.3.1 General requirements for the issue of the licence appropriate to the aeroplane, airship, helicopter and powered-lift categories

2.3.1.1 Age

The applicant shall be not less than 17 years of age.

2.3.1.2 Knowledge

The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a private pilot licence and appropriate to the category of aircraft intended to be included in the licence, in at least the following subjects:

Air law

- a) rules and regulations relevant to the holder of a private pilot licence; rules of the air; altimeter setting procedures; appropriate air traffic services practices and procedures;

Aircraft general knowledge for aeroplanes, airships, helicopters and powered-lifts

- b) principles of operation and functioning of engines, systems and instruments;
- c) operating limitations of the relevant category of aircraft and engines; relevant operational information from the flight manual or other appropriate document;
- d) for helicopters and powered-lifts, transmission (power trains) where applicable;
- e) for airships, physical properties and practical application of gases;

Flight performance, planning and loading

- f) effects of loading and mass distribution on flight characteristics; mass and balance calculations;
- g) use and practical application of take-off, landing and other performance data;
- h) pre-flight and en-route flight planning appropriate to private operations under VFR; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; position reporting procedures; altimeter setting procedures; operations in areas of high-density traffic;

Human performance

- i) human performance including principles of threat and error management;

Note.— Guidance material to design training programmes on human performance, including threat and error management, can be found in the Human Factors Training Manual (Doc 9683).

Meteorology

- j) application of elementary aeronautical meteorology; use of, and procedures for obtaining, meteorological information; altimetry; hazardous weather conditions;

Principles of flight

- y) principles of flight;

Radiotelephony

- z) communication procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure.

2.4.1.3 *Skill*

The applicant shall have demonstrated the ability to perform as pilot-in-command of an aircraft within the appropriate category of aircraft, the procedures and manoeuvres described in 2.4.3.2.1 or 2.4.4.2 or 2.4.5.2 or 2.4.6.2 with a degree of competency appropriate to the privileges granted to the holder of a commercial pilot licence, and to:

- a) recognize and manage threats and errors;

Note.— Guidance material on the application of threat and error management is found in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868), Chapter 3, Attachment C, and in Part II, Chapter 2, of the Human Factors Training Manual (Doc 9683).

- b) operate the aircraft within its limitations;
- c) complete all manoeuvres with smoothness and accuracy;
- d) exercise good judgement and airmanship;
- e) apply aeronautical knowledge; and
- f) maintain control of the aircraft at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured.

2.4.1.4 *Medical fitness*

The applicant shall hold a current Class 1 Medical Assessment.

2.4.2 Privileges of the holder of the licence
and the conditions to be observed in exercising such privileges

2.4.2.1 Subject to compliance with the requirements specified in 1.2.5, 1.2.6, 1.2.7.1, 1.2.9 and 2.1, the privileges of the holder of a commercial pilot licence shall be:

- a) to exercise all the privileges of the holder of a private pilot licence in an aircraft within the appropriate aircraft category;
- b) to act as pilot-in-command of an aircraft within the appropriate aircraft category engaged in operations other than commercial air transportation;
- c) to act as pilot-in-command, in commercial air transportation, of an aircraft within the appropriate aircraft category and certificated for single-pilot operation;

- d) to act as co-pilot of an aircraft within the appropriate aircraft category required to be operated with a co-pilot; and
- e) for the airship category, to pilot an airship under IFR.

2.4.2.2 Before exercising the privileges at night, the licence holder shall have received dual instruction in aircraft within the appropriate category of aircraft in night flying, including take-off, landing and navigation.

Note.— Certain privileges of the licence are curtailed by 2.1.10 for licence holders when they attain their 60th and 65th birthdays.

2.4.3 Specific requirements for the issue of the aeroplane category rating

2.4.3.1 Experience

2.4.3.1.1 The applicant shall have completed not less than 200 hours of flight time, or 150 hours if completed during a course of approved training, as a pilot of aeroplanes. The Licensing Authority shall determine whether experience as a pilot under instruction in a flight simulation training device is acceptable as part of the total flight time of 200 hours or 150 hours, as the case may be. Credit for such experience shall be limited to a maximum of 10 hours.

2.4.3.1.1.1 The applicant shall have completed in aeroplanes not less than:

- a) 100 hours as pilot-in-command or, in the case of a course of approved training, 70 hours as pilot-in-command;
- b) 20 hours of cross-country flight time as pilot-in-command including a cross-country flight totalling not less than 540 km (300 NM) in the course of which full-stop landings at two different aerodromes shall be made;
- c) 10 hours of instrument instruction time of which not more than 5 hours may be instrument ground time; and
- d) if the privileges of the licence are to be exercised at night, 5 hours of night flight time including 5 take-offs and 5 landings as pilot-in-command.

2.4.3.1.2 When the applicant has flight time as a pilot of aircraft in other categories, the Licensing Authority shall determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of 2.4.3.1.1 can be reduced accordingly.

2.4.3.2 Flight instruction

2.4.3.2.1 The applicant shall have received dual instruction in aeroplanes appropriate to the class and/or type rating, sought from an authorized flight instructor. The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the commercial pilot:

- a) recognize and manage threats and errors;

Note.— Guidance material on the application of threat and error management is found in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868), Chapter 3, Attachment C, and in Part II, Chapter 2, of the Human Factors Training Manual (Doc 9683).

- b) pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;
- c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;

- d) control of the aeroplane by external visual reference;
- e) flight at critically slow airspeeds; spin avoidance; recognition of, and recovery from, incipient and full stalls;
- f) flight with asymmetrical power for multi-engine class or type ratings;
- g) flight at critically high airspeeds; recognition of, and recovery from, spiral dives;
- h) normal and crosswind take-offs and landings;
- i) maximum performance (short field and obstacle clearance) take-offs; short-field landings;
- j) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;
- k) cross-country flying using visual reference, dead reckoning and radio navigation aids; diversion procedures;
- l) abnormal and emergency procedures and manoeuvres including simulated aeroplane equipment malfunctions;
- m) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and
- n) communication procedures and phraseology.

Note.— The instrument experience specified in 2.4.3.1.1.1 c) and 2.4.3.2.1 j) and the night flying experience and dual instruction specified in 2.4.3.1.1.1 d) and 2.4.2.2 do not entitle the holder of a commercial pilot licence to pilot aeroplanes under IFR.

2.4.3.2.2 Recommendation.— *The applicant should have received, in actual flight, upset prevention and recovery training approved by the Licensing Authority.*

Note 1.— Procedures for upset prevention and recovery training in actual flight are contained in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868).

Note 2.— Guidance on upset prevention and recovery training in actual flight is contained in the Manual on Aeroplane Upset Prevention and Recovery Training (Doc 10011).

2.4.4 Specific requirements for the issue of the helicopter category rating

2.4.4.1 Experience

2.4.4.1.1 The applicant shall have completed not less than 150 hours of flight time, or 100 hours if completed during a course of approved training, as a pilot of helicopters. The Licensing Authority shall determine whether experience as a pilot under instruction in a flight simulation training device is acceptable as part of the total flight time of 150 hours or 100 hours, as the case may be. Credit for such experience shall be limited to a maximum of 10 hours.

2.4.4.1.1.1 The applicant shall have completed in helicopters not less than:

- a) 35 hours as pilot-in-command;
- b) 10 hours of cross-country flight time as pilot-in-command including a cross-country flight in the course of which landings at two different points shall be made;

- c) 10 hours of instrument instruction time of which not more than 5 hours may be instrument ground time; and
- d) if the privileges of the licence are to be exercised at night, 5 hours of night flight time including 5 take-offs and 5 landing patterns as pilot-in-command.

2.4.4.1.2 When the applicant has flight time as a pilot of aircraft in other categories, the Licensing Authority shall determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of 2.4.4.1.1 can be reduced accordingly.

2.4.4.2 Flight instruction

The applicant shall have received dual instruction in helicopters from an authorized flight instructor. The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the commercial pilot:

- a) recognize and manage threats and errors;

Note.— Guidance material on the application of threat and error management is found in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868), Chapter 3, Attachment C, and in Part II, Chapter 2, of the Human Factors Training Manual (Doc 9683).

- b) pre-flight operations, including mass and balance determination, helicopter inspection and servicing;
- c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
- d) control of the helicopter by external visual reference;
- e) recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal range of engine rpm;
- f) ground manoeuvring and run-ups; hovering; take-offs and landings — normal, out of wind and sloping ground; steep approaches;
- g) take-offs and landings with minimum necessary power; maximum performance take-off and landing techniques; restricted site operations; quick stops;
- h) hovering out of ground effect; operations with external load, if applicable; flight at high altitude;
- i) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;
- j) cross-country flying using visual reference, dead reckoning and radio navigation aids; diversion procedures;
- k) abnormal and emergency procedures, including simulated helicopter equipment malfunctions, autorotative approach and landing;
- l) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and
- m) communication procedures and phraseology.

Note.— The instrument experience specified in 2.4.4.1.1 c) and 2.4.4.2 i) and the night flying experience and dual instruction specified in 2.4.4.1.1 d) and 2.4.2.2 do not entitle the holder of a commercial pilot licence to pilot helicopters under IFR.

2.4.5 Specific requirements for the issue of the powered-lift category rating

2.4.5.1 Experience

2.4.5.1.1 **Recommendation.**— *The applicant should have completed not less than 200 hours of flight time in a powered-lift, or 150 hours if completed during a course of approved training, as a pilot of aircraft. The Licensing Authority should determine whether experience as a pilot under instruction in a flight simulation training device is acceptable as part of the total flight time of 200 hours or 150 hours, as the case may be.*

2.4.5.1.2 **Recommendation.**— *The applicant should have completed in a powered-lift not less than:*

- a) 50 hours as pilot-in-command;
- b) 10 hours of cross-country flying as pilot-in-command including a cross-country flight totalling not less than 540 km (300 NM) in the course of which full-stop landings at two different aerodromes should be made;
- c) 10 hours of instrument instruction of which not more than 5 hours may be instrument ground time; and
- d) if the privileges of the licence are to be exercised at night, 5 hours of night flight time including 5 take-offs and landings as pilot-in-command.

2.4.5.1.3 **Recommendation.**— *When the applicant has flight time as a pilot of aircraft in other categories, the Licensing Authority should determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of 2.4.5.1.1 could be reduced accordingly.*

2.4.5.2 Flight instruction

Recommendation.— *The applicant should have received dual instruction time in a powered-lift from an authorized flight instructor. The instructor should ensure that the applicant has operational experience in at least the following areas to the level of performance required for the commercial pilot:*

- a) recognize and manage threats and errors;

Note.— *Guidance material on the application of threat and error management is found in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868), Chapter 3, Attachment C, and in Part II, Chapter 2, of the Human Factors Training Manual (Doc 9683).*

- b) pre-flight operations, including mass and balance determination, powered-lift inspection and servicing;
- c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
- d) control of the powered-lift by external visual reference;
- e) recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal range of engine rpm;
- f) ground manoeuvring and run-ups; hover and rolling take-offs and climb-out; hover and rolling approach and landings — normal, out of wind and sloping ground; steep approaches;
- g) take-offs and landings with minimum necessary power; maximum performance take-off and landing techniques; restricted site operations; quick stops;
- h) hovering out of ground effect; operations with external load, if applicable; flight at high altitude;

- i) *basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;*
- j) *cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids, including a flight of at least one hour;*
- k) *emergency operations, including simulated powered-lift equipment malfunctions; power of reconversion to autorotation and autorotative approach, where applicable; transmission and interconnect driveshaft failure, where applicable;*
- l) *operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and*
- m) *communication procedures and phraseology.*

Note.— The instrument experience specified in 2.4.5.1.2 c) and 2.4.5.2 i) and the night flying experience and dual instruction specified in 2.4.5.1.2 d) and 2.4.2.2 do not entitle the holder of a commercial pilot licence to pilot powered-lifts under IFR.

2.4.6 Specific requirements for the issue of the airship category rating

2.4.6.1 Experience

2.4.6.1.1 The applicant shall have completed not less than 200 hours of flight time as a pilot.

2.4.6.1.1.1 The applicant shall have completed not less than:

- a) 50 hours as a pilot of airships;
- b) 30 hours in airships as pilot-in-command or pilot-in-command under supervision, to include not less than:
 - 10 hours of cross-country flight time; and
 - 10 hours of night flight;
- c) 40 hours of instrument time, of which 20 hours shall be in flight and 10 hours in flight in airships; and
- d) 20 hours of flight training in airships in the areas of operation listed in 2.4.6.2.

2.4.6.2 Flight instruction

The applicant shall have received dual instruction in airships from an authorized flight instructor. The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the commercial pilot:

- a) recognize and manage threats and errors;

Note.— Guidance material on the application of threat and error management is found in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868), Chapter 3, Attachment C, and in Part II, Chapter 2, of the Human Factors Training Manual (Doc 9683).

- b) pre-flight operations, including mass and balance determination, airship inspection and servicing;

- c) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
- d) techniques and procedures for the take-off, including appropriate limitations, emergency procedures and signals used;
- e) control of the airship by external visual reference;
- f) recognition of leaks;
- g) normal take-offs and landings;
- h) maximum performance (short field and obstacle clearance) take-offs; short-field landings;
- i) flight under IFR;
- j) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids;
- k) emergency operations, including simulated airship equipment malfunctions;
- l) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and
- m) communication procedures and phraseology.

2.5 Multi-crew pilot licence appropriate to the aeroplane category

2.5.1 General requirements for the issue of the licence

2.5.1.1 Age

The applicant shall be not less than 18 years of age.

2.5.1.2 Knowledge

The applicant shall have met the requirements specified in 2.6.1.2 for the airline transport pilot licence appropriate to the aeroplane category in an approved training course.

2.5.1.3 Skill

2.5.1.3.1 The applicant shall have demonstrated the skills required for fulfilling all the competency units specified in Appendix 3 as pilot flying and pilot not flying, to the level required to perform as a co-pilot of turbine-powered aeroplanes certificated for operation with a minimum crew of at least two pilots under VFR and IFR, and to:

- a) recognize and manage threats and errors;

Note.— Guidance material on the application of threat and error management is found in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868), Chapter 3, Attachment C, and in Part II, Chapter 2, of the Human Factors Training Manual (Doc 9683).

- b) smoothly and accurately, manually control the aeroplane within its limitations at all times, such that the successful outcome of a procedure or manoeuvre is assured;

- c) operate the aeroplane in the mode of automation appropriate to the phase of flight and to maintain awareness of the active mode of automation;
- d) perform, in an accurate manner, normal, abnormal and emergency procedures in all phases of flight; and
- e) communicate effectively with other flight crew members and demonstrate the ability to effectively perform procedures for crew incapacitation, crew coordination, including allocation of pilot tasks, crew cooperation, adherence to standard operating procedures (SOPs) and use of checklists.

2.5.1.3.2 Progress in acquiring the skills specified in 2.5.1.3.1 shall be continuously assessed.

2.5.1.4 Medical fitness

The applicant shall hold a current Class 1 medical assessment.

2.5.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges

2.5.2.1 Subject to compliance with the requirements specified in 1.2.5, 1.2.6, 1.2.7.1, 1.2.9 and 2.1, the privileges of the holder of a multi-crew pilot licence shall be:

- a) to exercise all the privileges of the holder of a private pilot licence in the aeroplane category provided the requirements of paragraph 2.3.3 have been met;
- b) to exercise the privileges of the instrument rating in a multi-crew operation; and
- c) to act as co-pilot of an aeroplane required to be operated with a co-pilot.

2.5.2.2 Before exercising the privileges of the instrument rating in a single-pilot operation in aeroplanes, the licence holder shall have demonstrated an ability to act as pilot-in-command in a single-pilot operation exercised by reference solely to instruments and shall have met the skill requirement specified in 2.7.1.2 appropriate to the aeroplane category.

2.5.2.3 Before exercising the privileges of a commercial pilot licence in a single-pilot operation in aeroplanes, the licence holder shall have:

- a) completed in aeroplanes 70 hours, either as pilot-in-command, or made up of not less than 10 hours as pilot-in-command and the necessary additional flight time as pilot-in-command under supervision;
- b) completed 20 hours of cross-country flight time as pilot-in-command, or made up of not less than 10 hours as pilot-in-command and 10 hours as pilot-in-command under supervision, including a cross-country flight totalling not less than 540 km (300 NM) in the course of which full-stop landings at two different aerodromes shall be made; and
- c) met the requirements for the commercial pilot licence specified in 2.4.1.2, 2.4.1.3, 2.4.3.1.1 (with the exception of 2.4.3.1.1.1 a)) and 2.4.3.2 appropriate to the aeroplane category.

Note 1.— When a Contracting State grants single-pilot operation privileges to the holder of a multi-crew pilot licence, it can document the privileges through an endorsement of the multi-crew pilot licence or through the issuance of a commercial pilot licence in the aeroplane category.

Note 2.— Certain privileges of the licence are curtailed by 2.1.10 for licence holders when they attain their 65th birthday.

2.5.3 Experience

2.5.3.1 The applicant shall have completed in an approved training course not less than 240 hours as pilot flying and pilot not flying of actual and simulated flight.

2.5.3.2 Flight experience in actual flight shall include at least the experience requirements at 2.3.3.1, upset prevention and recovery training, night flying and flight by reference solely to instruments.

Note 1.— Procedures for upset prevention and recovery training in actual flight are contained in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868).

Note 2.— Guidance on upset prevention and recovery training in actual flight is contained in the Manual on Aeroplane Upset Prevention and Recovery Training (Doc 10011).

2.5.3.3 In addition to meeting the provisions of 2.5.3.2, the applicant shall have gained, in a turbine-powered aeroplane certificated for operation with a minimum crew of at least two pilots, or in a flight simulation training device approved for that purpose by the Licensing Authority in accordance with Appendix 3, paragraph 4, the experience necessary to achieve the advanced level of competency defined in Appendix 3.

2.5.4 Flight instruction

2.5.4.1 The applicant shall have completed a course of approved training covering the experience requirements specified in 2.5.3.

2.5.4.2 The applicant shall have received dual flight instruction in all the competency units specified in Appendix 3, to the level required for the issue of the multi-crew pilot licence, to include the competency units required to pilot under instrument flight rules.

2.6 Airline transport pilot licence

2.6.1 General requirements for the issue of the licence appropriate to the aeroplane, helicopter and powered-lift categories

2.6.1.1 Age

The applicant shall be not less than 21 years of age.

2.6.1.2 Knowledge

2.6.1.2.1 The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of an airline transport pilot licence and appropriate to the category of aircraft intended to be included in the licence, in at least the following subjects:

Air law

- a) rules and regulations relevant to the holder of an airline transport pilot licence; rules of the air; appropriate air traffic services practices and procedures;

Aircraft general knowledge for aeroplanes, helicopters and powered-lifts

- b) general characteristics and limitations of electrical, hydraulic, pressurization and other aircraft systems; flight control systems, including autopilot and stability augmentation;
- c) principles of operation, handling procedures and operating limitations of aircraft engines; effects of atmospheric conditions on engine performance; relevant operational information from the flight manual or other appropriate document;
- d) operating procedures and limitations of the relevant category of aircraft; effects of atmospheric conditions on aircraft performance in accordance with the relevant operational information from the flight manual;
- e) use and serviceability checks of equipment and systems of appropriate aircraft;
- f) flight instruments; compasses, turning and acceleration errors; gyroscopic instruments, operational limits and precession effects; practices and procedures in the event of malfunctions of various flight instruments and electronic display units;
- g) maintenance procedures for airframes, systems and engines of appropriate aircraft;
- h) for helicopters and powered-lifts, transmission (power trains) where applicable;

Flight performance, planning and loading

- i) effects of loading and mass distribution on aircraft handling, flight characteristics and performance; mass and balance calculations;
- j) use and practical application of take-off, landing and other performance data, including procedures for cruise control;
- k) pre-flight and en-route operational flight planning; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; altimeter setting procedures;
- l) in the case of helicopters and powered-lifts, effects of external loading on handling;

Human performance

- m) human performance including principles of threat and error management;

Note.— Guidance material to design training programmes on human performance, including threat and error management, can be found in the Human Factors Training Manual (Doc 9683).

Meteorology

- n) interpretation and application of aeronautical meteorological reports, charts and forecasts; codes and abbreviations; use of, and procedures for obtaining, meteorological information, pre-flight and in-flight; altimetry;
- o) aeronautical meteorology; climatology of relevant areas in respect of the elements having an effect upon aviation; the movement of pressure systems; the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;
- p) causes, recognition and effects of icing; frontal zone penetration procedures; hazardous weather avoidance;
- q) in the case of aeroplanes and powered-lifts, practical high altitude meteorology, including interpretation and use of weather reports, charts and forecasts; jetstreams;

- f) training programme development;
- g) lesson planning;
- h) classroom instructional techniques;
- i) use of training aids, including flight simulation training devices as appropriate;
- j) analysis and correction of student errors;
- k) human performance relevant to flight instruction including principles of threat and error management;

Note.— Guidance material to design training programmes on human performance, including threat and error management, can be found in the Human Factors Training Manual (Doc 9683).

- l) hazards involved in simulating system failures and malfunctions in the aircraft.

2.8.1.2 Skill

The applicant shall have demonstrated, in the category and class of aircraft for which flight instructor privileges are sought, the ability to instruct in those areas in which flight instruction is to be given, including pre-flight, post-flight and ground instruction as appropriate.

2.8.1.3 Experience

The applicant shall have met the experience requirements for the issue of a commercial pilot licence as specified in 2.4.3.1, 2.4.4.1, 2.4.5.1 and 2.4.6.1 for each aircraft category, as appropriate.

2.8.1.4 Flight instruction

The applicant shall, under the supervision of a flight instructor accepted by the Licensing Authority for that purpose:

- a) have received instruction in flight instructional techniques including demonstration, student practices, recognition and correction of common student errors; and
- b) have practised instructional techniques in those flight manoeuvres and procedures in which it is intended to provide flight instruction.

2.8.2 Privileges of the holder of the rating and the conditions to be observed in exercising such privileges

2.8.2.1 Subject to compliance with the requirements specified in 1.2.5 and 2.1, the privileges of the holder of a flight instructor rating shall be:

- a) to supervise solo flights by student pilots; and

- b) to carry out flight instruction for the issue of a private pilot licence, a commercial pilot licence, an instrument rating, and a flight instructor rating

provided that the flight instructor:

- 1) holds at least the licence and rating for which instruction is being given, in the appropriate aircraft category;
- 2) holds the licence and rating necessary to act as the pilot-in-command of the aircraft on which the instruction is given; and
- 3) has the flight instructor privileges granted entered on the licence.

2.8.2.2 The applicant, in order to carry out instruction for the multi-crew pilot licence, shall have also met all the instructor qualification requirements.

Note.— Specific provisions for flight instructors carrying out instruction for the multi-crew pilot licence exist in Chapter 6 of the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868).

2.9 Glider pilot licence

2.9.1 Requirements for the issue of the licence

2.9.1.1 Age

The applicant shall be not less than 16 years of age.

2.9.1.2 Knowledge

2.9.1.2.1 The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a glider pilot licence, in at least the following subjects:

Air law

- a) rules and regulations relevant to the holder of a glider pilot licence; rules of the air; appropriate air traffic services practices and procedures;

Aircraft general knowledge

- b) principles of operation of glider systems and instruments;
- c) operating limitations of gliders; relevant operational information from the flight manual or other appropriate document;

Flight performance, planning and loading

- d) effects of loading and mass distribution on flight characteristics; mass and balance considerations;
- e) use and practical application of launching, landing and other performance data;

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 Detail

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.

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.

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 an endorsement of language proficiency, and other information required in pursuance to Article 39 of the Chicago Convention; and
- XIV) Any other details desired by the State issuing the licence.

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.

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.

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.

Note.— Item headings may be arranged in such order as may best suit the convenience of the Contracting State issuing the licence.