

Annex 1

Essential requirements for pilot licensing

1. Training

1.a *General*

1.a.1 A person undertaking training to fly an aircraft must be sufficiently mature educationally, physically and mentally to acquire, retain and demonstrate the relevant theoretical knowledge and practical skill.

1.b *Theoretical Knowledge*

1.b.1 A pilot must acquire and maintain a level of knowledge appropriate to the functions exercised on the aircraft and proportionate to the risks associated to the type of activity. Such knowledge must include at least the following:

- air law;
- aircraft general knowledge;
- technical matters related to the category of the aircraft;
- flight performance and planning;
- human performance and limitations;
- meteorology;
- navigation;
- operational procedures, including resource management;
- principles of flight; and
- communications.

1.c *Demonstration and maintenance of theoretical knowledge*

1.c.1 The acquisition and retention of theoretical knowledge must be demonstrated by continuous assessment during training, and where appropriate, by examinations.

1.c.2 An appropriate level of competence in theoretical knowledge must be maintained. Compliance must be demonstrated by regular assessments, examinations, tests or checks. The frequency of examinations, tests or checks must be proportionate to the level of risk associated with the activity.

1.d *Practical skill*

1.d.1 A pilot must acquire and maintain the practical skills as appropriate to exercise his/her functions on the aircraft. Such skills must be proportionate to the risks associated to the type of activity and must cover, if appropriate to the functions exercised on the aircraft, the following:

- pre-flight and in-flight activities, including aircraft performance, mass and balance determination, aircraft inspection and servicing, fuel planning, weather appreciation, route planning, airspace restrictions and runway availability;
- aerodrome and traffic pattern operations;
- collision avoidance precautions and procedures;
- control of the aircraft by external visual reference;
- flight manoeuvres, including in critical situations, and associated "upset" manoeuvres, as technically achievable;
- normal and cross-wind take-offs and landings;
- flight by reference solely to instruments, as appropriate to the type of activity;
- operational procedures, including team skills and resource management, as appropriate to the type of operation, whether single or multi-crew;

- navigation and implementation of rules of the air and related procedures, using as appropriate, visual reference or navigation aids;
- abnormal and emergency operations, including simulated aircraft equipment malfunctions;
- compliance with air traffic services and communications procedures;
- aircraft type or class specific aspects; and
- additional practical skill training that may be required to mitigate risks associated with specific activities.

1.e *Demonstration and maintenance of practical skill*

1.e.1 A pilot must demonstrate the ability to perform the procedures and manoeuvres with a degree of competence appropriate to the functions exercised on the aircraft, by:

- operating the aircraft within its limitations;
- completing all manoeuvres with smoothness and accuracy;
- exercising good judgement and airmanship;
- applying aeronautical knowledge; and
- maintaining control of the aircraft at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured.

1.e.2 An appropriate level of competence in practical skill must be maintained. Compliance must be demonstrated by regular assessments, examinations, tests or checks. The frequency of examinations, tests or checks must be proportionate to the level of risk associated with the activity.

1.f *Language Proficiency*

Except where the related safety risk can be mitigated by other means, a pilot must have demonstrated proficiency in English, which must include:

- the ability to understand weather information documents;
- the use of aeronautical en-route, departure and approach charts and associated aeronautical information documents; and
- the ability to communicate with other flight crew and air navigation services in English during all phases of flight, including flight preparation.

1.g *Flight synthetic training devices*

When a flight synthetic training device (FSTD) is used for training, or for demonstration that practical skill is acquired or maintained, this FSTD shall be qualified to a given level of performance in those areas, which are relevant to completing the related task. In particular, the replication of configuration, handling qualities, aircraft performance, and systems behaviour shall adequately represent the aircraft.

1.h *Training Course*

1.h.1 Training must be executed through a training course.

1.h.2 A training course must meet the following conditions:

- a syllabus must be developed for each type of course; and
- the training course must comprise a breakdown of theoretical knowledge and practical flight instruction (including synthetic training), if applicable.

1.i *Instructors*

1.i.1 Theoretical instruction.

Theoretical instruction must be given by appropriately qualified instructors. They must:

- have appropriate knowledge in the field where instruction is to be given; and
- be capable of using appropriate instructional techniques.

1.i.2 Flight and synthetic flight instruction.

Flight and synthetic flight instruction must be given by appropriately qualified instructors, who have the following qualifications:

- meet the theoretical knowledge and the experience requirements appropriate for the instruction being given;
- be capable of using appropriate instructional techniques;
- have practised instructional techniques in those flight manoeuvres and procedures in which it is intended to provide flight instruction;
- have demonstrated the ability to instruct in those areas in which flight instruction is to be given, including pre-flight, post-flight and ground instruction; and
- receive regular refresher training to ensure that the instructional standards are maintained up to date.

Flight instructors must also be entitled to act as pilot in command on the aircraft for which instruction is being given, except for training on new aircraft types.

1.j *Examiners*

1.j.1 Persons responsible for assessing the competence of pilots must:

- meet or have met the requirements for flight instructors;

- be capable of assessing pilot performance and conducting flight tests and checks.

2. Training Organisations

2.a Training Organisation requirements

2.a.1 A training organisation providing pilot training must meet the following requirements:

- have all the means necessary for the scope of responsibilities associated with their activity. These means comprise, but are not limited to, the following: facilities, personnel, equipment, tools and material, documentation of tasks, responsibilities and procedures, access to relevant data and record-keeping;
- implement and maintain a management system relating to safety and the standard of training, and aim for continuous improvement of this system; and
- establish arrangements with other relevant organisations, as necessary, to ensure continuing compliance with the above requirements.

3. Medical fitness

3.a Medical and physical criteria

3.a.1 All pilots must periodically demonstrate medical fitness to satisfactorily execute their functions, taking into account the type of activity. Compliance must be shown by appropriate assessment based on aero-medical best practice, taking into account the type of activity and the possible mental and physical degradation due to age.

Medical fitness, comprising physical and mental fitness, means not suffering from any disease or disability, which makes the pilot unable:

- to execute the tasks necessary to operate an aircraft; or
- to perform assigned duties at any time; or

- to perceive correctly his/her environment.

3.a.2 Where medical fitness cannot be fully demonstrated, mitigation measures that provide equivalent flight safety may be implemented.

3.b *Aero-medical examiners*

3.b.1 An aero-medical examiner must:

- be qualified and licensed in the practice of medicine;
- have received training in aviation medicine and regular refresher training in aviation medicine to ensure that assessment standards are maintained;
- have acquired practical knowledge and experience of the conditions in which pilots carry out their duties.

3.c *Aero-medical Centres*

3.c.1 Aero-medical centres must meet the following conditions:

- have all the means necessary for the scope of responsibilities associated with their privileges. These means comprise, but are not limited to, the following: facilities, personnel, equipment, tools and material, documentation of tasks, responsibilities and procedures, access to relevant data and record-keeping;
- implement and maintain a management system relating to safety and the standard of medical assessment, and aim for continuous improvement of this system;
- establish arrangements with other relevant organisations, as necessary, to ensure continuing compliance with these requirements.