

STATUTORY INSTRUMENT

S.I. No. 333 of 2000

**IRISH AVIATION AUTHORITY
(PERSONNEL LICENSING) ORDER, 2000**

IRISH AVIATION AUTHORITY
(PERSONNEL LICENSING) ORDER, 2000

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IRISH AVIATION AUTHORITY
(PERSONNEL LICENSING) ORDER, 2000

The Irish Aviation Authority, in exercise of the powers conferred on it by sections 5, 58, and 60 of the Irish Aviation Authority Act, 1993 (No 29 of 1993) as amended by the Air Navigation and Transport Act, 1998 (No 24 of 1998) hereby orders as follows:

PART I

PRELIMINARY

Title and commencement

1. (1) This Order may be cited as the Irish Aviation Authority (Personnel Licensing) Order, 2000
- (2) This Order shall come into operation on the first day of November, 2000 or on the date of its publication in the Iris Oifigiuil, whichever date occurs later.

Definitions

2. (1) In this Order-

“accessories” includes spare parts, replacements, items repaired and overhauled and aircraft materials;

“the Act” means the Irish Aviation Authority Act, 1993 (No. 29 of 1993);

“aerial work aircraft” means an aircraft, not being a commercial transport aircraft, which is being flown for payment required to be made, or promised, to the operator of the aircraft in respect of the flight or of the purpose for which the flight is made¹;

“aerodrome” means a defined area of land or water (including any buildings, installations and equipment) intended to be used, either wholly or in part, for the arrival, departure and the surface movement of aircraft;

“aerodrome flight information service” means a service provided at an aerodrome by the appropriate authority or by the licensee of an aerodrome

¹An aircraft used for flight instruction in accordance with the proviso clause of paragraph (2) of this Article is not considered to be such an aircraft when so used.

for the purpose of giving information by means of radio signals to aircraft flying or intending to fly within the aerodrome traffic zone of that aerodrome;

“aerodrome traffic” means all traffic on the manoeuvring area of an aerodrome and all traffic flying in the vicinity of the aerodrome;

“aerodrome traffic zone” means an airspace of dimensions decided and notified by the appropriate authority and established by such authority around an aerodrome for the protection of aerodrome traffic;

“aeronautical communications service” means a service provided at a centre or centres designated by the appropriate authority for the purpose of ensuring, through the appropriate communications methods, the safe and expeditious movement of aircraft in flight;

“aeronautical mobile (radio) service” means an aeronautical mobile service reserved for communications relating to safety and regularity of flight, primarily along national or international civil air routes;

“aeronautical station” means a land station in the aeronautical mobile telecommunications service;

“aeroplane” means a power-driven heavier-than-air aircraft deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight;

“aircraft maintenance engineer licence” means an aircraft maintenance licence;

“aircraft maintenance licence” means a licence issued to a person authorising that person to exercise such privileges appropriate to the licence in relation to the maintenance of an aircraft as are specified in this Order. Such a licence may also be termed an aircraft maintenance engineer licence;

“aircraft type” means those aircraft of the same basic design including modifications except for those modifications which result in a change of handling, flight characteristics or flight crew complement;

“aircraft” means any machine that can derive support in the atmosphere from the reactions of the air other than the reaction of air against the earth's surface;

“air traffic” means all traffic in flight or operating on the manoeuvring area of an aerodrome;

“air traffic control service” means a service provided by the appropriate authority or by the licensee of an aerodrome for the purpose of all or any of

the following, that is to say, preventing collisions between aircraft and, on the manoeuvring area, between aircraft and obstructions, and expediting and maintaining an orderly flow of air traffic;

“air transport undertaking” means an undertaking the business of which includes the carriage by air of passengers or cargo for remuneration or hire;

“applicable Joint Aviation Requirements” means the relevant Joint Aviation Requirements applicable to the subject referred to in the Order and effective in the State under the European Communities Council Regulation 91/3922/EEC of 16 December 1991² or otherwise directed as effective by a direction of the Authority under this Order or any other Order;

“appropriate authority” means, in relation to the State, the Authority and, in relation to any other state, the national authority responsible for the safety of air navigation in or over the territory of that state;

approved training” means training carried out under curricula and supervision documented by the Authority as suitable for the purpose intended;

“The Authority” means The Irish Aviation Authority;

“authorisation” means evidence that the Authority has authorised a person or activity;

“authorised” means a designation by the Authority of a person or organisation to perform a function or a duty on its behalf or the designation of an activity as approved by or acceptable to the Authority;

“authorised examiner” means a person authorised by the Authority in accordance with Article 24 of this Order to conduct on its behalf such examinations, tests or checks as are specified by the Authority in relation to the authorisation;

“authorised officer” means, unless otherwise specified, an authorised officer of the company within the meaning of section 2 of the Act;

“avionic equipment” means any electronic device (and any electrical or mechanical part thereof) for use in an aircraft, including the radio, automatic flight control, electrical and instrument systems of an aircraft;

“balloon” means a non-powered lighter-than-air aircraft

“cargo” includes mail and animals;

²OJ No. L.373, 31.12.91 pp 4-8

“category” means the classification of aircraft according to specified basic characteristics, e.g. aeroplane, rotorcraft, glider, free balloon;

“club” means a club registered under the Registration of Clubs Acts (1904 to 1995) or incorporated as a limited company under the Companies Acts by Certificate of Incorporation and which, in either case, shall be managed by a committee elected by all the members for a period of not less than one year and which is subject to periodic re-election;

“club member” means, for the purposes of this Order, a person who has applied for membership of the club concerned and whose application for membership was made available for inspection by existing members of that club during a period agreed by the members and who has been accepted as a member at a meeting of the club’s committee or members’ body;

“commercial air transport operation” means an aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire;

“commercial transport aircraft” means an aircraft carrying passengers or cargo or reward or, if the carriage is effected by an air transport undertaking, whether for remuneration or hire or not;

“competent licensing authority” means the authority designated by a state as responsible for the licensing of aviation personnel;

“component parts” includes spare parts, replacements, items repaired and overhauled and aircraft materials;

“the Convention” has the meaning ascribed to it in the Act;

“contracting state” means a state party to the Chicago Convention;

“co-pilot” means a licensed pilot serving in any piloting capacity other than as pilot-in-command, but excludes a pilot who is on board the aircraft for the sole purpose of receiving flight instruction;

“directed”, or, “as directed” means directed by the Authority in a direction under this Order;

“dual instruction time” means flight time or instrument ground time during which a person is receiving flight instruction from a duly authorised instructor;

“duly authorised instructor” means a person who holds a current pilot licence which includes a flight instructor rating or authorisation issued or

validated by the Authority (including a JAA flight crew licence with an instructor rating or authorisation) and entitling that person to give instruction in flying the class or classes and type or types of aircraft covered by such rating in accordance with the privileges and limitations of the particular flight instructor rating held;

“examiner” means a person, including an authorised officer of the company, authorised in that behalf by the Authority for the purposes of this Order;

“flight crew member” means a licensed member of the aircraft crew charged with duties essential to the operation of the aircraft during the time defined as flight time;

“flight time” means the total time from the moment the aircraft first moves under its own power for the purpose of taking off until the moment it comes to rest at the end of the flight and in the case of a helicopter, all of the time during which the rotor is engaged or rotating;

“glider” means a non-power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight;

“gyroplane” means an aircraft defined as directed under the Order;

“issued in accordance with JAR-FCL” means a JAA (flight crew) Licence issued by a civil aviation authority which is a full member of the JAA pursuant to requirements and in accordance with a procedure which has been assessed as satisfactory by the JAA;

“helicopter” means a heavier-than-air aircraft supported in flight by the reactions of the air on one or more power driven rotors on substantially vertical axes;

“instrument time” means instrument flight time or instrument ground time;

“instrument flight time” means time during which a pilot is piloting an aircraft solely by reference to instruments and without external reference points;

“instrument ground time” means time during which a pilot is practising on the ground simulated instrument flight in a synthetic training device approved by the Authority for that purpose;

“instrument flight rules” means the rules contained in Part IV of the Schedule to the Irish Aviation Authority (Rules of the Air) Order, 1999 (S.I. No. 20 of 1999);

“JAA licence” means a flight crew licence issued in accordance with JAR-FCL for a flight crew member or an aircraft maintenance licence issued in accordance with JAR 66 for an aircraft maintenance engineer;

“JAR 66” means the Joint Aviation Requirements applicable to aircraft maintenance licences;

“JAR-FCL” means the Joint Aviation Requirements applicable to Flight Crew Licensing;

“Joint Aviation Authorities (abbreviated as JAA)” has the meaning ascribed to it in section 14 of the Act;

“Joint Aviation Requirements (abbreviated as JARs)” means Requirements adopted by the European Joint Aviation Authorities and accepted by the State under the terms of the Arrangements defined in section 14 (6) of the Irish Aviation Authority Act, 1993 (No. 29 of 1993);

“the licensee of an aerodrome” means the holder of a licence in respect of an aerodrome issued under Article 6 of the Irish Aviation Authority (Aerodromes and Visual Ground Aids) Order, 1998 (S.I. No. 487 of 1998);

“maximum total weight authorised” has the same meaning as it has in the Irish Aviation Authority (Operations) Order, 1999 (S.I. No. 19 of 1999);

“medical assessment” means the evidence issued by the Authority that a licence applicant or licence holder meets the appropriate medical requirements of this Order following evaluation by the Authority of the medical report submitted by a designated medical examiner who conducted a medical examination of that person;

“medical certificate” means a certificate issued by the Authority or an authorised medical examiner or medical centre attesting to the results of a medical examination carried out in accordance with the requirements of this Order or the applicable Joint Aviation Requirements;

“microlight” means an aeroplane defined as directed under the Order;

“multi-crew co-operation (MCC)” means the functioning of a flight crew as a team led by the pilot-in-command;

“multi-pilot aeroplane (MPA)” means an aeroplane certificated for operation with a minimum flight crew of two pilots;

“multi-pilot helicopter (MPC)” means a helicopter certificated for operation or otherwise required to be operated with a minimum flight crew of two pilots;

“multi-pilot crew” means two or more pilots assigned to a single aircraft;

“night” means-

- (a) in or over the State-
 - (i) during the period of summer time - the time between one hour after sunset and one hour before sunrise,
 - (ii) during the remainder of the year - the time between half-an-hour after sunset and half-an-hour before sunrise;
- (b) in or over any place other than the State - the hours between the end of evening civil twilight (that is, when in the evening the centre of the sun’s disc is six degrees below the horizon) and the beginning of morning civil twilight (that is, when in the morning the centre of the sun’s disc is six degrees below the horizon) or such other period between sunset and sunrise as may be specified by the appropriate authority;

“pilot” means to manipulate the flight controls of an aircraft during flight time and cognate words shall be construed accordingly;

“pilot-in-command” means the pilot responsible for the operation and safety of the aircraft during flight time;

“private aircraft” means an aircraft which is neither a commercial transport aircraft nor an aerial work aircraft;

“problematic use of substances” means the use of one or more psychoactive substances by aviation personnel in a way that:-

- (a) constitutes a direct hazard to the user or endangers the lives, health or welfare of others; or
- (b) causes or worsens an occupational, social, mental or physical problem or disorder;

“proficiency check” means a demonstration of skill in order to allow the revalidation or renewal of a rating and includes such oral examination as an examiner may require;

“psychoactive substances” means alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee, tea and tobacco are excluded;

“radio officer” means an aeronautical station operator with responsibility for aeronautical radio communications;

“rated air traffic controller” means an air traffic controller holding a licence and valid ratings appropriate to the privileges to be exercised;

“rating” means an entry on a licence stating special conditions, privileges or limitations pertaining to that licence;

“rendering (a licence) valid” means the action taken by the Authority as an alternative to issuing its own licence, in accepting a licence issued by another contracting state as the equivalent of its own licence;

“revalidation” means, in relation to a licence rating, an administrative action taken within the validity period of a rating that allows the licence holder to continue to exercise the privileges of a rating for a further specified period consequent on the fulfilment of specified requirements;

“rotorcraft” means a power-driven heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors;

“skill test” means a demonstration of skill for the issue of a flight crew licence or the issue of a rating, including such oral examinations as an examiner may require;

“solo flight time” means flight time during which a pilot is the sole occupant of an aircraft;

“synthetic flight trainer” means any one of the following three types of apparatus in which flight conditions are simulated on the ground:-

- (a) a flight simulator, which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic and other aircraft systems control functions, the normal environment of flight-crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;
- (b) a flight procedures trainer, which provides a realistic flight-deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic and other aircraft systems, and the performance and flight characteristics of aircraft of a particular class;
- (c) a basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the flight deck of an aircraft in flight in instrument flight conditions;
- (d) a synthetic flight training device which is substituted for an aircraft for the purposes of training a person for the issue of a JAA licence or for

the revalidation or renewal of a rating issued under this Order shall meet the applicable Joint Aviation Requirements pertaining to such devices;

“transitional arrangements” mean those arrangements for the introduction of licences which meet the requirements of the applicable Joint Aviation Requirements, including the date or dates concerned, and which will apply to the issue of licences and to the conversion, re-issue or revalidation of existing national, non-JAA, licences to those Requirements;

“type” means aircraft or engines which, in the opinion of the Authority, are of the same basic design, including all modifications thereto, except those modifications which in the opinion of the Authority result in a material change in flight or operating characteristics or maintenance requirements;

“validation” means, with respect to a licence, issued by a competent licensing authority in accordance with Annex 1 to the Convention, other than a JAA licence, the acceptance of such licence by the Authority as the equivalent of a licence issued by the Authority.

- (2) References to carriage for hire or reward include references to-
- (a) the carriage of persons in an aircraft for the purpose of undergoing instruction in flying for which payment is made;
 - (b) the carriage of persons or cargo in an aircraft for remuneration;

provided that, as respects clause (a) of this paragraph the carriage of a member of a flying club for the purpose of such instruction, by a fellow club member who is a duly authorised instructor, in an aircraft owned by or operated under a lease arrangement entered into by the club, shall not, by reason only of payment for such instruction, be deemed, for the purposes of this Order, to be carriage for remuneration or hire.

- (3) In relation to the carriage of a person in an aircraft for the purpose of undergoing instruction, payment shall be deemed to be made for the instruction if any sum is paid or payable in respect of the particular flight by any person either to the instructor or to any person by whom the instructor is employed or contracted as an instructor, or if the instructor is employed for reward to instruct persons in flying aircraft.
- (4) In this Order a reference to an enactment or order shall, unless the context otherwise requires, be construed as a reference to the enactment or order as amended as extended by or under any subsequent enactment or order, including this Order.

Revocations

3. (1) The Air Navigation (Personnel Licensing) Orders, 1966 to 1999, are hereby revoked.
- (2) Notwithstanding the revocation of the Orders specified in paragraph (1) of this Article-
 - (a) a licence issued, validated, revalidated or re-issued under the Air Navigation (Personnel Licensing) Orders, 1966 to 1999, and
 - (b) a rating, authorisation or approval endorsed, issued, validated, revalidated or renewed under those Orders,
 - (c) any direction given or exemption made under those Orders,

which is in force immediately before the commencement of this Order shall continue in force as if the revocation had not been made, and the provisions of the said Air Navigation (Personnel Licensing) Orders, 1966 to 1999, which relate to such directions and such licences and ratings and the holders thereof, shall continue to have effect in relation thereto during the currency of such licences, ratings, authorisations or approvals.

Directions and JAA licences

4. (1) The Authority may give such directions, in respect of such matters and things as may be specified in this Order and in relation to a person or an organisation for carrying out the purposes of this Order or the Schedules thereto as may be necessary and appropriate.
- (2) The Authority may issue a JAA licence under this Order to an applicant who complies with the applicable Joint Aviation Requirements and may, by direction, specify a date after which a licence in a particular category or class may only be issued, validated or re-issued or a rating or an authorisation may only be issued, revalidated or renewed in accordance with the applicable Joint Aviation Requirements.
- (3) The Authority may by direction specify transitional arrangements for the conversion of a national licence in a particular class or category or a rating or an authorisation to a JAA licence, rating or authorisation in accordance with the applicable Joint Aviation Requirements.
- (4) The provisions of the applicable Joint Aviation Requirements shall apply with respect to a JAA licence and its associated ratings, authorisations, certificates or approvals and where any provision of the applicable Joint Aviation Requirements conflicts with or may be interpreted to conflict with a corresponding provision of this Order, with regard to a JAA licence, rating or authorisation, that provision of the applicable Joint Aviation

Requirements shall take precedence over the corresponding provision of this Order unless otherwise directed by the Authority in a particular case.

- (5) An authorisation, approval or certificate required by the applicable Joint Aviation Requirements may be issued, varied, revalidated, renewed, revoked or suspended by the Authority in accordance with those Requirements. The Authority may issue, annotate or vary a medical certificate issued in accordance with the applicable Joint Aviation Requirements and may, subject to duly justified medical reasons, limit, suspend or deny such a certificate in accordance with those Requirements, subject also to the review procedures of Article 31 of this Order.
- (6) Directions under this Order may be given in the form of Notices to Airmen (otherwise known as "NOTAMS"), Notices to Aircraft Owners and Aircraft Engineers (otherwise known as Aeronautical Notices) or Aeronautical Information Circulars or by notice sent by registered post to the person or organisation affected.

PART II

GENERAL

Flight Crew Members to be Licensed

5. (1) Subject to the provisions of this Order, a person shall not act as a flight crew member of an aircraft registered in the State unless that person is the holder of an appropriate licence issued or validated by the Authority, or a JAA licence.
- (2) A person shall not, within the territorial limits of the State, act as a flight crew member of an aircraft registered in any other state unless -
 - (a) in the case of a commercial transport or aerial work aircraft, that person is the holder of an appropriate licence issued or validated by the competent licensing authority of the state in which the aircraft is registered, or, for a JAA member state, a JAA licence;
 - (b) in the case of a private aircraft, that person is the holder of an appropriate licence, issued or validated by the competent licensing authority of the state in which the aircraft is registered or by the Authority, or a JAA licence.

- (3) An aircraft shall not fly unless every flight crew member thereof is the holder of the licence which that person is required to hold under the provisions of this Article.
- (4) A person may act as pilot of an aircraft registered in the State without being the holder of an appropriate licence for the purpose of undergoing training or tests for the issue, revalidation or re-issue of a pilot licence or the inclusion, revalidation, renewal or extension of a rating therein -
 - (a) subject to the provisions of paragraph (5) of this Article, if undergoing dual instruction for the purpose of obtaining a student pilot's licence or for the purpose of becoming qualified for the endorsement of an additional category rating on a private, commercial, or airline transport pilot licence;
 - (b) subject to the provisions of paragraph (6) of this Article, if flying for the purpose of becoming qualified for the issue, revalidation or re-issue of a flight crew licence (other than a student pilot licence) or for the renewal of a category rating therein and was, within the immediately preceding six months, the holder of a flight crew licence (other than a student pilot licence) appropriate to the category and class or type of aircraft flown or was serving as a pilot in the Defence Forces of the State and has not, so far as that person is aware, suffered any decrease in medical fitness such that the medical requirements specified in this Order as appropriate to the class of licence for which qualification is sought cannot be met in that case;
 - (c) subject to the provisions of paragraph (7) of this Article, if acting as pilot or flight engineer under the observation or supervision of an examiner on a flight forming part of a skill test or proficiency check required to be performed for the issue, re-issue, revalidation or renewal of a licence or rating and being undertaken on the instructions of such examiner;
 - (d) subject to the provisions of paragraph (8) of this Article, if, as the holder of a pilot licence, acting within the State as pilot of an aircraft of a category endorsed on that licence, but of a class or type other than a class or type for which the licence is rated, for the purpose of becoming qualified for an additional class or type rating in such a category in accordance with the provisions of paragraph (2) of Article 16 of this Order.
- (5) The following conditions shall apply to any flight made in accordance with sub-paragraph (a) of paragraph (4) of this Article:-
 - (a) a person undergoing dual instruction for the purpose of obtaining a student pilot's licence shall be not less than 15 years of age and shall be not less than 16 years of age before undertaking an initial solo flight;

- (b) the holder of a student pilot's licence shall not fly solo in an aircraft unless under the supervision and with the permission of an authorised flight instructor and such a flight, where authorised, shall be conducted wholly within the territorial limits of State;
 - (c) a person undergoing dual instruction shall be accompanied in the aircraft by a duly authorised instructor who is entitled under this Order to give instruction in flying the category of aircraft flown;
 - (d) the aircraft shall be equipped with fully functioning dual flying controls;
 - (e) no other person, except a duly authorised instructor or an examiner, shall be carried in the aircraft.
- (6) The following conditions shall apply to any flight made in accordance with sub-paragraph (b) of paragraph (4) of this Article-
- (a) no other person shall be carried in the aircraft, except a flight crew member, an examiner, a duly authorised instructor or, if the pilot-in-command of the aircraft is the holder of an appropriate licence, a person carried for the purpose of being trained as a member of the flight crew of the aircraft;
 - (b) each flight shall be made in accordance with instructions given by a duly authorised instructor and shall terminate at the aerodrome of departure, provided, however, that intermediate practice landings may be made elsewhere if made in accordance with such instruction;
 - (c) each flight shall be made wholly within the territorial limits of the State unless otherwise permitted by the Authority.
- (7) The following condition shall apply to any flight made in accordance with sub-paragraph (c) of paragraph (4) of this Article:-
- (a) the person making the flight shall be not less than 17 years of age;
 - (b) no other person, except a flight crew member, an examiner or a duly authorised instructor shall be carried in the aircraft.
- (8) The following conditions shall apply to any flight made in accordance with sub-paragraph (d) of paragraph (4) of this Article:-
- (a) if the licence is not a licence entitling the holder to act as pilot-in-command of a commercial transport aircraft in the category of the aircraft flown, no other person shall be carried in the aircraft, except a flight crew member, an official examiner, a duly authorised instructor, an authorised officer or a person giving instruction in the

circumstances referred to in the proviso to paragraph (1) of Article 17 of this Order;

- (b) if the licence is a licence entitling the holder to act as pilot-in-command of a commercial transport aircraft in the category of the aircraft flown, no other person shall be carried in the aircraft, except a flight crew member, an examiner, a duly authorised instructor, a person giving instruction in the circumstances referred to in the proviso to paragraph (1) of Article 17 of this Order or a person carried with the consent of the operator of the aircraft for the purpose of being trained to perform duties as a flight crew member.
- (9) An applicant for the issue, or re-issue of a flight engineer's licence or for the issue, re-validation or renewal of a type rating thereon may act in the capacity of flight engineer in an aircraft of the type for which such issue, revalidation, re-issue or endorsement is sought if so acting under the direct supervision of a flight engineer instructor on that aircraft.
- (10) For the purposes of this Article, a valid and subsisting licence, other than a JAA licence, issued by any other state which is a member of the International Civil Aviation Organisation in conformity with Annex I (Personnel Licensing) to the Chicago Convention purporting to authorise the holder thereof to act as a flight crew member of an aircraft, not being a licence purporting to authorise that holder to act as a student pilot only, shall be deemed to be a licence validated by the Authority under the provisions of this Order entitling the holder thereof to fly as a member of the flight crew of a private aircraft³ insofar as the holder is permitted to do so by the terms of the licence and by the law of the state by which it was issued:

Provided that-

- (i) the holder of such a licence shall not, for the purposes of this Order, exercise any privilege relating to instruction in flying or flight under the instrument flight rules which may be attached to the licence unless otherwise so entitled under this Order,
 - (ii) if the Authority sees fit to do so, it may at any time prohibit the holder of such a licence from exercising the privileges conferred by this subparagraph and, in that event, such licence shall cease to be deemed to be a licence validated by the Authority under the provisions of this Order.
- (11) For the purposes of this Article and of Schedule VII to this Order "appropriate licence" means a licence, other than a JAA licence, which

³ i.e. an aircraft used in the private category as permitted by the certificate of airworthiness issued by its state of registry.

entitles the holder to perform the functions which are undertaken in relation to the aircraft concerned and the flight on which it is engaged.

- (12) The holder of a JAA flight crew licence may, without formality, exercise the privileges of that licence in an aircraft registered in the State.
- (13) This Article shall not apply to a person acting as pilot of a glider which is being flown as a private aircraft.

Issue of Licences to Flight Crew Members

6. (1) Subject to and in accordance with the provisions of this Order, the Authority may issue a licence to any person applying therefor to act as a flight crew member of an aircraft registered in the State in any of the following capacities:-

pilot or flight engineer,

upon its being satisfied that the applicant is qualified in accordance with the provisions of this Order, or with those of the applicable Joint Aviation Requirements in the case of a JAA licence, to act in the capacity to which the licence relates.

- (2) A licence, other than a JAA licence, issued under the provisions of paragraph (1) of this Article may be made subject to any conditions which the Authority deems fit.
- (3) The Authority may, in respect of a particular licence or class of licence issued under the provisions of paragraph (1) of this Article, other than a JAA licence, direct the manner, nature and frequency of skill tests and proficiency checks which the holder of the particular licence or class of licence shall be required to undergo during the validity period of the licence and may authorise an examiner for the purpose of carrying out such tests or checks. The holder of a JAA licence issued by the Authority shall be required to comply with the applicable Joint Aviation Requirements in respect of skill tests and proficiency checks.

Medical Fitness

7. (1) A person who applies for a licence or a rating thereon, other than a JAA licence or a rating thereon, to act in any capacity as a flight crew member, an air traffic controller, a student air traffic controller, a radio officer, a student radio officer or an aerodrome flight information service officer, shall meet the medical requirements specified in the appropriate Part of this Order or as otherwise directed in a direction under this Order. A person who applies

for a JAA licence or rating shall meet the medical requirements of the applicable Joint Aviation Requirements and in particular, an applicant for a JAA pilot licence shall hold a medical certificate in accordance with the applicable Joint Aviation Requirements appropriate to the privileges of that licence.

- (2) The holder of a licence to act in any capacity as a flight crew member shall not exercise the privileges of that licence during any period in which that person is aware of any illness or decrease in medical fitness such that, for the time being, the medical requirements specified in paragraph (1) above cannot be met in that case.
- (3) The holder of a licence, other than a JAA licence, to act in any capacity as a flight crew member shall make a declaration to the Authority-
 - (a) immediately, of any accident which may occur to the holder during the performance of that holder's duties, or of any accident which may otherwise happen to the holder and which involves any incapacity for work;
 - (b) of any illness involving incapacity for work during ten days or more, as soon as the period of ten days has elapsed;
 - (c) immediately, of any medical operation or investigation involving, in either case, incapacity for work;

and shall not exercise the privileges of that licence until a medical report has been furnished to the Authority, giving the nature of the injury, illness or other cause of incapacity, the treatment received and that holder's present condition and the licence holder has, in the light of such report, either been medically re-examined and declared fit so to act or has been informed by the Authority that such medical re-examination is not required.

The holder of a JAA flight crew licence shall, on becoming aware of a decrease in medical fitness, comply with the applicable Joint Aviation Requirements (JAR-FCL - Medical) in that regard.

- (4) The holder of a licence to act in any capacity as a flight crew member may be required by the Authority to submit from time to time to further medical examinations carried out in accordance with arrangements approved by the Authority or, in the case of a JAA licence, as required by the applicable Joint Aviation Requirements.
- (5) A licence to act in any capacity as a flight crew member issued or validated under this Order shall be deemed to be suspended upon the pregnancy of the holder being diagnosed and shall remain suspended until the holder has

been medically examined after the termination of the pregnancy and has been assessed as fit to resume the exercise of the privileges of the licence.

- (6) A holder of an air traffic controller licence issued under this Order who suffers any personal injury or illness involving incapacity to undertake the functions to which that licence relates throughout a period of 30 consecutive days shall inform the Authority in writing of such injury or illness as soon as possible.
- (7) In the case of an air traffic controller who is unable to undertake the functions to which that licence relates under the conditions described in paragraph (6) of this Article, the air traffic controller's licence shall be deemed to be suspended and as soon as the period of injury or illness referred to in paragraph (6) has elapsed, the suspension of the licence shall cease-
 - (a) upon the holder being medically examined under arrangements approved by the Authority and assessed as fit to resume the exercise of the privileges of the licence; or
 - (b) upon the Authority exempting the holder from the requirements of a medical examination, subject to such conditions as the Authority may think fit.
- (8) A holder of a radio officer's licence issued under this Order who suffers any personal injury or illness involving incapacity to undertake the functions to which that licence relates throughout a period of 30 consecutive days shall inform the Authority in writing of such injury or illness as soon as possible.
- (9) In the case of a radio officer who is unable to undertake the functions to which that licence relates under the conditions described in paragraph (8) of this Article, the radio officer's licence shall be deemed to be suspended and, as soon as the period of injury or illness referred to in paragraph (8) has elapsed, the suspension of the licence shall cease-
 - (a) upon the holder being medically examined under the arrangements approved by the Authority and assessed as fit to resume the exercise of the privileges of the licence; or
 - (b) upon the Authority exempting the holder from the requirements of a medical examination subject to such conditions as the Authority may think fit.

Aircraft Maintenance Engineers to be Licensed

8. (1) Subject to the provisions of this Article, a person may not certify any matter requiring certification by or under Articles 7 (3), 18 and 19 of the Irish

Aviation Authority (Airworthiness of Aircraft) Orders, 1996 to 1997, unless such person is the holder of a current licence to act in the capacity of an aircraft maintenance engineer issued or validated by the Authority and entitling the holder to certify that matter or is a person designated in accordance with paragraph (4) of this Article to certify that matter or is a person otherwise approved by the Authority in that behalf under those Orders or under this Order.

- (2) When an aircraft registered in the State is within the territory of such other state as may be directed by the Authority and subject to such conditions as are contained in that direction, the certification referred to in paragraph (1) of this Article may be performed by the holder of an ICAO Aircraft Maintenance Licence issued or validated by the competent civil aviation licensing authority of such other state in accordance with Annexe 1 to the Convention or by a person authorised or approved to issue such certification by such authority.
- (3) Subject to and in accordance with the provisions of this Order, the Authority may issue a licence to any person applying therefor who satisfies the appropriate requirements of this Order to act in the capacity of aircraft maintenance engineer in any of the categories and ratings specified in Article 61 of this Order or in the applicable Joint Aviation Requirements: provided that, the Authority shall not consider, except in the case of a JAR-66 aircraft maintenance licence, an application for a licence to act in the capacity of aircraft maintenance engineer in respect of aircraft or engines of such type, size or complexity that they should in the opinion of the Authority be certified only by persons designated in that behalf in accordance with paragraph (4) of this Article.
- (4)
 - (a)
 - (i) The Authority may, subject to the requirements of the applicable Joint Aviation Requirements, approve an organisation (in this Order referred to as "an Approved Organisation") for the overhaul, modification, repair or maintenance of aircraft including their accessories and component parts and may vest in that organisation any or all of the privileges appropriate to the categories and ratings of an aircraft maintenance licence.
 - (ii) An Approved Organisation may, subject to the extent of the privileges so vested and to the requirements of the applicable Joint Aviation Requirements and to any conditions or limitations which the Authority may impose, designate persons to certify on its behalf any or all of the matters requiring the certification referred to in paragraph (1) of this Article.
 - (iii) A person so designated may act in that capacity only while so designated and then only to the extent to which that person is

entitled so to act in accordance with the terms of that designation.

- (iv) A person shall only be designated in accordance with this sub-paragraph to certify matters which that person is competent to certify and that person shall meet such requirements as to the qualifications, training and experience as are acceptable to the Authority in relation to such persons in the organisation or type of organisation concerned and the terms of the designation.
- (b)
- (i) The Authority, on sufficient grounds being shown to its satisfaction, after due investigation by it and subject to the provisions of the applicable Joint Aviation Requirements, may by written notice to an Approved Organisation, on and from a date specified in such notice, withdraw the approval and thereupon the vesting effected by such approval shall cease to have effect.
 - (ii) On receipt of such notice the organisation shall forthwith cause all persons concerned in the organisation to be notified of such withdrawal and of the specified date thereof and shall return the letter of approval to the Authority.
 - (iii) On and from such date persons designated by the organisation shall not certify any matter requiring the certification referred to in paragraph (1) of this Article except insofar as they may be otherwise entitled to certify that matter under this Order, or under the Irish Aviation Authority (Airworthiness of Aircraft) Orders, 1996 to 1997, or unless redesignated by the organisation in the event of its subsequent approval by the Authority under sub-paragraph (a) of this paragraph.
- (5) In this Article -

“ICAO Aircraft Maintenance Licence” means an aircraft maintenance licence as described in Chapter 4, section 4.2. of Annexe 1 to the Chicago Convention.

- (6) A person duly designated under paragraph (4) of this Article and a person licensed or approved under paragraph (1) of this Article shall, while so designated, licensed or approved and when acting within the terms of such designation, licence or approval, be regarded as a person approved by the Authority for the purposes of Article 25 of the Irish Aviation Authority (Airworthiness of Aircraft) Orders, 1996 to 1997.

Validity Periods of Licences, Ratings, Examiner Authorisations and Medical Certificates

9. (1) The validity of a licence shall be determined by the validity of the ratings contained therein. Subject to the provisions of this Order a pilot, flight engineer, maintenance, air traffic control or radio officer licence, issued or re-issued thereunder, shall remain effective for a period not exceeding 5 years or such other period as may be specified in respect of a particular class of licence by a direction under this Order.

(2) The validity period of a rating issued to a pilot or flight engineer, as applicable, shall be as follows:-

Instrument Rating	1 Year
Instructor Rating	3 Years
Single-pilot Aeroplane Class Rating	2 Years
Multi-engine Aeroplane Class Rating	1 Year
Type Rating (Aeroplane & Helicopter)	1 Year

or, as otherwise directed or, in the case of a JAA licence, as specified in the applicable Joint Aviation Requirements.

(3) The validity period of an authorisation issued to a pilot or flight engineer shall be as follows:-

Synthetic Flight Instructor Authorisation	3 Years
Examiner Authorisation	3 Years

or, as otherwise directed or, in the case of a JAA licence, as specified in the applicable Joint Aviation Requirements.

(4) The validity period of a medical certificate in respect of a pilot or flight engineer, as applicable, shall be as follows:-

(a) Class 1 Medical Certificate -

issued before the applicants 40 th birthday	1 Year
issued from the applicants 40 th birthday	6 Months

or, as otherwise directed or, in the case of a JAA licence, as specified in the applicable Joint Aviation Requirements.

(b) Class 2 Medical Certificate -

issued before the applicants 30 th birthday	5 Years
issued from age 30 and before applicants 50 th birthday	2 Years
issued from age 50 and before applicants 65 th birthday	1 year
above the age of 65	6 months

or, as otherwise directed or, in the case of a JAA licence, as specified in the applicable Joint Aviation Requirements.

(5) The validity periods of other licence ratings shall be as follows :-

Aircraft maintenance licence rating	2 Years
Air traffic controller licence rating	
- issued before the applicant's 40 th birthday	2 Years
- issued after the applicant's 40 th birthday	1 Year
Aerodrome flight information officer service officer licence	2 Years
Radio officer licence rating	1 Year

or, as otherwise directed or, in the case of a JAA licence, as specified in the applicable Joint Aviation Requirements.

A JAA licence shall remain effective for such period as is shown therein and which shall not exceed such period as is specified in the applicable Joint Aviation Requirements.

Air Traffic Controllers and Aerodrome Flight Information Services Officers to be Licensed

10. (1) Subject to the provisions of this Order, a person shall not provide at any place in the State any type of air traffic control service or an aerodrome flight information service or, purport, whether by use of a radio call sign or in any other way, to be a person who may provide any type of air traffic control service or an aerodrome flight information service unless-
- (a) in the case of an air traffic control service, that person is the holder of and complies with the terms of-

- (i) a valid air traffic controller's licence issued under this Order authorising the holder to provide that type of service at that place; or
 - (ii) a valid air traffic controller's licence issued under this Order which does not authorise the holder to provide that type of service at that place except where supervised by a person who is present at the time and who is qualified by way of licence endorsement to provide such supervision and who is the holder of a valid air traffic controller's licence so issued which authorises that holder to provide at that place the type of air traffic control service which is being provided; or
 - (iii) a valid student air traffic controller licence issued under this Order which does not authorise the holder to provide that type of service at that place unless supervised by person who is present at the time, and who is qualified by way of licence endorsement to provide such supervision, and who is the holder of a valid air traffic controller licence so issued which authorises that holder to provide at that place the type of air traffic control service which is being provided.
- (b) in the case of an aerodrome flight information service, that person is the holder of and complies with the terms of an aerodrome flight information service officer's licence issued under this Order authorising the holder to provide such a service at that place.
- (2) Paragraph (1) of this Article shall not apply until 1 Jan 2004 to a person who is acting in the course of duty, in relation to an air traffic control service or an aerodrome flight information service, as a member of the Authority, and shall not apply to a person who is a member of the Defence Forces (within the meaning of the Defence Act, 1954 (No. 18 of 1954) but may be made applicable to such a person by a direction under this Order when deemed appropriate subject to the agreement of the Minister for Defence.

Issue of Air Traffic Controller and Aerodrome Flight Information Services Officers Licences

11. (1) Subject to and in accordance with the provisions of this Order, the Authority may issue a licence, subject to any conditions which it deems fit, to any person to act as an air traffic controller, as a student air traffic controller or as an aerodrome flight information service officer, upon the Authority being satisfied that the applicant is a fit person to hold the licence and is qualified in accordance with the provisions of this Order to act in the capacity to which the licence relates.

- (2) An applicant for or a holder of an air traffic controller's licence, a student air traffic controller's licence or an aerodrome flight information service officer's licence shall upon such occasions as the Authority may require-
- (a) submit to medical examination by a person approved by the Authority either generally or in a particular case who shall make a report to the Authority in such form as the Authority may require; and
 - (b) submit to such examinations and tests and furnish such evidence as to that applicant's or that holder's state of knowledge, experience, competence and skill, as the Authority may require.
- (3) On the basis of the medical examination referred to in paragraph (2) of this Article, a person approved by the Authority as competent to do so may issue medical certificates subject to such conditions as that competent person thinks fit to the effect that the holder of the licence has been assessed as fit to perform the functions to which the licence relates. The certificate shall, without prejudice to Article 7 of this Order, be valid for such period as is specified therein and shall be deemed to form part of the licence.
- (4) (a) The holder of an air traffic controller's licence or student air traffic controller's licence shall not provide any type of air traffic control service at any such aerodrome or place as is referred to in Article 10 of this Order unless that licence includes a medical certificate issued and in force under paragraph (3) of this Article.
- (b) The holder of an aerodrome flight information service officer's licence shall not provide any type of aerodrome flight information service at any such aerodrome or place as is referred to in Article 10 of this Order unless that licence includes a medical certificate issued and in force under paragraph (3) of this Article.
- (c) Subject to the provisions of paragraph 3 of Schedule VIII to this Order, applicants for the issue, re-issue, validation or revalidation of an air traffic controller's licence, a student air traffic controller's licence or an aerodrome flight information service officer's licence shall meet the following standards of medical requirements set out in that Schedule -

Medical Assessment

Air Traffic Controller

Class 3

Student Air traffic Controller	Class 3
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Aerodrome Flight Information Service Officer	Class 2
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Aerodrome Flight Information Services Manual

12. A person shall not provide an aerodrome flight information service at any time unless -
- (a) the service is provided in accordance with the standards and procedures specified in an aerodrome flight information service manual in respect of that aerodrome,
 - (b) the manual is produced to the Authority within a reasonable time after a request for its production is made by the Authority, and
 - (c) such amendments or additions as the Authority may from time to time require have been made to the manual.

Radio Officers to be Licensed

13. (1) Subject to the provisions of this Order, a person shall not provide at any place in the State any type of aeronautical communications service or, purport, whether by use of a radio call sign or in any other way, to be a person who may provide any type of aeronautical communications service unless, in the case of an aeronautical communications service, that person is the holder of and complies with the terms of -
- (a) a valid radio officer licence issued under this Order authorising the holder to provide that type of service at that place; or
 - (b) a valid student radio officer licence issued under this Order and that person is supervised by a person who is present at the time and who is qualified by way of licence endorsement to provide such supervision and who is the holder of a valid radio officer's licence issued under this Order which authorises that holder to provide at that place the type of aeronautical communications service which is being provided.
- (2) Paragraph (1) of this Article will not apply until 1 January, 2004 to a person who is acting in the course of duty, in relation to an aeronautical communications service, as a serving officer of the Authority.

Issue of Radio Officers Licences

14. (1) Subject to and in accordance with the provisions of this Order, the Authority may issue a licence, subject to any conditions which it deems fit, to any person to act as a radio officer or as a student radio officer upon the Authority being satisfied that the applicant is a fit person to hold the licence and is qualified in accordance with the provisions of this Order to act in the capacity to which the licence relates.
- (2) An applicant for or a holder of a radio officer licence or a student radio officer licence shall, upon such occasions as the Authority may require-
- (a) submit to medical examination by a person approved by the Authority, either generally or in a particular case, who shall make a report to the Authority in such form as the Authority may require; and
 - (b) submit to such examinations and tests and furnish such evidence as to that applicant's or that holder's state of knowledge, experience and skill, as the Authority may require.
- (3) On the basis of the medical examination referred to in paragraph (2) of this Article, a person approved by the Authority as competent to do so may issue medical certificates subject to such conditions as that competent person thinks fit to the effect that the holder of the licence has been assessed as fit to perform the functions to which the licence relates. The certificate shall, without prejudice to Article 7 of this Order, be valid for such period as is specified therein and shall be deemed to form part of the licence.
- (4) (a) The holder of a radio officer's licence or a student radio officer's licence shall not provide any type of aeronautical communications service at any such aerodrome or place as is referred to in Article 13 of this Order unless that licence includes a medical certificate issued and in force under paragraph (3) of this Article.
- (b) Applicants for the issue, re-issue, validation or revalidation of a radio officer licence, a student radio officer licence shall meet such standards of medical requirements as are directed.

Validity of Licences and Ratings

15. (1) A licence may be re-issued by the Authority from the expiration of its period of effectivity or from any time thereafter, on application being made by the holder thereof. The validity of a licence shall be determined by the validity of the ratings contained therein and a rating may be revalidated by the Authority prior to the expiration of its period of validity or, at any time thereafter, renewed, on application being made by the holder thereof.

- (2) An applicant for the re-issue of a licence or the revalidation or renewal of a rating, shall satisfy the appropriate requirements of this Order. An applicant for the re-issue of a JAA licence and, where directed, a flight crew licence, or, for the revalidation or renewal of a rating thereon shall satisfy the appropriate provisions of the applicable Joint Aviation Requirements.
- (3) The Authority may require an applicant for the re-issue of a licence or the revalidation or renewal of a rating thereon to comply with any or all of the requirements for the time being applicable to the issue of a licence or rating of the same class, category or type.
- (4) An applicant for the re-issue of a licence or the revalidation or renewal of a rating thereon shall meet the medical requirements specified in the appropriate Part of this Order or, in the case of a flight crew licence or a JAA licence, the applicable Joint Aviation Requirements.
- (5) The period for which a licence may re-issued or a rating thereon revalidated or renewed shall not exceed the appropriate period set out in Article 9 of this Order or otherwise directed as provided therein, as the case may be, and may be limited to such shorter period as the Authority may determine in a particular case

Rating of Licences

16. (1) A licence to act in the capacity of pilot, flight engineer, aircraft maintenance engineer, air traffic controller, student air traffic controller, radio officer, student radio officer or aerodrome flight information service officer shall, at the time of the issue thereof, be rated in accordance with the provisions of this Order.
- (2) Additional ratings may be endorsed on a licence at any time during its currency on the holder thereof satisfying the appropriate requirements of this Order.
- (3) The Authority may at any time cancel or vary any rating endorsed on a licence or an examiner authorisation issued by the Authority if it is not satisfied that the holder thereof continues to be competent to hold, or to perform the duties appropriate to such rating or authorisation or to perform any particular duty appropriate to such rating or authorisation, as the case may be.

Instruction in Flying

17. (1) A person shall not fly within the State in an aircraft for the purpose of giving instruction in flying to another person carried therein for the purpose of becoming qualified for the issue or re-issue of a pilot licence or the issue,

revalidation or renewal of a rating thereon, or give to any person flying or about to fly as pilot -in-command of an aircraft for the purpose of becoming so qualified any direction in relation to such instruction unless-

- (a) the first-mentioned person (hereinafter referred to as the instructor) holds a current pilot licence issued or validated by the Authority, or a JAA licence;
 - (b) that licence entitles that instructor to act as pilot-in-command of the aircraft in the circumstances under which the instruction is given;
 - (c) the licence held by the instructor includes an instructor rating issued or validated by the Authority, or, in the case of a JAA licence, by the civil aviation authority of a JAA state, if different from the State, and entitling the instructor to give the instruction undertaken.
- (2) (a) The holder of an instructor rating issued by the Authority under this Order may act in that capacity only to the extent to which the holder is entitled so to act by virtue of the privileges and limitations as are appropriate in accordance with the provisions of this Order to the class of instructor rating held or, in accordance with the applicable Joint Aviation Requirements;
- (b) Subject to any limitations or conditions under which the rating was validated, the holder of an instructor rating validated by the Authority under this Order may act in that capacity only to the extent to which the holder is entitled so to act by the terms of the rating and by the law of the state in which the licence and the rating was issued or, in the case of a rating on a JAA licence, the applicable Joint Aviation Requirements.
- (3) In this Article an "instructor rating" includes, in the case of an instructor rating issued by the Authority, a flight instructor rating class I and a flight instructor rating class II or an instructor rating or authorisation defined under the applicable Joint Aviation Requirements.

Issue of Flight Instructor Rating

18. (1) The Authority may issue to the holder of a current pilot licence, issued or validated by it, a flight instructor rating, on such a person applying therefor, and such a rating shall be graded by the Authority as class I or class II, according to the qualifications of such holder as determined by reference to the appropriate requirements in accordance with Article 43 of this Order for the issue of such a rating.

- (2) An instructor rating shall specify:-
 - (i) the class or type of aircraft in which the holder of the licence is authorised to give instruction;
 - (ii) the ratings for which the holder of the licence is entitled to give instruction.
- (3) An instructor rating may be extended by the Authority to cover the giving of instruction on any other class or type of aircraft or synthetic training device or the giving of instruction for the issue or re- issue of any other licence or the issue, renewal or revalidation of any flight crew rating, on such a holder applying therefor and satisfying the appropriate requirements in accordance with Article 43 of this Order for the issue, renewal, revalidation or extension of such rating.
- (4) An instructor rating may be endorsed, varied, suspended or revoked by the Authority, in accordance with Article 28 of this Order, if it is satisfied that such action is warranted, but such a rating shall otherwise remain valid for such period shown therein not exceeding -
 - (i) 36 months, or
 - (ii) such other period as may be directed,
 - (iii) in the case of a JAA Instructor Rating, as required by the applicable Joint Aviation Requirements,

as the case may be, and may be revalidated or renewed by the Authority, provided that the holder satisfies the appropriate requirements in accordance with Article 43 of this Order for revalidation or renewal of such a rating. The Authority may require an applicant for the revalidation or renewal of an instructor rating to comply with any or all of the requirements for the time being applicable to the issue of such a rating.

- (5) An instructor rating shall not be issued or renewed if the Authority is satisfied that the holder of the licence concerned is not a fit and proper person to give instruction in flying.
- (6) The Authority may, at any time, or at a specified frequency, or both, require the holder of an instructor rating to undergo training as determined by the Authority or an instructor skill test or an instructor proficiency check of such nature, in such a manner and carried out by an authorised examiner in

accordance with Article 24 of this Order, for the purpose of demonstrating that the holder continues to maintain proficiency to act as an instructor in accordance with the privileges of the instructor rating concerned.

Flight under Instrument Flight Rules

19. (1) A person shall not act as pilot-in-command of an aircraft or as co-pilot of a multi-pilot aeroplane or helicopter registered in the State under instrument flight rules unless such person holds a valid instrument rating -
- (a) issued or validated by the Authority and endorsed in or deemed by the Authority to be included in the licence held by such person or in the validation of such licence, as the case may be, and
 - (b) appropriate to the category, class or type of aircraft flown.
- (2) A person shall not, within the State, act as pilot-in-command of an aircraft or as co-pilot in a multi-pilot aeroplane or helicopter registered in any other state under instrument flight rules unless that person holds a valid licence, with a current instrument rating endorsed thereon or included therein, issued or validated by the competent licensing authority of the state in which the aircraft is registered and appropriate to the category, class or type of aircraft flown.
- (3) The Authority may issue to the holder of a valid pilot's licence issued or validated by the Authority an instrument rating on the application therefor by the person concerned who shall comply with the appropriate requirements in accordance with Article 44 of this Order for the issue of such rating or, in the case of a JAA licence, with the applicable Joint Aviation Requirements.
- (4) An instrument rating shall, subject to paragraph (6) of this Article, remain valid for the period shown therein not exceeding-
- (i) 12 months, or
 - (ii) such other period as may be directed,

and may be revalidated by an authorised examiner within the three months immediately preceding the expiry date of the rating or renewed by the Authority thereafter, provided that the holder shall comply with the appropriate requirements in accordance with Article 44 of this Order for renewal of such a rating or, where appropriate or as directed, in accordance with the applicable Joint Aviation Requirements.

- (5) The Authority may require an applicant for the revalidation or renewal of an instrument rating to comply with any or all of the requirements for the time being applicable to the issue of such rating.
- (6) An instrument rating may be endorsed, suspended, varied or revoked by the Authority, in accordance with Article 28 of this Order, if it is satisfied that such action is warranted.
- (7) The Authority may, at any time or at a specified frequency or both, require the holder of an instrument rating to undergo an instrument proficiency check of such nature, in such a manner and conducted by an authorised examiner for the purpose of demonstrating that the holder continues to maintain proficiency to act as pilot under instrument flight rules in an aircraft of the category, class or type to which the instrument rating relates.

Issue, Revalidation and Renewal of Night Rating or Night Qualification

20. (1) The Authority may, on application being made therefor by the holder of a current private pilot licence who satisfies the appropriate requirements of Article 45 of this Order, issue to the applicant a night rating or, in the case of a JAA licence, the Authority may issue a night qualification if the applicant complies with the applicable Joint Aviation Requirements.
- (2) Subject to paragraph (3) of this Article, a night rating or night qualification shall remain valid during its period of validity and that of the holder's licence and may be revalidated or renewed provided that the holder satisfies the appropriate requirements of Article 45 of this Order, except that the Authority may require the applicant to comply with any or all of the requirements for the time being applicable to the issue of such rating or qualification.
- (3) A night rating or qualification may be cancelled or suspended by the Authority in accordance with Article 28 if it is satisfied that the holder is no longer competent to hold such a rating or qualification.
- (4) The Authority may, at any time or at such times as may be directed, or both, require the holder of a night rating or qualification to undergo a proficiency check carried out by an authorised examiner in accordance with Article 24 of this Order for the purpose of showing that such holder continues to maintain proficiency to act as pilot-in-command while carrying passengers at night.

Privileges of Licences

21. (1) Subject to the provisions of this Order, the holder of a licence issued by the Authority under this Order may act in the capacity for which that holder is

licensed only to the extent that the holder is entitled so to act by the privileges as are appropriate in accordance with the provisions of this Order, or, for a JAA licence, in accordance with the provisions of the applicable Joint Aviation Requirements, for the licence concerned and shall not exercise any other privileges.

- (2) Subject to the provisions of this Order and to any limitations or conditions under which the licence was validated, the holder of a licence validated by the Authority under this Order may act in the capacity for which that holder is licensed only to the extent that the holder is entitled so to act by the privileges of the licence and of the ratings therein by the law of the state in which the licence was issued.
- (3) Nothing in this Order shall prohibit the holder of a commercial pilot or airline transport pilot licence issued by the Authority from acting as pilot-in-command of an aircraft carrying passengers at night by reason only of the lack of a night rating on that licence.
- (4) The Authority may, at the time of the issue, re-issue, revalidation or renewal of a licence, a rating or an authorisation, at any time during a period for which the licence or rating remains in force, impose such special limitations on or in connection with the exercise of the privileges conferred by the licence, rating or authorisation as the Authority may in the particular case think fit. Any such limitations shall be endorsed on the licence, rating or authorisation and may at any time be removed by the Authority if it is satisfied that they are no longer necessary.
- (5) The Authority may at the time of re-issue of a licence or the renewal or revalidation of a rating or an authorisation, at any time during a period for which a licence, rating or authorisation remains in force, vary any particular or other matter entered therein.
- (6) A person who is the holder of a licence issued or validated under this Order shall not exercise the privileges of that licence and its related ratings, where applicable, while under the influence of any psychoactive substance which might render them unable to safely and properly exercise those privileges.
- (7) A person who is the holder of a licence issued or validated under this Order shall not exercise the privileges of that licence and its related ratings while engaging in any problematic use of substances. A person who engages in problematic use of substances shall cease to engage in safety-critical functions until after undergoing successful treatment for such problematic use, where necessary, and cessation thereof.

Validation of Licences Issued by Foreign States

22. (1) The Authority may, subject to such limitations and conditions as it deems fit and to the provisions of this Article, validate any current licence, other than a JAA licence, including any endorsement thereon or rating included therein issued by the competent licensing authority in another state, and such validation shall confer on such licence the same validity in relation to aircraft registered in the State as if it had been issued under this Order.
- (2) The period of validity of a validation issued under the preceding paragraph shall not exceed twelve months from the date of validation or as required by the applicable Joint Aviation Requirements.
- (3) A validation issued under this Article shall be attached to the licence to which it relates and shall remain so attached during the period for which the validation has been issued.
- (4) The Authority may require a licence holder who applies for a validation to undergo such examinations, tests or checks as it may deem necessary in the particular case or to meet the validation requirements specified in the applicable Joint Aviation Requirements.
- (5) Articles 28, 29, 30, 31 and 33 of this Order shall apply to a validation under this Article in the same manner as they apply to a licence.

Production of Licences

23. A person who is required by the provisions of this Order to hold a licence and who is required by-
 - (a) an authorised officer of the company, or
 - (b) a person authorised for the purpose of this Article by the Authority, or
 - (c) a member of the Garda Síochána,

to produce the licence for inspection by such person, shall forthwith produce the licence for such inspection.

Examinations, Skill Tests, Proficiency Checks and Training Approvals

24. (1) An examination or test required under the provisions of this Order and the Schedules thereto shall be conducted by the Authority or by a person authorised by the Authority for that purpose and as to whose qualifications for the purpose the Authority is satisfied. Where such an examination or test consists of a skill test or a proficiency check in an aircraft, the examiner concerned shall not be the pilot-in-command of that aircraft during the flight concerned unless the examiner is suitably qualified and holds an appropriate flight crew licence with appropriate ratings thereon and agrees to act in that capacity for the flight or for portion of the flight by prior arrangement with

the applicant for the test or with a person who would otherwise act as pilot-in-command of that aircraft for the flight or portion of the flight concerned.

- (2) The Authority may approve a course of training for persons and may, subject to such conditions and requirements as may be directed and, where appropriate, in accordance with the applicable Joint Aviation Requirements, approve an organisation for the conduct of flight or ground training of persons, to include the training of flight crew and engineers and may authorise such an organisation to conduct examinations or tests in accordance with paragraph (1) of this Article for the purposes of issuing licences, ratings and authorisations as appropriate.

Logbooks

25. (1) A person licensed or undergoing training under the provisions of this Order to act in any of the capacities specified in paragraph (1) of Article 6 of this Order shall keep a record of the flights completed in a log- book in such form as may be required or approved by the Authority or, for a JAA licence, as required by the applicable Joint Aviation Requirements.
- (2) Entries in a pilots' logbook shall be made in conformity with the requirements of Schedule VII to this Order or, where appropriate, as required by the applicable Joint Aviation Requirements.
- (3) Entries in a logbook shall be made in ink and shall be kept up to date.
- (4) No person shall-
- (a) deface, disfigure, mutilate, make a deletion in, alter or render illegible a logbook kept under this Article or any entry made in any such logbook or destroy any such logbook during the period for which it is required by this Article to be preserved; or
- (b) wilfully make or procure to be made or assist in the making of any false entry in or material omission from a logbook kept under this Article.
- (5) A person who is required by the provisions of this Article to keep or preserve a logbook and who is required by-
- (a) an authorised officer of the company, or
- (b) a person authorised by the Authority for the purpose of this Article, or

(c) a member of the Garda Siochana,

to produce for inspection such a logbook by such person, shall, within a reasonable time, produce for such inspection any such logbook wherein an entry has been made.

Power to Prevent Aircraft Flying

26. (1) If it appears to the Authority or to an authorised officer that an aircraft is intended or is likely to be flown from any place within the State in such circumstances that there would be a contravention of any of the applicable provisions of this Order or of any directions made thereunder and that the flight would be or could be a cause of danger to persons or property, the Authority or the authorised officer may give to the operator or the pilot-in-command of that aircraft such instructions and take such steps by way of detention of the aircraft or, otherwise, as appear to be necessary in order to prevent the flight and the person so instructed shall comply with such instructions.
- (2) For the purposes of this Article an authorised officer may enter and inspect the aircraft concerned.

Applications in respect of Licences and Ratings

27. (1) An applicant for the issue, validation or re-issue of a licence, or the issue, revalidation or renewal of a rating, or the extension or variation of either, shall make application in such form and shall furnish such particulars as the Authority may from time to time require.
- (2) The Authority may require any such applicant to produce documentary or other satisfactory evidence in support of any particulars given in the application form or of any statement made in relation to the application.

Endorsement, Variation, Limitation, Revocation and Suspension of Licences, Ratings and Authorisations

28. (1) The Authority may-
- (a) if it deems fit, provisionally suspend or vary any licence, rating, authorisation, approval or certificate issued under this Order pending an inquiry into or consideration of the case, or
 - (b) on sufficient grounds being shown to its satisfaction, after due investigation by it, endorse, vary, limit or revoke any licence, rating, authorisation, approval or certificate issued under this Order and may

suspend any such licence, rating, authorisation, approval or certificate for such period as it deems fit.

- (2) The Authority shall give notice to the person or organisation concerned of its intention under paragraph (1) (b) of this Article and the reasons therefor and shall state in the notice that representations in relation to the proposed action may be made in writing to the Authority before a specified date (which shall be not less than 2 weeks after the date of the notice).
- (3) The Authority shall consider any representations made to it pursuant to paragraph (2) before suspending, varying, limiting or revoking a licence, rating, authorisation, approval or certificate under paragraph (1) of this Article or enlarging or reducing the period of a suspension or variation.
- (4) The Authority may, at any time, if it deems fit, remove any such endorsement, limitation, suspension or variation and may issue or issue, with or without an endorsement, a replacement licence, rating or authorisation in lieu of any licence, rating or authorisation which it has suspended, varied or revoked.

Surrender of Licence Documents

29. An endorsement, suspension, variation or revocation of a licence, rating or authorisation done in accordance with Article 28 of this Order shall be communicated in writing by the Authority to the holder of the licence, rating or authorisation concerned and such holder shall forthwith return the licence or other appropriate documentation concerned to the Authority.

Limitation on Issue, Re-issue, Revalidation or Renewal of Licences, Ratings and Authorisations

30. The Authority shall not issue or re-issue a licence, including a JAA licence, or issue, revalidate or renew a rating or authorisation if it is not satisfied that the applicant is a fit and proper person to hold such a licence, rating or authorisation.

Refusal to Issue or Re-issue a Licence or to Issue, Revalidate or Renew a Rating or Authorisation

31. (1) The Authority may refuse to issue or re-issue a licence, including a JAA licence, or to issue, revalidate or renew a rating or authorisation, in any particular case, if, in the circumstances of that case, it appears to the Authority to be inexpedient in the public interest to do so.
- (2) The Authority may specify review procedures in relation to this Order and a person or organisation subject to a decision of the Authority under this

Order or the applicable Joint Aviation Requirements may, where adversely affected thereby, apply for a review of such a decision in accordance with the procedures as directed.

Signature on Licence

32. (1) A licence issued under this Order, including a JAA licence, shall not be valid unless the person to whom the licence was issued has signed the licence with an ordinary signature in ink.
- (2) The holder of a licence issued under this Order, including a JAA licence, shall notify the Authority in writing of the new address within thirty days after any change in the holder's permanent postal address.
- (3) An entry, endorsement or variation shall not be made in or on a licence, including a JAA licence, or in respect of a rating therein, except in a manner and by a person authorised for that purpose by the Authority.

Forgery of Licences

33. A person shall not-
 - (a) forge or fraudulently alter or procure to be forged or fraudulently altered or assist in forging or fraudulently altering any licence, rating, validation, authorisation or certificate required by or issued under this Order or under the applicable Joint Aviation Requirements;
 - (b) fraudulently use a licence, rating, validation, authorisation or certificate or validation issued under this Order, or under the applicable Joint Aviation Requirements, to which that person is not entitled, or
 - (c) fraudulently use any such licence, rating, validation, authorisation or certificate which has been forged, altered, revoked or suspended, or
 - (d) fraudulently lend any such licence, rating, validation, authorisation or certificate to any other person or fraudulently allow or permit any such licence to be used by any other person.

False Representations

34. A person shall not make, procure to be made, or assist in making any false representations for the purpose of procuring for any reason the issue, validation, extension or re-issue of a licence or the issue, renewal, or revalidation of a rating, authorisation or certificate required by this Order or the applicable Joint Aviation Requirements, whether for that person or any other person.

Prohibition on Unauthorised Certifying

35. A person who is the holder of an aircraft maintenance licence, issued or validated under this Order or under the provisions of the applicable Joint Aviation Requirements or who is authorised or is otherwise entitled in accordance with the terms of any provision of this Order or of the Irish Aviation Authority (Airworthiness of Aircraft) Order, 1996 or any directions given thereunder, or of the applicable Joint Aviation Requirements, to certify anything for the purposes thereof, shall not, in acting as being so entitled or authorised, certify anything which the holder is not qualified under the terms or conditions of that licence to certify, or which the holder is not authorised or entitled to certify, as the case may be, or wilfully or negligently certify anything which the holder has not ascertained to be correct.

Exemption from Order

36. An aircraft or organisation in respect of which, or a person in respect of whom, the Authority gives a direction under this Order, for the purposes of this Article, shall be exempt from such provisions of this Order as are specified in that direction, subject to any conditions or limitations contained therein. Such a direction may also be issued by the Authority in respect of the holder of a JAA licence, rating, authorisation, approval or certificate in accordance with the applicable Joint Aviation Requirements.

A direction under this Article may be given by an authorised officer who is authorised in that behalf by the Authority.

PART III

PILOT LICENCES

Classification of Licences

37. Pilot licences shall be classified as follows:

- Student pilot licence
- Private pilot licence
- Commercial pilot licence
- Airline Transport pilot licence
- Glider pilot licence
- Free Balloon pilot licence

Age Limits

38. Applicants for the issue of pilot licences shall be not less than the ages respectively shown hereunder on the date of application-

Student pilot	..	..	..	..	..	16 years
Private pilot	..	..	..	..	..	17 years
Commercial pilot	..	..	..	..	..	18 years
Airline Transport pilot	..	..	..	..	..	21 years
Glider pilot licence (International)	..	..	..	..	..	16 years
Free Balloon pilot licence	..	..	..	..	..	16 years

Medical Requirements

39. (1) Subject to the provisions of paragraph 3 of Schedule VIII to this Order, applicants for the issue or re-issue of pilot licences shall, currently, meet the following standards of medical requirements set out in that Schedule or, for a JAA licence, the applicable Joint Aviation Requirements -

Medical Assessment

Student pilot	Class 2
Private pilot	Class 2
Commercial pilot	Class 1
Airline Transport pilot	Class 1
Glider pilot licence (International)	Class 2
Free Balloon pilot licence	Class 2

- (2) An applicant for the issue or re-issue of a student pilot, private pilot, glider pilot or free balloon pilot licence shall be examined by an Authorised Medical Examiner authorised or designated by the Authority for that purpose. The medical examination shall be conducted in accordance with the form of medical assessment report approved for that purpose by the Authority and as required by the applicable Joint Aviation Requirements. The medical assessment report shall be furnished to the Authority by the medical examiner on completion of the medical examination.
- (3) An applicant for the issue or validation of a commercial pilot or airline transport pilot licence shall undergo a medical examination conducted by a suitably qualified medical examiner, as determined by the Authority, in accordance with arrangements made or approved by the Authority and, where directed, the medical requirements for re-issue or revalidation of such a licence, as for a JAA licence, shall be in accordance with the applicable Joint Aviation Requirements.
- (4) An applicant for the issue of an instrument rating who is the holder of a private pilot's licence shall pass a test in the Class 1 hearing requirement set

out in Schedule VIII to this Order conducted by an Authorised Medical Examiner authorised or designated in accordance with arrangements made or approved by the Authority or, in the case of a revalidation or renewal of such a rating or the holder of a JAA licence, in accordance with the applicable Joint Aviation Requirements.

Technical Requirements

40. (1) (a) Subject to Article 15 of this Order, an applicant for the issue or re-issue of a pilot licence or the issue, revalidation or renewal of a rating or for the issue of an additional rating to fly aeroplanes, helicopters, balloons or, where directed, gliders, shall meet the respective technical requirements of the appropriate Part of Schedule I to this Order or, for a JAA licence, the appropriate requirements of the applicable Joint Aviation Requirements; except that, where directed, an applicant for the re-issue of a licence or the revalidation or renewal of a rating shall also meet the appropriate requirements of the applicable Joint Aviation Requirements.
- (b) Subject to Article 15 of this Order, an applicant for the issue or re-issue of a pilot licence or the issue, revalidation or renewal of a rating to fly aircraft other than aeroplanes, helicopters, balloons or, if directed, gliders, shall meet such respective technical requirements as may be directed by the Authority as appropriate in a particular case.
- (2) Evidence of flying experience shall be in the form of a record in the pilot logbook or in such other form as may be required or approved by the Authority or as required by the applicable Joint Aviation Requirements in a particular case.

Aircraft Ratings

41. (1) Aircraft ratings shall comprise:-
- (a) category ratings;
 - (b) class ratings;
 - (c) type ratings.
- (2) Category ratings shall comprise:-
- (a) aeroplane;

- (b) rotorcraft (e.g. helicopter or gyroplane);
 - (c) glider;
 - (d) free balloon.
- (3) Class ratings shall comprise:
- (a) for aeroplanes:
 - (i) single-engine piston, land;
 - (ii) single-engine piston, sea;
 - (iii) multi-engine piston, land;
 - (iv) multi-engine piston, sea;
 - (v) single-engine turboprop, land.
- (4) Type ratings shall comprise:-
- (a) a rating for each type of multi-engine turbopropeller single-pilot aeroplane;
 - (b) a rating for each type of aeroplane certificated for multi-pilot operation;
 - (c) a rating for each type of helicopter and for each unconventional type of aircraft;
 - (d) in any case not provided for in sub-paragraphs (a), (b) or (c) of this paragraph, a rating for each type of aircraft where so required for the exercise of the privileges set out in Article 46 of this Order or directed under sub-paragraph (b) of paragraph (1) of that Article, or in the case of a JAA licence, in accordance with the applicable Joint Aviation Requirements.

Endorsement of Rating on Licence

42. A pilot licence (other than a student pilot licence) shall, at the time of the issue thereof and thereafter, be endorsed with an aircraft rating appropriate to the category, class or type of aircraft in respect of which the licence holder has satisfied the Authority that such person is qualified by reason of that person's knowledge, experience, skill and medical fitness to act in the capacity to which the licence relates and in accordance with the privileges of the licence, or, in the case of a JAA licence, in accordance with the applicable Joint Aviation Requirements.

Instructor Ratings and Examiner Authorisations

43. (1) An applicant for the issue, extension, revalidation or renewal of an instructor rating or examiner authorisation appropriate to aeroplanes or helicopters shall meet the appropriate requirements set out in Part V of Schedule I to this Order or, in the case of a JAA licence or where directed in respect of the renewal or revalidation of such a rating or authorisation, as specified by the applicable Joint Aviation Requirements.
- (2) An applicant for the issue, extension, revalidation or renewal of an instructor rating appropriate to aircraft other than aeroplanes or helicopters shall meet such requirements as may be directed by the Authority as appropriate.

Instrument Rating

44. (1) An applicant for the issue, renewal, validation or revalidation of an instrument rating-aeroplanes shall meet the appropriate requirements of paragraph 2 of Part VI of Schedule I to this Order or in the case of a JAA licence or where directed in respect of the renewal or revalidation of such a rating, the applicable Joint Aviation Requirements.
- (2) An applicant for the issue, renewal, validation or revalidation of an instrument rating-helicopters shall meet the appropriate requirements of paragraph 3 of Part VI of Schedule I to this Order or in the case of a JAA licence or where directed in respect of the renewal or revalidation of such a rating, the applicable Joint Aviation Requirements.
- (3) An applicant for the issue, renewal or revalidation of an instrument rating appropriate to an aircraft, other than aeroplanes or helicopters, shall meet such requirements as may be directed by the Authority in that case.

Night Rating and Night Qualification

45. (1) The holder of a private pilot licence who applies for the issue of a night rating appropriate to aeroplanes or helicopters shall meet the appropriate requirements set out in sub-paragraphs (3)(b) of Paragraphs 1 or 3, as appropriate, of Part II of Schedule I to this Order or, for a night qualification on a JAA licence, as specified in the applicable Joint Aviation Requirements.
- (2) The holder of a private pilot licence who applies for the issue, renewal or revalidation of a night rating appropriate to an aircraft other than aeroplanes

or helicopters shall meet such requirements as may be directed by the Authority in that case.

Privileges and Limitations

46. (1) Subject to the provisions of Article 21 of this Order, the respective privileges and limitations of pilot licences and ratings issued by the Authority under this Order shall be-
- (a) as set out in the appropriate part of Schedule I to this Order in the case of a licence to fly aeroplanes, helicopters, gliders or free balloons and in the case of a night rating, instrument rating and (flight) instructor rating appropriate to such a licence and endorsed thereon or included therein or, for a JAA licence and its corresponding ratings, as specified in the applicable Joint Aviation Requirements;
 - (b) as directed from time to time in the case of a licence to fly an aircraft other than aeroplanes, helicopters, gliders or free balloons and in the case of a night rating, instrument rating and (flight) instructor rating appropriate to such a licence and endorsed thereon or included therein.

PART IV

FLIGHT ENGINEERS LICENCES

Age Limits

47. An applicant for the issue of a flight engineer licence shall be not less than 18 years of age on the date of application.

Medical Requirements

48. (1) Subject to the provisions of paragraph 3 of Schedule VIII to this Order applicants for the issue, re-issue, validation or revalidation of a flight engineers licence shall meet the following standards of medical requirements set out in that Schedule or, for a JAA licence, the applicable Joint Aviation Requirements:-

- (2) An applicant for the issue, re-issue or validation of a flight engineer licence shall undergo a medical examination conducted by a suitably qualified medical examiner in accordance with arrangements determined or approved by the Authority.

Technical Requirements

49. (1) An applicant for the issue or validation of a flight engineer licence shall, to the satisfaction of the Authority, pass examinations and tests and produce evidence of experience, in accordance with the requirements of knowledge, experience and skill set out in Schedule II to this Order or, for a JAA licence, as required by the applicable Joint Aviation Requirements.
- (2) Subject to paragraphs (2) and (3) of Article 15 of this Order, an applicant for the re-issue or revalidation of a flight engineer's licence shall meet the requirements of paragraph 5 of Schedule II to this Order or, for a JAA licence, as required by the applicable Joint Aviation Requirements.
- (3) Evidence of experience shall be in the form of a record in the flight engineer logbook or in such other form as may, in the particular case, be required or approved by the Authority or, for a JAA licence, as required by the applicable Joint Aviation Requirements.

Licence Ratings

50. (1) A flight engineer licence shall, at the time of the issue thereof and thereafter, be endorsed with a rating for the particular type or types of aircraft, in respect of which the applicant has satisfied the requirements specified in Article 49 of this Order or, for a JAA licence, as required by the applicable Joint Aviation Requirements.
- (2) The holder of a flight engineer licence who makes application for the endorsement of an additional type rating thereon shall meet the requirements specified in paragraphs 1, 2 and 3 of Schedule II to this Order which are applicable to the safe operation of that type of aircraft or, for a JAA licence, as required by the applicable Joint Aviation Requirements.

Privileges and Limitations

51. The holder of a flight engineer licence may act in the capacity of flight engineer in any aircraft of the type for which the holder's licence is endorsed with a rating in accordance with the provisions of Article 50 and Schedule II of this Order.

PART V

ENDORSEMENT OF RADIOTELEPHONY QUALIFICATION ON A PILOT'S LICENCE

Endorsement

52. The Authority may, by endorsement on a current pilot licence issued by it, authorise the holder thereof to operate radiotelephony apparatus in accordance with the provisions of this Part of the Order.

Technical Requirements

53. An applicant for the issue of the endorsement referred to in Article 52 this Article shall -
- (a) require a certificate of proficiency from an examiner duly authorised by the Authority to the effect that the applicant has passed an examination and tests in accordance with the technical requirements appropriate to the issue of a flight radio telephony operator licence endorsement as set out in Schedule III to this Order; or
 - (b) establish to the satisfaction of the Authority that the applicant possesses the required knowledge and skill.

Exercise of Privileges

54. Provided that the applicant is familiar with all pertinent and current information regarding the type or types of radio equipment to be used and the operating procedures to be followed, the holder of a pilot licence endorsed in accordance with Article 52 may exercise the privileges in specified in Article 55 of this Order.

Endorsement of Privileges

55. The holder of a radio telephony endorsement referred to in Article 52 of this Order may carry out the radiotelephone service of any aircraft station operating on frequencies allocated exclusively to the aeronautical mobile service, provided that the operation of the transmitter requires only the use of simple external switching devices excluding all manual adjustment of frequency determining elements and that the stability of the frequencies is automatically maintained by the transmitter itself.

Licence Validity

56. (1) A radiotelephony endorsement shall remain valid during the validity period of the licence concerned and may be renewed if the Authority is satisfied that the holder of the licence has maintained competence to operate radiotelephony apparatus in accordance with the provisions of the endorsement.
- (2) Articles 28, 29, 30, 31 and 33 of this Order shall apply to an endorsement under this Article in the same manner as they apply to a licence.

PART VI

AIRCRAFT MAINTENANCE ENGINEER LICENCES

Age Limits

57. An applicant for the issue of an aircraft maintenance licence shall be not less than 18 years of age on the date of application.

Licence Categories

58. An aircraft maintenance licence may be issued in any one or more of the categories specified in Article 61 of this Order or, for a JAA licence, in accordance with the applicable Joint Aviation Requirements.

Technical Requirements

59. (1) An applicant for the issue of an aircraft maintenance licence shall, to the satisfaction of the Authority, pass examinations and tests and produce evidence of experience in accordance with the requirements of knowledge and experience set out in Part I of Schedule IV to this Order as appropriate to the category or categories in which the licence is sought or in accordance with the applicable Joint Aviation Requirements.
- (2) Subject to paragraphs (2) and (3) of Article 15 of this Order, an applicant for the re-issue of an aircraft maintenance engineer's licence shall meet the requirements of Part II of Schedule IV to this Order or, as appropriate, those of the applicable Joint Aviation Requirements.

- (3) Evidence of experience shall be in the form of such documents, licences or certificates as may be required by the Authority.

Licence Ratings

60. (1) An aircraft maintenance licence may, at the time of the issue thereof, be endorsed with a rating for the particular class or classes or the particular type or types of aircraft or engines or the particular instruments or equipment in respect of which the holder of such licence may exercise the privileges, appropriate to the category or categories in which such licence has been issued, set out in Article 61 of this Order or, for a JAA licence or where directed, in accordance with the applicable Joint Aviation Requirements.
- (2) The holder of an aircraft maintenance licence who makes application for an additional rating in any category shall meet the requirements set out in Schedule IV to this Order, as appropriate to the issue of an additional rating in such category, or the applicable Joint Aviation Requirements.

Licence Categories, Privileges and Limitations

61. (1) Subject to the provisions of paragraphs (1) and (4) of Article 21 of this Order, the privileges of the holder of an aircraft maintenance licence issued by the Authority under this Order, shall be as set out in this Article.
- (2) Provided that, as regards the particular type of aircraft, engine, systems or equipment for which certification is to be given, the holder is familiar with all pertinent and current information regarding the maintenance of airworthiness relating thereto, and on condition that, within the preceding 24 months, the licence holder has either had experience in the inspection, servicing or maintenance of an aircraft, engine, systems or equipment in accordance with the privileges issued by the licence held for not less than a 6 month period or has met the provisions for the issue of the licence with the appropriate privileges to the satisfaction of the Authority, the holder of an aircraft maintenance licence may, in respect of the aircraft, engine, systems or equipment, as the case may be, specified in the rating endorsed on the licence, certify such of the documents relating to matters requiring certification by or under the Irish Aviation Authority (Airworthiness of Aircraft) Order, 1996, or the applicable Joint Aviation Requirements, as are shown hereunder to be appropriate for certification in relation to the particular category or categories in which the holder's licence has been issued:-

Category A - Aircraft (excluding engines)

- (i) certificate of release to service in respect of inspections, tests and approved adjustments, replacements, minor repairs and minor modifications;
- (ii) certificate as to fitness for flight of an aircraft;

Provided that a certificate referred to in paragraph (i) or (ii) above in respect of an aircraft which is or is required to be maintained by an organisation approved for aircraft maintenance in accordance with Article 8(4) of this Order may only be signed or issued by a person designated by that organisation in accordance with the said Article 8(4).

In this category "aircraft" includes such instruments, accessories, component parts, systems and equipment of an aircraft as may be directed or otherwise required by the Authority or the applicable Joint Aviation Requirements.

Category C - Engines (other than those installed in rotorcraft)

- (i) certificate of release to service in respect of inspections, tests and approved adjustments, approved replacements, approved minor repairs and minor modifications: provided that as regards the certification of embodiment of approved modifications and the replacement of approved component parts that -
 - (a) in the case of piston engines, the work has not involved dismantling the engine other than to obtain access to the pistons, cylinders and valve operating mechanism;
 - (b) in the case of turbine engines, the extent of replacement permitted to be certified shall be such as the Authority may approve;
- (ii) certificate as to fitness for flight of an engine installed in an aircraft;

Provided that a certificate referred to in paragraph (i) or (ii) above in respect of an engine, engine equipment or propeller installed in an aircraft which is or is required to be maintained by an organisation approved for aircraft maintenance in accordance with Article 8(4) of this Order may only be signed or issued by a person designated by that organisation in accordance with the said Article 8(4).

In this category "engines" includes such engines, component parts, accessories and equipment of an aircraft, including control systems and propellers, as may be directed or otherwise required by the Authority or the applicable Joint Aviation Requirements.

Category A and C - Rotorcraft (including Installed Engines)

- (i) issue a certificate of release to service in respect of inspections, tests and approved adjustments, replacements, minor repairs and minor modifications;
- (ii) issue a certificate as to fitness for flight of a rotorcraft;

Provided that a certificate referred to in paragraph (i) or (ii) above in respect of a rotorcraft which is or is required to be maintained by an organisation approved for aircraft maintenance in accordance with Article 8(4) of this Order may only be signed or issued by a person designated by that organisation in accordance with the said Article 8(4).

In this category "rotorcraft" includes such engines, instruments, component parts, accessories, systems and equipment of an aircraft as may be directed or otherwise required by the Authority or the applicable Joint Aviation Requirements.

Categories X - Avionic Equipment Ratings

Category X - Compasses

Issue a certificate of release to service in respect of inspections, adjustments, compensation and approved replacements.

In this category "compasses" includes direct and remote reading magnetic and other direction indicating equipment.

Provided that a certificate referred to above in respect of avionic equipment installed in an aircraft which is or is required to be maintained by an organisation approved for aircraft maintenance in accordance with Article 8(4) of this Order may only be signed or issued by a person designated by that organisation in accordance with the said Article 8(4).

Category X - Electrical Systems

- (i) issue a certificate of release to service in respect of inspections, tests and approved adjustments, repairs, replacements and modifications;
- (ii) issue a certificate of fitness for flight for electrical systems installed in aircraft:

Provided that a certificate referred to in paragraph (i) or (ii) above in respect of avionic equipment installed in an aircraft which is or is required to be maintained by an organisation approved for aircraft maintenance in accordance with Article 8(4) of this Order may only be signed or issued by a person designated by that organisation in accordance with the said Article 8(4).

In this category “electrical systems” includes both primary and secondary dc/ac generation and control systems and such parts and equipment as may be directed or otherwise required by the Authority or the applicable Joint Aviation Requirements.

Category X - Instruments

- (i) issue a certificate of release to service in respect of inspections, tests and approved adjustments, repairs, replacements and modifications;
- (ii) issue a certificate of fitness for flight for instrument systems installed in aircraft;

Provided that a certificate referred to in paragraph (i) or (ii) above in respect of avionic equipment installed in an aircraft which is or is required to be maintained by an organisation approved for aircraft maintenance in accordance with Article 8(4) of this Order may only be signed or issued by a person designated by that organisation in accordance with the said Article 8(4).

In this category “instruments” includes such general aircraft instrumentation (including gyroscopic and electrical instruments), electronic analogue and digital instrument equipment, systems for navigation, flight deck displays and flight recorders (including flight management systems and ground proximity warning systems), vibration and maintenance data measurement and recording systems, as may be directed or otherwise required by the Authority or the applicable Joint Aviation Requirements.

Category X - Autopilots

- (i) issue a certificate of release to service in respect of inspections, tests and approved adjustments, repairs, replacements and modifications;
- (ii) issue a certificate of fitness for flight for autopilot systems installed in aircraft;

Provided that a certificate referred to in paragraph (i) or (ii) above in respect of avionic equipment installed in an aircraft which is or is required to be maintained by an organisation approved for aircraft maintenance in accordance with Article 8(4) of this Order may only be signed or issued by a person designated by that organisation in accordance with the said Article 8(4).

In this category “autopilots” includes -

- (a) Aircraft autopilots and associated systems

This rating includes aeroplane autopilots, auto-stabilisers, flight path command, display and guidance systems and coupled autopilots (including auto land and autothrottle systems) and such other aircraft avionic systems and equipment as may be directed or otherwise required by the Authority or the applicable Joint Aviation Requirements;

(b) Rotorcraft stabilisation, autopilots and associated systems

This rating includes rotorcraft stability augmentation systems, autopilots, flight path command, display and guidance systems and coupled autopilots (including automatic transition to hover systems) and such other rotorcraft avionic systems and equipment as may be directed or otherwise required by the Authority or the applicable Joint Aviation Requirements;

Category X - Radio Equipment

- (i) issue a certificate of release to service in respect of inspections, tests and approved adjustments, repairs, replacements and modifications;
- (ii) issue a certificate of fitness for flight for radio systems installed in aircraft;

Provided that a certificate referred to in paragraph (i) or (ii) above in respect of avionic equipment installed in an aircraft which is or is required to be maintained by an organisation approved for aircraft maintenance in accordance with Article 8(4) of this Order may only be signed or issued by a person designated by that organisation in accordance with the said Article 8(4).

In this category "Radio Equipment" includes -

(a) Radio communication and navigation

This rating includes airborne radio communication and navigation systems and equipment and also voice recorder, audio, hyperbolic navigation systems, satellite communication and navigation systems and such other systems and equipment as may be directed or otherwise required by the Authority or the applicable Joint Aviation Requirements;

(b) Pulsed systems

This rating includes airborne primary and secondary radar systems, distance measuring, proximity and collision warning systems and such other systems and equipment as may be directed or otherwise required by the Authority or the applicable Joint Aviation Requirements;

- (3) In this Article and in Part I of Schedule IV to this Order, "approved" means approved by the Authority or, unless otherwise directed by it, by the airworthiness authority of the state of manufacture of the aircraft, engine, component parts, accessories, or equipment, as the case may be.
- (4) An aircraft maintenance licence issued in accordance with this Order shall be equivalent to an ICAO Aircraft Maintenance Licence for the purposes of Annexe 1 to the Chicago Convention.

PART VII

AIR TRAFFIC CONTROLLER, STUDENT AIR TRAFFIC CONTROLLER AND AERODROME FLIGHT INFORMATION SERVICE OFFICER LICENCES

Age Limits

62. (1) A licence may not be issued in respect of -
- (a) a student air traffic controller, or an aerodrome flight information service officer, to a person under the age of 18 years; or
 - (b) an air traffic controller, which contains an Aerodrome Control Rating, an Approach Control Procedural Rating or an Area Control Procedural Rating, to a person under the age of 20 years; or
 - (c) an air traffic controller, which contains any other rating, to a person under the age of 21 years.
- (2) A student air traffic controller licence, an air traffic controller licence, and an aerodrome flight information officer licence shall cease to be valid upon the holder reaching 65 years of age.

Endorsement of Rating on Air Traffic Controller Licences

63. (1) An air traffic controller licence shall, at the time of the issue thereof, be endorsed with the rating or ratings, and applicable unit endorsements, if any, appropriate to the licence in accordance with Article 64 of this Order.

- (2) An additional rating or additional ratings, and applicable unit endorsements, if any, may be endorsed under paragraph (1) of this Article where the holder of the licence meets the requirements of Article 64 of the Order in relation to the additional rating or additional ratings, and unit endorsements, if any, as the case may be.

Licence Ratings

64. (1) The holder of an air traffic controller licence which includes ratings in two or more of the classes specified in paragraph (2) of this Article shall not at any one time, perform the functions specified in respect of more than one of those ratings: Provided that the functions of any of the following groups of ratings may be exercised at the same time -
 - (a) the aerodrome rating and the approach control procedural rating;
 - (b) the approach control procedural rating and the approach control surveillance rating, except that the functions of the approach control procedural rating shall not be exercised at the same time as the functions of the approach control surveillance rating if the service being provided under the latter is a surveillance radar approach terminating at a point less than 2 nautical miles from the point of intersection of the glide path with the runway;
 - (c) the area control procedural rating and the area control surveillance rating.
- (2) Ratings of the following classes may be endorsed on an air traffic controller licence, other than a student air traffic controller licence, issued under this Order and, subject to the provisions of this Order and of that licence, the endorsement of a rating on a licence shall have the privileges respectively specified as follows-
 - (a) Aerodrome Control Ratings shall entitle the holder of the licence, at any aerodrome for which the rating is valid, to provide an air traffic control service for an aircraft on the manoeuvring area or apron of that aerodrome or which is flying in the vicinity of the aerodrome but not with any type of surveillance equipment for which a surveillance control rating is required under this paragraph;
 - (b) An Approach Control Procedural Rating shall entitle the holder of the licence, at an aerodrome for which the rating is valid, to provide an air traffic control service but not with any type of surveillance equipment for which a surveillance control rating is required under this paragraph for an aircraft which is flying in the vicinity of the aerodrome, whether or not it is flying by visual reference to the surface.

- (c) An Approach Control Surveillance Rating shall entitle the holder of the licence, at an aerodrome for which the rating is valid, to provide an air traffic control service with the aid of any type of surveillance equipment for which the rating is valid for an aircraft which is flying within 40 nautical miles of the aerodrome, whether or not it is flying by visual reference to the surface.
 - (d) An Area Control Procedural Rating shall entitle the holder of the licence, at any place for which the rating is valid, to provide an air traffic control service without the aid of any surveillance equipment.
 - (e) An Area Control Surveillance Rating shall entitle the holder of the licence, at any place for which the rating is valid, to provide an air traffic control service with the aid of any type of surveillance equipment for which the rating is valid.
- (3) The Authority may specify examinations or tests for or may require information to be provided in relation to an applicant for a rating for the purposes of establishing that applicant's entitlement to such a rating under this Article and may impose other conditions, where deemed appropriate, for the issue of such a rating.

Privileges, Limitations and Validity of Licences

65. (1) Subject to paragraph (2) of this Article, a licence to act as an air traffic controller shall be valid only for the purpose of authorising the holder to provide the air traffic control service specified in the licence at the place or places, and with the type of surveillance equipment, if any, with the aid of which that service may be provided, as specified in the licence. If, throughout any period of 90 days, the holder of the licence has not at any time provided at a particular place the type of air traffic control service specified in the licence, the rating concerned and its associated endorsements, if any, shall, without prejudice to the Authority's powers under Article 28 of this Order, cease to be valid for that place at the end of that period and the holder of the licence shall forthwith inform the Authority to that effect and shall either arrange for renewal or revalidation of the rating concerned by the Authority or surrender the licence to the Authority.
- (2) The holder of an air traffic controller licence shall be entitled to provide an air traffic control service under the supervision of another person who is present at the time and who is qualified by way of a licence endorsement to provide such supervision or is authorised by the Authority in that behalf and

who is the holder of a valid air traffic controller licence, issued or in force under this Order, which includes a rating for the type of air traffic control service which is being provided at the place concerned.

- (3) A licence to act as a student air traffic controller shall be valid only for the purpose of authorising the holder to provide an air traffic control service under the supervision of another person who is present at the time and who is qualified by way of licence endorsement to provide such supervision or who is authorised by the Authority in that behalf and who is the holder of a valid air traffic controller licence, issued or in force under this Order, which includes a rating for the type of air traffic control service which is being provided by the student air traffic controller at the place concerned.
- (4) A licence to act as an aerodrome flight information service officer shall be valid only for the purpose of authorising the holder to provide an aerodrome flight information service at the aerodrome specified in the licence. If, throughout any period of 180 days, the holder of the licence has not at any time provided such a service at a particular aerodrome, the licence shall cease to be valid for that aerodrome at the end of that period and the holder of the licence shall inform the Authority to that effect and shall either arrange for the re-issue of the licence by the Authority or surrender the licence to the Authority.
- (5) Nothing in this Article shall prohibit the holder of a valid air traffic controller's licence from providing at any place, for which the licence is valid, information to aircraft in flight in the interests of safety.

PART VIII

RADIO OFFICERS AND STUDENT RADIO OFFICERS LICENCES

Age Limits

66. (1) A licence may not be issued in respect of-
 - (a) a student radio officer, to a person under the age of 18 years; or
 - (b) a radio officer, to a person under the age of 18 years.
- (2) A student radio officer and a radio officer licence shall cease to be valid upon the holder reaching 65 years of age.

Endorsement of Ratings on Radio Officer Licences

67. (1) A radio officer licence shall, at the time of the issue thereof, be endorsed with the rating and unit endorsements appropriate to the licence.
- (2) Subject to the condition outlined at paragraph (3) below, all ratings shall be valid for one year and shall lapse unless the requirements directed for their renewal are met.
- (3) A rating which is not exercised for 90 days or more shall lapse and the requirements directed for renewal of ratings shall, thereafter, apply.
- (4) The Authority may specify examinations or tests and require information to be provided for the purposes of establishing entitlement to a rating or ratings under this Article.
- (5) Ratings may be general or specific. A general rating will state the place or places at which the holder may exercise the privileges of the licence. Specific ratings will state the types of service which the holder of the licence, endorsed with that rating, may provide, including the type of telecommunications equipment which may be used.

Privileges, Limitations and Validity of licences

68. (1) Subject to paragraph (2) of this Article, a licence to act as a radio officer shall be valid only for the purpose of authorising the holder to provide the aeronautical communications service specified in the licence at the place or places as specified in the licence. If, throughout any period of 90 days, the holder of the licence has not at any time provided at a particular place the type of aeronautical communications service specified in the licence, the licence shall, without prejudice to the Authority's powers under Article 28 of this Order, cease to be valid for that place at the end of that period and the holder of the licence shall forthwith inform the Authority to that effect and shall either arrange for the re-issue of the licence by the Authority or surrender the licence to the Authority.
- (2) A licence to act as a student radio officer shall be valid only for the purpose of authorising the holder to provide an aeronautical communications service under the supervision of another person who is present at the time and is the holder of a valid radio officer licence which includes an endorsement entitling the holder to provide such supervision or who is otherwise authorised by the Authority in that behalf.

- (3) The holder of a valid radio officer licence may act as an operator in an aeronautical station provided that the licence holder is familiar with all pertinent and current information regarding the types of equipment and operating procedures used at that aeronautical radio station.
- (4) Nothing in this Article shall prohibit the holder of a valid radio officer licence from providing at any place, for which the licence is valid, information to aircraft in flight in the interests of safety.

SCHEDULE 1

PILOT TECHNICAL REQUIREMENTS

PART I

Student Pilot licence

1. Student Pilot Licence Requirements - Aeroplane and Helicopter:

The requirements for a student pilot licence to fly an aeroplane or helicopter shall be as follows:-

(1) **Knowledge:**

The applicant shall produce a certificate, signed and dated by a duly authorised flight instructor, that such applicant has demonstrated to the satisfaction of that instructor an adequate knowledge of the rules of the air and local air traffic control procedures.

(2) **Experience:**

(a) The applicant shall produce a certificate, signed and dated by a duly authorised instructor, that such applicant has completed satisfactorily a course of dual flight instruction and having undertaken a satisfactory check flight with that instructor is deemed, in the opinion of such flight instructor, competent to undertake solo flight in an aircraft of the category to be flown under the supervision of an authorised instructor.

(b) Flight time shall be credited in accordance with the requirements of Schedule VII to this Order.

(3) **Certification:**

The certification required under the preceding paragraphs shall be written in the pilot's logbook or licence and shall be signed and dated by the duly authorised flight instructor whom the applicant has satisfied as to knowledge and experience respectively and shall be valid for such period as is determined by the Authority.

(4) **Medical Fitness:**

The applicant shall meet the medical requirements specified in Article 39 of this Order.

(5) **Age Limits:**

Age limits shall be in accordance with Articles 5 and 38 of this Order.

2. Student Pilot Licence Privileges - Aeroplane and Helicopter:

The privileges of the holder of a Student Pilot Licence to act as pilot-in-command and the limitations to be observed in exercising such privileges are as follows:-

- (1) all flights shall be made under the supervision and authority of a duly authorised instructor;
- (2) all solo flights shall be made within the territorial limits of the state unless otherwise permitted by the Authority;
- (3) no person other than an instructor or an authorised examiner may be carried in the aircraft;
- (4) no cross-country flight may be undertaken unless and until a duly authorised flight instructor has certified that the holder of the student pilot licence:-
 - (a) has passed to the satisfaction of such flight instructor an examination in air navigation, rules of the air and air traffic control procedures, elementary map reading and the use of the compass in flight; and
 - (b) is competent to undertake cross-country flight.

PART II

Private Pilot Licence

1. Private Pilot Licence Requirements - Aeroplane:

The requirements for a private pilot licence to fly an aeroplane shall be as follows:-

(1) **Knowledge:**

The applicant shall pass an examination in at least the following subjects:-

(a) Air Law:

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

(b) Aeroplanes - General Knowledge:

(i) principles of operation of aeroplane powerplants, systems and instruments;

(ii) operating limitations of aeroplanes and powerplants; relevant operational information from the flight manual or other appropriate document;

(c) Flight Performance and Planning:

(i) effects of loading and mass distribution on flight characteristics; mass and balance calculations;

(ii) use and practical application of take-off, landing and other performance data;

(iii) 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;

(d) Human Performance and Limitations:

human performance and limitations relevant to the private pilot (aeroplane);

(e) Meteorology:

application of elementary aeronautical meteorology; use of and procedures for obtaining meteorological information; altimetry;

(f) Navigation:

practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;

- (g) Operational Procedures:
 - (i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
 - (ii) appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;
- (h) Principles of flight:

principles of flight relating to aeroplanes; and
- (i) Radiotelephony:

radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in the event of communication failure.

(2) Examination - Aeroplanes:

The examination shall be based on a syllabus determined by the Authority and shall include an examination on the types of aeroplanes certificated for multi-pilot crew operations for which the licence is sought.

(3) Experience - Aeroplane:

- (a) The applicant shall have satisfactorily completed as pilot of aeroplanes not less than 45 hours of flight time which shall include not less than:-
 - (i) 10 hours of solo flight time, supervised by a duly authorised flight instructor, including at least 5 hours of solo cross-country flight time with at least one solo cross-country flight totalling not less than 150 nautical miles in the course of which full-stop landings at two different aerodromes shall be made;
 - (ii) 5 hours of instrument instruction time of which not more than 2 hours may be instrument ground time; and
 - (iii) 5 hours as pilot-in-command or dual instruction flight time during the 90 day period immediately preceding the date of application.
- (b) If the privileges of the licence are to be exercised at night, the applicant shall have completed an additional 5 hours of flight time at night in an aeroplane, including 3 hours of dual instruction with navigational instruction and 5 solo take-offs, circuits and full-stop landings.

- (c) The Authority shall determine whether experience as a pilot under instruction in an approved synthetic flight trainer is acceptable as part of the total flight time of 45 hours. Credit for such experience shall be limited to a maximum of 5 hours.
- (d) When the applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and, if so, the applicant may be credited with not more than 6 hours of such flight time, and flight time requirements of subparagraph 3(a) may be reduced accordingly.
- (e) Flight time shall be credited in accordance with the requirements of Schedule VII to this Order.

(4) Flight Instruction - Aeroplane:

The applicant, who shall hold a student pilot licence - aeroplane, shall have received dual instruction in an aeroplane from a duly authorised 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 private pilot:-

- (i) pre-flight operation, including mass and balance determination, aeroplane inspection and servicing;
- (ii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
- (iii) control of the aeroplane by external visual reference;
- (iv) flight at critically slow airspeeds, recognition of, and recovery from, incipient and full stalls;
- (v) flight at critically high airspeeds; recognition of and recovery from spiral dives;
- (vi) normal and cross-wind take-offs and landings;
- (vii) maximum performance (short field and obstacle clearance) take-offs; short field landings;
- (viii) flight by reference solely to instruments, including the completion of a level 180° turn;
- (ix) cross-country flying using visual reference, dead-reckoning and, where available, radio navigation aids;

- (x) emergency operations, including simulated aeroplane equipment malfunctions; and
- (xi) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology.

(5) **Skill - Aeroplane:**

The applicant shall have demonstrated to the satisfaction of the Authority the ability to perform as pilot-in-command of an aeroplane, the procedures and manoeuvres described in sub-paragraph 1(4), with a degree of competency appropriate to the privileges issued to the holder of a private pilot licence (aeroplane); and to:-

- (i) operate the aeroplane within its limitations;
- (ii) complete all manoeuvres with smoothness and accuracy;
- (iii) exercise good judgement and airmanship;
- (iv) apply aeronautical knowledge; and
- (v) maintain control of the aeroplane at all times in a manner such that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

(6) **Additional Type and Class Ratings - Aeroplane:**

The applicant shall meet the appropriate requirements specified in Part VII of this Schedule.

(7) **Re-issue and Revalidation of Licences - Aeroplane:**

The validity of a private pilot licence (Aeroplane) is determined by the validity of the ratings therein. Such ratings shall, where directed, be revalidated or renewed in accordance with the applicable Joint Aviation Requirements or as otherwise directed.

(8) **Medical Fitness:**

The Applicant shall meet the medical requirements specified in Article 39 of this Order.

(9) **Age Limits:**

Age limits shall be in accordance with Article 38 of this Order.

2. Private Pilot Licence Privileges and Limitations - Aeroplane:

The privileges of the holder of a valid Private Pilot Licence (Aeroplane) and the limitations to be observed in exercising such privileges are as follows:-

(1) Privileges:

to act, but not for remuneration (save where given in the circumstances mentioned in the proviso to paragraph (2) of Article 2 of this Order) -

- (a) as pilot-in-command or as co-pilot of any aeroplane, when operated as a private aircraft, of the type or types specified in the aircraft rating on the licence;
- (b) as pilot-in-command or as co-pilot of any aeroplane when operated as a private aircraft, of the class specified in the aircraft rating on the licence which is not certificated for operation by a multi-pilot crew and which is not an aeroplane of an unconventional type.

(2) Limitations:

- (a) Before exercising the privileges at night, the licence holder shall have complied with the requirements specified in sub-paragraph (3)(b) of paragraph 1;
- (b) The holder of a private pilot licence (aeroplane) shall not act as pilot-in-command of an aeroplane carrying passengers unless within the preceding 90 days that holder has made three take-offs, circuits and landings as the sole manipulator of the controls in an aeroplane of the same type or class; if the privileges are to be exercised at night the holder shall have completed the aforementioned requirements by night.

3. Private Pilot Licence Requirements - Helicopter:

The requirements for a private pilot licence to fly a helicopter shall be as follows:-

(1) Knowledge:

The applicant shall pass an examination in at least the following subjects:-

- (a) Air Law:

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

(b) Helicopters - General Knowledge:

- (i) principles of operation of helicopter powerplants, transmissions (power-trains), systems and instruments;
- (ii) operating limitations of helicopters and powerplants; relevant operational information from the flight manual or other appropriate document;

(c) Flight Performance and Planning:

- (i) effects of loading and mass distribution on flight characteristics; mass and balance calculations;
- (ii) use and practical application of take-off, landing and other performance data;
- (iii) 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;

(d) Human Performance and Limitations:

human performance and limitations relevant to the private pilot (helicopter);

(e) Meteorology:

application of elementary aeronautical meteorology; use of and procedures for obtaining, meteorological information; altimetry;

(f) Navigation:

practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;

(g) Operational Procedures:

- (i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;

- (ii) appropriate precautionary and emergency procedures including action to be taken to avoid hazardous weather and wake turbulence; settling with power, ground resonance, roll-over and other operational hazards;
- (h) Principles of Flight:
principles of flight relating to helicopters; and
- (i) Radiotelephony:
radiotelephony procedures and phraseology as applied to VFR Operations; action to be taken in the event of communication failure;

(2) Examinations - Helicopters:

The examination shall be based on a syllabus determined by the Authority and shall include an examination on the types of helicopters for which the licence is sought.

(3) Experience - Helicopter:

- (a) The applicant shall have satisfactorily completed as a pilot of helicopters not less than 45 hours of flight time, which shall include not less than:-
 - (i) 10 hours of solo flight time, supervised by a duly authorised flight instructor, including at least 5 hours of solo cross-country flight time with at least one solo cross-country flight totalling not less than 100 NM in the course of which landings at two different points shall be made;
 - (ii) 5 hours of instrument instruction time of which not more than 2 hours may be instrument ground time;
 - (iii) 5 hours as pilot-in-command or dual instruction flight time during the 90 day period immediately preceding the date of application.
- (b) If the privileges of the licence are to be exercised at night, the applicant shall have completed on additional 5 hours of flight time at night in a helicopter, including 3 hours of dual instruction with navigational instruction and 5 solo take-offs, circuits and full-stop landings.

- (c) The Authority shall determine whether experience as a pilot under instruction in an approved synthetic flight trainer is acceptable as part of the total flight time of 45 hours. Credit for such experience shall be limited to a maximum of 5 hours.
- (d) When the applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and, if so, the applicant may be credited with not more than 6 hours of such flight time and flight time requirements of subparagraph 3(a) may be reduced accordingly.
- (e) Flight time shall be credited in accordance with the requirements of Schedule VII to this Order.

(4) Flight Instruction - Helicopters:

The applicant, who shall hold a student pilot licence (helicopter), shall have received dual instruction in a helicopter from a duly authorised 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 private pilot:-

- (i) pre-flight operations, including mass and balance determination, helicopter inspection and servicing;
- (ii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
- (iii) control of the helicopter by external visual reference;
- (iv) recovery at the incipient stage from settling with power; recovery techniques with low-rotor RPM;
- (v) ground manoeuvring and run-ups; hovering; take-offs and landings - normal, out of wind and sloping ground;
- (vi) take-offs and landings with minimum necessary power; maximum performance takeoff and landing techniques; restricted site operations; quick stops;
- (vii) cross-country flying using visual reference, dead-reckoning and, where available, radio navigation aids;
- (viii) emergency operations, including simulated helicopter equipment malfunctions; autorotative approach and landing;

- (ix) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology; and
- (x) operational experience in flight by sole reference to instruments including the safe completion of a level 180° turn, in a suitably instrumented helicopter.

(5) **Skill - Helicopters:**

The applicant shall have demonstrated to the satisfaction of the Authority the ability to perform as pilot-in-command of a helicopter the procedures and manoeuvres described in sub-paragraph 3(4), with a degree of competency appropriate to the privileges issued to the holder of a private pilot licence (helicopter); and to:-

- (i) operate the helicopter within its limitations;
- (ii) complete all manoeuvres with smoothness and accuracy;
- (iii) exercise good judgement and airmanship;
- (iv) apply aeronautical knowledge; and
- (v) maintain control of the helicopter at all times such that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

(6) **Additional Type Ratings - Helicopter:**

The applicant shall meet the appropriate requirements specified in Part VII of this Schedule.

(7) **Re-issue and Revalidation of Licences - Helicopter:**

The validity of a private pilot licence (Helicopter) is determined by the validity of the ratings therein. Such ratings shall, where directed, be revalidated or renewed in accordance with the applicable Joint Aviation Requirements or as otherwise directed.

(8) **Medical Fitness:**

The applicant shall meet the medical requirements specified in Article 39 of this Order.

(9) **Age Limits:**

Age limits shall be in accordance with Article 38 of this Order.

4. Private Pilot Licence Privileges and Limitations - Helicopter:

The privileges of the holder of a valid Private Pilot Licence (Helicopter) and the limitations to be observed in exercising such privileges are as follows:-

(1) **Privileges:**

to act, but not for remuneration (save where given in the circumstances mentioned in the proviso to paragraph (2) of Article 2 of this Order) -

as pilot-in-command or as co-pilot of any helicopter when operated as a private aircraft of the type specified in the aircraft rating on the licence.

(2) **Limitations:**

(a) Before exercising the privileges at night, the licence holder shall comply with the requirements specified in sub-paragraph (3)(b) of paragraph 3.

(b) The holder of a private pilot licence (helicopter) shall not act as pilot-in-command of a helicopter carrying passengers unless within the preceding 90 days that holder has made three take-offs, circuits and landings as the sole manipulator of the controls in a helicopter of the same type or class: if the privileges are to be exercised at night the holder shall have completed the above requirements by night.

PART III

Commercial Pilot Licence

1. Commercial Pilot Licence Requirements - Aeroplane:

The requirements for a commercial pilot licence to fly an aeroplane shall be as follows:-

(1) **Knowledge:**

The applicant shall pass an examination in at least the following subjects:-

(a) Air Law:

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

(b) Aeroplanes - General Knowledge:

- (i) principles of operation and functioning of aeroplane powerplants; systems and instruments;
- (ii) operating limitations of appropriate aeroplanes and powerplants; relevant operational information from the flight manual or other appropriate document;
- (iii) use and serviceability checks of equipment and systems of appropriate aeroplanes;
- (iv) maintenance procedures for airframes, systems and powerplants of appropriate aeroplanes;

(c) Flight Performance and Planning:

- (i) effects of loading and mass distribution on aeroplane handling, flight characteristics and performance; mass and balance calculations;
- (ii) use and practical application of take-off, landing and other performance data;
- (iii) pre-flight and en-route flight planning appropriate to operations under VFR; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; altimeter setting procedures;

(d) Human Performance and Limitations:

human performance and limitations relevant to the commercial pilot - aeroplane;

(e) Meteorology:

- (i) interpretation and application of aeronautical meteorological reports, charts and forecasts; use of and procedures for obtaining meteorological information, pre-flight and in-flight; altimetry;
- (ii) 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; hazardous weather avoidance;

(f) Navigation:

air navigation, including the use of aeronautical charts, instruments and navigation aids; an understanding of the principles and characteristics of appropriate navigation systems; operation of airborne equipment;

(g) Operational Procedures:

- (i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
- (ii) appropriate precautionary and emergency procedures;
- (iii) operational procedures for carriage of freight; potential hazards associated with dangerous goods;
- (iv) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking on and disembarking from aeroplanes;

(h) Principles of Flight:

principles of flight relating to aeroplanes; and

(i) Radiotelephony:

radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure;

(2) Examination - Aeroplanes:

The examination shall be based on a syllabus determined by the Authority and shall include an examination on the type or types of aeroplane for which the licence is sought.

(3) Experience - Aeroplane:

- (a) The applicant shall have satisfactorily completed as a pilot of aeroplanes not less than 200 hours of flight time, or 150 hours if completed during a course of approved training, which shall include not less than:-
 - (i) 100 hours as pilot-in-command, or in the case of a course of approved training, 70 hours as pilot-in-command;

- (ii) 20 hours of cross-country flight as pilot-in-command, including a cross-country flight totalling at least 300 nautical miles in the course of which full-stop landings at two different aerodromes shall be made;
 - (iii) 10 hours of instrument instruction time of which not more than 5 hours may be instrument ground time;
 - (iv) 5 hours of flight time at night in an aeroplane, including 4 hours dual instruction and 5 solo take-offs, circuits and full stop landings;
 - (v) 60 hours of dual instruction or in the case of a course of approved training 80 hours of dual instruction under a duly authorised flight instructor of which not more than 5 hours may be instrument ground time; and
 - (vi) 10 hours of flight time as pilot-in-command during the 90 day period immediately preceding the date of application.
- (b) The Authority shall determine whether experience as a pilot under instruction in an approved synthetic flight trainer 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.
- (c) When the applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and, if so, the applicant may be credited with not more than 30 hours of such flight time or 20 hours having participated in a course of approved training and the flight time requirements of sub-paragraph 3(a) may be reduced accordingly.
- (d) Flight time shall be credited in accordance with the requirements of Schedule VII to this Order.

(4) **Flight Instruction - Aeroplane:**

The applicant shall have received dual instruction in an aeroplane from a duly authorised 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:-

- (i) pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;

- (ii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
- (iii) control of the aeroplane by external visual reference;
- (iv) flight at critically slow airspeeds; spin avoidance; recognition of, and recovery from, incipient and full stalls;
- (v) flight at critically high airspeeds; recognition of, and recovery from, spiral dives;
- (vi) normal and cross-wind take-offs and landings;
- (vii) maximum performance (short-field and obstacle clearance) take-offs; short-field landings;
- (viii) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;
- (ix) cross-country flying using visual reference, dead-reckoning and radio navigation aids; diversion procedures;
- (x) abnormal and emergency procedures and manoeuvres; and
- (xi) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology.

(5) **Skill - Aeroplane:**

The applicant shall have demonstrated to the satisfaction of the Authority the ability to perform as pilot-in-command of an aeroplane, the procedures and manoeuvres described in sub-paragraph 1(4), with a degree of competency appropriate to the privileges issued to the holder of a commercial pilot licence (aeroplane), and to:

- (i) operate the aeroplane within its limitations;
- (ii) complete all manoeuvres with smoothness and accuracy;
- (iii) exercise good judgement and airmanship;
- (iv) apply aeronautical knowledge; and
- (v) maintain control of the aeroplane at all times in a manner such that the successful outcome of a procedure is never seriously in doubt.

(6) **Additional Type and Class Ratings - Aeroplane:**

The applicant shall meet the appropriate requirements specified in Part VII of this Schedule.

(7) Re-issue and Revalidation of Licences - Aeroplanes:

The validity of a commercial pilot licence (Aeroplane) is determined by the validity of the ratings therein. Such ratings shall, where directed, be revalidated or renewed in accordance with the applicable Joint Aviation Requirements or as otherwise directed.

(8) Medical Fitness:

The applicant shall meet the medical requirements specified in Article 39 of this Order.

(9) Age Limits:

Age limits shall be in accordance with Article 38 of this Order.

2. Commercial Pilot Licence Privileges and Limitations - Aeroplane:

The privileges of the holder of a valid Commercial Pilot Licence (Aeroplane) and the limitations to be observed in exercising such privileges are as follows:-

(1) Privileges:

- (a) to exercise all the privileges and to observe the limitations of the privileges of a private pilot licence (aeroplane);
- (b) to act as pilot-in command or co-pilot in any aeroplane, engaged in an operation other than a commercial air transport operation, of the type or types specified in Part 1 of the aircraft rating on the licence;
- (c) to act as pilot-in-command in any aeroplane engaged in a commercial air transport operation, of the type or types specified in Part 1 of the aircraft rating on the licence, which is an aeroplane certificated for single-pilot operation;
- (d) to act as co-pilot in any aeroplane, engaged in an operation other than a commercial air transport operation, of the type or types specified in Part II of the aircraft rating on the licence; and
- (e) to act as co-pilot in any aeroplane, engaged in a commercial air transport operation and certificated for multi-pilot crew operation, of the type or types specified in Part II of the aircraft rating on the

licence, provided that the licence holder shall have passed an examination in the knowledge requirements for the issue of an Airline Transport Pilot Licence (Aeroplane) in accordance with the syllabus determined by the Authority.

(2) **Limitations:**

- (a) The holder of a commercial pilot licence (aeroplane) shall not act as pilot of an aeroplane engaged in commercial air transport operations if the licence holder has attained the age of 60 years except:-
 - (i) as a member of a multi-pilot crew;
 - (ii) such pilot is the only pilot in the flight crew who has attained the age of 60 years; and
 - (iii) such holder has obtained permission from each State into whose airspace the holder wishes to fly.
- (b) The holder of a commercial pilot licence (aeroplane) who has attained the age of 65 years shall not act as a pilot of an aeroplane engaged in commercial air transport operations.

3. Commercial Pilot Licence Requirements - Helicopter:

The requirements for a commercial pilot licence to fly a helicopter shall be as follows:-

(1) **Knowledge:**

The applicant shall pass an examination in at least the following subjects:-

- (a) Air Law:

rules and regulations relevant to the holder of a commercial pilot licence - helicopter; rules of the air; appropriate air traffic services practices and procedures;
- (b) Helicopters - General Knowledge:
 - (i) principles of operation and functioning of helicopter powerplants, transmission (power-trains), systems and instruments;
 - (ii) operating limitations of appropriate helicopters and powerplants; relevant operational information from the flight manual;

- (iii) use and serviceability checks of equipment and systems of appropriate helicopters;
 - (iv) maintenance procedures for airframes, systems and powerplants of appropriate helicopters;
- (c) Flight Performance and Planning:
- (i) effects of loading and mass distribution, including external loads, on helicopter handling, flight characteristics and performance; mass and balance calculations;
 - (ii) use and practical application of take-off, landing and other performance data;
 - (iii) pre-flight and en-route flight planning appropriate to operations under VFR; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; altimeter setting procedures;
- (d) Human Performance and Limitations:
- human performance and limitations relevant to the commercial pilot - helicopter;
- (e) Meteorology:
- (i) interpretation and application of aeronautical meteorological reports, charts and forecasts; use of and procedures for obtaining meteorological information, pre-flight and in-flight; altimetry;
 - (ii) 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; hazardous weather avoidance;
- (f) Navigation:
- air navigation, including the use of aeronautical charts, instruments and navigation aids; an understanding of principles and characteristics of appropriate navigation systems; operation of airborne equipment;
- (g) Operational Procedures:

- (i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
 - (ii) appropriate precautionary and emergency procedures; settling with power, ground resonance, roll-over and other operating hazards;
 - (iii) operational procedures for carriage of freight, including external loads; potential hazards associated with dangerous goods;
 - (iv) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking on and disembarking from helicopters;
- (h) Principles of Flight:
- principles of flight relating to helicopters; and

- (i) Radiotelephony:
- radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure.

(2) Examination - Helicopters:

The examination shall be based on a syllabus determined by the Authority and shall include an examination on the types of helicopters for which the licence is sought.

(3) Experience - Helicopter:

- (a) The applicant shall have satisfactorily completed as a pilot of helicopters not less than 150 hours of flight time, or 135 hours if completed during a course of approved training, which shall include not less than:-
- (i) 35 hours as pilot-in-command;
 - (ii) 10 hours of cross-country flight as pilot-in-command including a cross-country flight totalling at least 150 nautical miles in the course of which landings at two different points shall be made;
 - (iii) 10 hours of instrument instruction time of which not more than 5 hours may be instrument ground time;

- (iv) 5 hours of flight time at night in a helicopter, including 4 hours dual instruction and 5 solo take-offs, circuits and full stop landings;
 - (v) 65 hours of dual instruction or in the case of a course of approved training 75 hours of dual instruction under a duly authorised flight instructor of which not more than 5 hours may be instrument ground time; and
 - (vi) 8 hours of flight time as pilot-in-command during the 90 day period immediately preceding the date of application.
- (b) The Authority shall determine whether experience as a pilot under instruction in an approved synthetic flight trainer is acceptable as part of the total flight time of 150 hours or 135 hours, as the case may be. Credit for such experience shall be limited to not more than 10 hours.
- (c) When the applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and, if so, the applicant may be credited with not more than 30 hours of such flight time or 20 hours, having participated in a course of approved training, and the flight time requirements of subparagraph 3(a) may be reduced accordingly.
- (d) Flight time shall be credited in accordance with the requirements of Schedule VII to this Order.

(4) Flight Instruction - Helicopter:

The applicant shall have received dual instruction in a helicopter from a duly authorised 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:-

- (i) pre-flight operations, including mass and balance determination, helicopter inspection and servicing;
- (ii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
- (iii) control of the helicopter by external visual reference;
- (iv) recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal range of engine rpm;

- (v) ground manoeuvring and run-ups; hovering; take-offs and landings - normal, out of wind and sloping ground; steep approaches;
- (vi) take-offs and landings with minimum necessary power; maximum performance take-off and landing techniques; restricted site operations; quick stops;
- (vii) hovering out of ground effect; operation with external load, if applicable; flight at high altitude;
- (viii) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;
- (ix) cross-country flying using visual reference, dead-reckoning and radio navigation aids; diversion procedures;
- (x) abnormal and emergency procedures, including simulated helicopter equipment malfunctions, autorotative approach and landing; and
- (xi) operating to, from and transiting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology.

(5) **Skill - Helicopters:**

The applicant shall have demonstrated to the satisfaction of the Authority the ability to perform as pilot-in-command of a helicopter, the procedures and manoeuvres described in paragraph 3(4), with a degree of competency appropriate to the privileges issued to the holder of a commercial pilot licence (helicopter); and to:-

- (i) operate the helicopter within its limitations;
- (ii) complete all manoeuvres with smoothness and accuracy;
- (iii) exercise good judgement and airmanship;
- (iv) apply aeronautical knowledge; and
- (v) maintain control of the helicopter at all times in a manner such that the successful outcome of a procedure is never seriously in doubt.

(6) **Additional Type and Class Ratings - Helicopter:**

The applicant shall meet the appropriate requirements specified in Part VII of this Schedule.

(7) **Re-issue and Revalidation of Licence - Helicopter:**

The validity of a commercial pilot licence (Helicopter) is determined by the validity of the ratings therein. Such ratings, where directed, shall be revalidated or renewed in accordance with the applicable Joint Aviation Requirements or as otherwise directed.

(8) **Medical Fitness:**

The applicant shall meet the medical requirements specified in Article 39 of this Order.

(9) **Age Limits:**

Age limits shall be in accordance with Article 38 of this Order.

4. Commercial Pilot Licence Privileges and Limitations - Helicopter:

The privileges of the holder of a valid Commercial Pilot Licence (Helicopter) and the limitations to be observed in exercising such privileges are as follows:-

(1) **Privileges:**

- (a) to exercise all the privileges and to observe the limitations of the privileges of a private pilot licence (helicopter);
- (b) to act as pilot-in-command or co-pilot in any helicopter, engaged in an operation other than a commercial air transport operation, of the type or types specified in Part 1 of the aircraft rating on the licence;
- (c) to act as pilot-in-command in any helicopter engaged in a commercial air transport operation, of the type or types specified in Part 1 of the aircraft rating on the licence, which is a helicopter certificated for single-pilot operation;
- (d) to act as co-pilot in any helicopter, engaged in an operation other than a commercial air transport operation, of the type or types specified in Part II of the aircraft rating on the licence; and
- (e) to act as co-pilot in any helicopter, engaged in a commercial air transport operation and certificated for multi-pilot crew operation, of the type or types specified in Part II of the aircraft rating on the licence, provided that the licence holder shall have passed an examination in the knowledge requirements for the issue of an Airline Transport Pilot Licence (Helicopter) in accordance with the syllabus determined by the Authority.

(2) **Limitations:**

- (a) The holder of a commercial pilot licence (helicopter) shall not act as pilot of a helicopter engaged in commercial air transport operations if the licence holder has attained the age of 60 years except:-
 - (i) as a member of a multi-pilot crew;
 - (ii) such pilot is the only pilot in the flight crew who has attained the age of 60 years; and
 - (iii) such holder has obtained permission from each State into whose airspace the holder wishes to fly.
- (b) The holder of a commercial pilot licence (helicopter) who has attained the age of 65 years shall not act as pilot of a helicopter engaged in commercial air transport operations.

PART IV

Airline Transport Pilot Licence

1. Airline Transport Pilot Licence Requirements Licence - Aeroplane:

The requirements for an airline transport pilot licence to fly an aeroplane shall be as follow:-

(1) **Knowledge:**

The applicant shall pass an examination in at least the following subjects:

(a) Air Law:

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

(b) Aeroplanes - General Knowledge:

(i) general characteristics and limitations of electrical, hydraulic, pressurisation and other aeroplane systems; flight control systems, including autopilot and stability augmentation;

(ii) principles of operation, handling procedures and operating limitations of aeroplane powerplants; effects of atmospheric conditions on engine performance; relevant operational

information from the flight manual or other appropriate document;

- (iii) operating procedures and limitations of appropriate aeroplanes; effects of atmospheric conditions on aeroplane performance;
- (iv) use and serviceability checks of equipment and systems of appropriate aeroplanes;
- (v) 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;
- (vi) maintenance procedures for airframes, systems and powerplants of appropriate aeroplanes;

(c) Flight Performance and Planning:

- (i) effects of loading and mass distribution on aeroplane handling, flight characteristics and performance; mass and balance calculations;
- (ii) use and practical application of take-off, landing and other performance data, including procedures for cruise control;
- (iii) 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;

(d) Human Performance and Limitations:

Human performance and limitations relevant to the airline transport pilot - aeroplane;

(e) Meteorology:

- (i) 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;
- (ii) 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 takeoff, en-route and landing conditions;

- (iii) causes, recognition and effects of engine and airframe icing; frontal zone penetration procedures; hazardous weather avoidance;
- (iv) practical high altitude meteorology, including interpretation and use of weather reports, charts and forecasts; jetstreams;

(f) Navigation:

- (i) air navigation, including the use of aeronautical charts, radio navigation aids and area navigation systems; specific navigation requirements for long-range flights;
- (ii) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aeroplanes;
- (iii) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of radio navigation aids;
- (iv) principles and characteristics of self-contained and external-referenced navigational systems; operation of airborne equipment;

(g) Operational Procedures:

- (i) interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations, and instrument procedure charts for departure, en- route, descent and approach;
- (ii) precautionary and emergency procedures; safety practices associated with flight under IFR;
- (iii) operational procedures for carriage of freight and dangerous goods;
- (iv) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking on and disembarking from aeroplanes;

(h) Principles of Flight:

principles of flight relating to aeroplanes; sub-sonic aerodynamics; compressibility effects, manoeuvre boundary limits, wing design characteristics, effects of supplementary lift and drag devices; relationships between lift, drag and thrust at various airspeeds and in different flight configurations; and

(i) Radiotelephony:

radiotelephony procedures and phraseology; action to be taken in case of communication failure.

(2) **Examination - Aeroplanes:**

The examination shall be based on a syllabus determined by the Authority and shall include an examination on the types of aeroplanes for which the licence is sought.

(3) **Experience - Aeroplane:**

(a) The applicant shall be the holder of a valid instrument rating (aeroplane) and have satisfactorily completed as a pilot of an aeroplane not less than 1,500 hours of flight time, which shall include not less than:-

(i) 250 hours, either as pilot-in-command or made up by not less than 100 hours as pilot-in-command and the necessary additional flight time as co-pilot performing, under the supervision of a duly authorised pilot-in-command, the duties and functions of a pilot-in-command, provided that the method of supervision employed is acceptable to the Authority;

(ii) 200 hours of cross-country flight time, of which not less than 100 hours shall be as pilot-in-command or as co-pilot performing, under the supervision of a duly authorised pilot-in-command, the duties and functions of a pilot-in-command, provided that the method of supervision employed is acceptable to the Authority;

(iii) 75 hours of instrument time of which not more than 30 hours may be instrument ground time; and

(iv) 100 hours of night flight as pilot-in-command or as co-pilot.

- (b) The Authority shall determine whether experience as a pilot under instruction in an approved synthetic flight trainer is acceptable as part of the total flight time of 1500 hours. Credit for such experience shall be limited to a maximum of 100 hours of which not more than 25 hours shall have been acquired in a flight procedures trainer or a basic instrument flight trainer.
- (c) When the applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and, if so, the applicant may be credited with not more than 350 hours of such flight time and the flight time requirements of sub-paragraph 3(a) may be reduced accordingly.
- (d) The total flight time of 1500 hours specified in sub-paragraph 3(a) shall include such flying experience in the type or types of aeroplane to which the application relates as is considered reasonable by the Authority.
- (e) Flight time shall be credited in accordance with the requirements of Schedule VII to this Order.

(4) **Flight Instruction - Aeroplane:**

The applicant shall have received the flight instruction required for the issue of the commercial pilot licence (aeroplane) specified in Part III and the instrument rating (aeroplane) specified in Part VI of this Schedule.

(5) **Skill - Aeroplanes:**

- (a) The applicant shall have demonstrated to the satisfaction of the Authority the ability to perform, as pilot-in-command of a multi-engined aeroplane required to be operated with a co-pilot, the following procedures and manoeuvres:-
 - (i) pre-flight procedures, including the preparation of the operational flight plan and filing of the air traffic services flight plan;
 - (ii) normal flight procedures and manoeuvres during all phases of flight;
 - (iii) procedures and manoeuvres for IFR operations under normal, abnormal and emergency conditions, including simulated engine failure, and covering at least the following:-
 - transition to instrument flight on take-off;

- standard instrument departures and arrivals;
 - en-route IFR procedures and navigation;
 - holding procedures;
 - instrument approaches to specified minima;
 - missed approach procedures; and
 - landings from instrument approaches;
- (iv) abnormal and emergency procedures and manoeuvres related to failures and malfunctions of equipment, such as powerplant, systems and airframe; and
- (v) procedures for crew incapacitation and crew co-ordination, including allocation of pilot tasks, crew co-operation and use of checklists.
- (b) The applicant shall have demonstrated to the satisfaction of the Authority the ability to perform the procedures and manoeuvres described in sub-paragraph (5)(a), with a degree of competency appropriate to the privileges of the holder of an airline transport pilot licence - aeroplane, and to
- (i) operate the aeroplane within its limitations;
 - (ii) complete all manoeuvres with smoothness and accuracy;
 - (iii) exercise good judgement and airmanship;
 - (iv) apply aeronautical knowledge;
 - (v) maintain control of the aeroplane at all times in a manner such that the successful outcome of a procedure or manoeuvre is never in doubt;
 - (vi) understand and apply crew co-ordination and incapacitation procedures; and
 - (vii) communicate effectively with the other flight crew members.
- (6) **Additional Type and Class Ratings - Aeroplane:**

The applicant shall meet the appropriate requirements specified in Part VII of this Schedule.

(7) **Re-issue and Revalidation of Licences - Aeroplanes:**

The validity of an Airline Transport Pilot licence (Aeroplane) is determined by the validity of the ratings therein. Such ratings, where directed, shall be revalidated or renewed in accordance with the applicable Joint Aviation Requirements or as otherwise directed.

(8) **Medical Fitness:**

The applicant shall meet the medical requirements specified in Article 39 of this Order.

(9) **Age Limits:**

Age limits shall be in accordance with Article 38 of this Order.

2. Airline Transport Pilot Licence Privileges and Limitations - Aeroplane:

The privileges of the holder of a valid Airline Transport Pilot Licence (Aeroplane) and the limitations to be observed in exercising such privileges are as follows:-

(1) **Privileges:**

- (a) to exercise all the privileges and to observe the limitations of the privileges of the holder of a private and commercial pilot licence (aeroplane) and of the instrument rating aeroplane;
- (b) to act as pilot-in-command or co-pilot in any aeroplane, certificated for multi-pilot crew operation and engaged in commercial air transport operation, of the type or types specified in Part I of the aircraft rating on the licence;
- (c) to act as co-pilot in any aeroplane, certificated for multi-pilot crew operation and engaged in a commercial air transport operation, of the type or types specified in Part II of the aircraft rating on the licence.

(2) **Limitations:**

- (a) The holder of an airline transport pilot licence (aeroplane) shall not act as pilot of an aeroplane engaged in commercial air transport operations if the licence holder has attained the age of 60 years except:-
 - (i) as a member of a multi-pilot crew; and provided that,

- (ii) such pilot is the only pilot in the flight crew who has attained the age of 60 years; and
 - (iii) such holder has obtained permission from each State into whose airspace the holder wishes to fly.
- (b) The holder of an airline transport pilot licence (aeroplane) who has attained the age of 65 years shall not act as a pilot of an aeroplane engaged in commercial air transport operations.

3. Airline Transport Pilot Licence Requirements - Helicopter:

The requirements for an airline transport pilot licence to fly a helicopter shall be as follows:-

(1) Knowledge:

The applicant shall pass an examination in at least the following subjects:-

(a) Air Law:

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

(b) Helicopters - General Knowledge:

- (i) general characteristics and limitations of electrical, hydraulic, and other helicopter systems; flight control systems, including autopilot and stability augmentation;
- (ii) principles of operation, handling procedures and operating limitations of helicopter powerplants; transmission (power-trains); effects of atmospheric conditions on engine performance; relevant operational information from the flight manual;
- (iii) operating procedures and limitations of appropriate helicopters; effects of atmospheric conditions on helicopter performance; relevant operational information from the flight manual;
- (iv) 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;
- (v) maintenance procedures for airframes, systems and powerplants of appropriate helicopters;

(c) Flight Performance and Planning:

- (i) effects of loading and mass distribution, including external loads, on helicopter handling, flight characteristics and performance; mass and balance calculations;
- (ii) use and practical application of take-off, landing and other performance data, including procedures for cruise control;
- (iii) 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;

(d) Human Performance and Limitations:

human performance and limitations relevant to the airline transport pilot - helicopter;

(e) Meteorology:

- (i) 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;
- (ii) 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;
- (iii) causes, recognition and effects of engine, airframe and rotor icing; hazardous weather avoidance;

(f) Navigation:

- (i) air navigation, including the use of aeronautical charts, radio navigation aids and area navigation systems; specific navigation requirements for long-range flights;
- (ii) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of helicopters;

- (iii) use, accuracy and reliability of navigation systems; identification of radio navigation aids;
- (iv) principles and characteristics of self-contained and external-referenced navigation systems; operation of airborne equipment;

(g) Operational Procedures:

- (i) interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
- (ii) precautionary and emergency procedures; settling with power, ground resonance, retreating blade stall, dynamic roll-over and other operating hazards; safety practices associated with flight under VFR;
- (iii) operational procedures for carriage of freight, including external loads, and dangerous goods;
- (iv) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking on and disembarking from helicopters;

(h) Principles of Flight:

principles of flight relating to helicopters; and

(i) Radiotelephony:

radiotelephony procedures and phraseology as applied to VFR Operations; action to be taken in case of communication failure.

(2) Examination - Helicopters:

The examination shall be based on a syllabus determined by the Authority and shall include an examination on the types of helicopters for which the licence is sought.

(3) Experience - Helicopter:

- (a) The applicant shall have satisfactorily completed as a pilot of helicopters not less than 1,000 hours of flight time, which shall include not less than:-
 - (i) 250 hours either as pilot-in-command or made up by not less than 100 hours as pilot-in-command and the necessary additional flight time as co-pilot performing, under the supervision of a duly

authorised pilot-in-command, the duties and functions of a pilot-in-command, provided that the method of supervision employed is acceptable to the Authority;

- (ii) 200 hours of cross-country flight time, of which not less than 100 hours shall be as pilot-in-command or as co-pilot performing under the supervision of a duly authorised pilot-in-command the duties and functions of a pilot-in-command, provided that the method of supervision employed is acceptable to the Authority;
 - (iii) 50 hours of night flight as pilot-in-command or as co-pilot; and
 - (iv) 30 hours of instrument time, of which not more than 10 hours may be instrument ground time.
- (b) The Authority shall determine whether experience as a pilot under instruction in an approved synthetic flight trainer is acceptable as part of the total flight time of 1000 hours. Credit for such experience shall be limited to a maximum of 100 hours, of which not more than 25 hours shall have been acquired in a flight procedures trainer or a basic instrument flight trainer.
 - (c) When the applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and, if so, the applicant may be credited with not more than 200 hours of such flight time and the flight time requirements of sub-paragraph 3(a) may be reduced accordingly.
 - (d) The total flight time of 1000 hours specified in sub-paragraph (3)(a) shall include such flying experience in the type or types of helicopter to which the application relates as is considered reasonable by the Authority.
 - (e) Flight time shall be credited in accordance with the requirements of Schedule VII to this Order.

(4) **Flight Instruction - Helicopters:**

The applicant shall have received the flight instruction required for the issue of the commercial pilot licence (helicopter) specified in Part III of this Schedule.

(5) **Skill - Helicopter:**

- (a) The applicant shall have demonstrated to the satisfaction of the Authority the ability to perform, as pilot-in-command of a helicopter

required to be operated with a co-pilot, the following procedures and manoeuvres:

- (i) pre-flight procedures, including the preparation of the operational flight plan and filing of the air traffic services flight plan;
 - (ii) normal flight procedures and manoeuvres during all phases of flight;
 - (iii) abnormal and emergency procedures and manoeuvres related to failures and malfunctions of equipment, such as powerplant, systems and airframe; and
 - (iv) procedures for crew incapacitation and crew co-ordination including allocation of pilot tasks, crew co-operation and use of checklists.
- (b) The applicant shall have demonstrated to the satisfaction of the Authority the ability to perform the procedures and manoeuvres described in sub-paragraph 5(a), with a degree of competency appropriate to the privileges of the holder of an airline transport pilot licence - helicopter, and to:
- (i) operate the helicopter within its limitations;
 - (ii) complete all manoeuvres with smoothness and accuracy;
 - (iii) exercise good judgement and airmanship;
 - (iv) apply aeronautical knowledge;
 - (v) maintain control of the helicopter at all times in a manner such that the successful outcome of a procedure or manoeuvre is never in doubt;
 - (vi) understand and apply crew co-ordination and incapacitation procedures; and
 - (vii) communicate effectively with the other flight crew members.

(6) Additional Type and Class Ratings - Helicopter:

The applicant shall meet the appropriate requirements specified in Part VII of this Schedule.

(7) Re-issue and Revalidation of Licence - Helicopter:

The validity of an Airline Transport Pilot licence (Helicopter) is determined by the validity of the ratings therein. Such ratings shall, where directed, be revalidated or renewed in accordance with the applicable Joint Aviation Requirements or as otherwise directed.

(8) **Medical Fitness:**

The applicant shall meet the medical requirements specified in Article 39 of this Order.

(9) **Age Limits:**

Age limits shall be in accordance with Article 38 of this Order.

4. Airline Transport Pilot Licence Privileges and Limitations - Helicopter:

The privileges of the holder of a valid Airline Transport Pilot Licence (Helicopter) and the limitations to be observed in exercising such privileges are as follows:-

(1) **Privileges:**

- (a) to exercise all the privileges and to observe the limitations of the privileges of the holder of a private and commercial pilot licence (helicopter); and
- (b) to act as pilot-in-command or co-pilot in any helicopter, certificated for multi-pilot crew operation and engaged in a commercial air transport operation, of the type or types specified in Part I of the aircraft rating on the licence;
- (c) to act as co-pilot in any helicopter, certificated for multi-pilot crew operation and engaged in a commercial air transport operation, of the type or types specified in Part II of the aircraft rating on the licence;

(2) **Limitations**

- (a) The holder of an airline transport pilot licence (helicopter) shall not act as pilot of a helicopter engaged in commercial air transport operations if the licence holder has attained the age of 60 years except:-
 - (i) as a member of a multi-pilot crew; and provided that,
 - (ii) such pilot is the only pilot in the flight crew who has attained the age of 60 years; and
 - (iii) such holder has obtained permission from each State into whose airspace the holder wishes to fly.

The holder of an airline transport licence (helicopter) who has attained the age of 65 years shall not act as pilot of a helicopter engaged in commercial air transport operations.

PART V

Flight Instructor Rating - Aeroplanes and Helicopters

1. Flight Instructor Rating Requirements - Aeroplane and Helicopter:

The requirements for a flight instructor rating shall be as follows:-

(1) Knowledge:

The applicant shall have met at least the knowledge requirements specified for a commercial pilot licence aeroplane or helicopter, as appropriate, and shall pass an oral examination in at least the following subjects:-

- (i) techniques of applied instruction;
- (ii) assessment of student performance in those subjects in which ground instruction is given;
- (iii) elements of effective teaching;
- (iv) student evaluation and testing; training philosophies;
- (v) training programme development;
- (vi) lesson planning;
- (vii) classroom instructional techniques;
- (viii) use of training aids;
- (ix) analysis and correction of student errors;
- (x) human performance and limitations relevant to flight instruction; and
- (xi) hazards involved in simulating system failures and malfunctions in the aircraft.

(2) **Examination:**

The oral examination shall be based on a syllabus determined by the Authority and shall have particular reference to the category, classes and types of aircraft for which the rating is sought.

(3) **Experience:**

(a) Class II Flight Instructor:-

The applicant shall have met, to the satisfaction of the Authority, at least the experience requirements specified for the issue of the commercial pilot licence - aeroplanes or helicopters as appropriate, completed at least 200 hours of flight time of which at least 100 hours shall be as pilot-in-command if holding an ATPL or CPL licence, or 150 hours of pilot-in-command if holding a PPL licence and have undergone satisfactorily a course of approved training in flight instruction comprised of at least the following:-

30 hours of flight training time comprised of 20 dual flight hours conducted by a duly authorised flight instructor accepted by the Authority for that purpose, 5 hours of mutual flying (that is, two applicants for the flight instructor rating flying together to practice flight demonstrations) and 5 hours of instrument training instruction flight time conducted by a duly authorised instrument flight instructor of which not more than 2 hours may be instrument ground time.

(b) Class I Flight Instructor:

The applicant shall have met, to the satisfaction of the Authority, at least the experience requirements for the issue of the Class II flight instructor rating and have completed not less than:-

- (i) 300 hours of flight time as pilot of aircraft or 500 hours where qualification is sought to instruct for the issue of a commercial pilot licence;
- (ii) 30 hours of flight time on the type of aircraft for which the rating is sought;
- (iii) 100 hours of flight instruction time including the supervision of 25 student solo flights;

- (iv) 200 hours flight time in accordance with the instrument flight rules, of which up to 50 hours may be instrument ground time in an approved flight simulator, when a qualification is required to instruct for the issue of an instrument rating;
 - (v) have completed 500 hours instruction in aircraft when a qualification is required to instruct for the issue of a flight instructor rating; and
 - (vi) hold a recommendation from a supervising Class 1 Flight Instructor.
- (c) Flight time shall be credited in accordance with the provisions of Schedule VII of this Order.

(4) Flight Instruction:

The applicant shall, under the supervision of a duly authorised flight instructor acceptable to the Authority for that purpose:-

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

(5) Skill:

- (a) The applicant shall have demonstrated to the satisfaction of the Authority, the ability to instruct a student pilot, in the category and class of aircraft for which the rating is sought, to the level required for the issue of a private pilot licence including:-
 - (i) theoretical knowledge;
 - (ii) pre-flight briefing, post-flight de-briefing; and
 - (iii) a flight exercise, selected by the examiner, to demonstrate the teaching abilities of the applicant.
- (b) The skill test for the qualification to instruct for the issue of an instrument, night or instructor rating shall include appropriate instructional exercises, selected by the examiner in the category and class of aircraft for which the rating is sought, in order to demonstrate the teaching abilities of the applicant.

(6) Extension of Rating:

The applicant for the inclusion of an additional type of aircraft on a flight instructor rating shall have completed at least 30 hours as pilot-in-command on that type provided that this requirement may be modified to such an extent as the Authority may determine having regard to the applicant's general experience, qualifications and competency. The applicant shall be required to produce satisfactory evidence of recent experience on that type and may, at the discretion of the Authority, be required to undergo an oral examination and skill test with an authorised examiner.

(7) Validity of Rating:

All instructor ratings shall be valid for three years or as otherwise required by the applicable Joint Aviation Requirements.

(8) Renewal and revalidation of Rating:

- (a) An applicant for the revalidation or renewal of a flight instructor rating shall meet the applicable Joint Aviation Requirements for such a rating where appropriate or where directed.

2. Flight Instructor Rating Privileges and Limitations - Aeroplane and Helicopter:

The privileges of the holder of a Flight Instructor Rating and the limitations to be observed in exercising such privileges are as follows:-

(1) Class II Flight Instructor Rating - Privileges and Limitations:

(a) Privileges

The holder of a Flight Instructor Rating Class II, when operating under the direction of an appropriately rated Flight Instructor Class I:-

- (i) may give instruction in flying aircraft of the types specified in that Flight Instructor Rating Class II;
- (ii) may give instruction for the issue, re-issue, revalidation or renewal of a pilot licence or rating specified in that Flight Instructor Rating Class II;
- (iii) may give directions in relation to such flight instruction to any person flying or about to fly as pilot-in-command of an aircraft.

(b) Limitations

The holder of a Flight Instructor Rating Class II:-

- (i) is not entitled to give directions to a person in respect of the performance by that person of a first solo flight by day or night or a first solo cross-country flight by day or night;
- (ii) is not entitled to certify as to any matter required to be certified by a duly authorised flight instructor pursuant to the provisions of this Order.

(2) **Class I Flight Instructor Rating - Privileges:**

The holder of a Flight Instructor Rating Class I:-

- (i) may give instruction in flying aircraft of the types specified in that Flight Instructor Rating Class I;
- (ii) may give instruction for the issue, re-issue, revalidation or renewal of a pilot licence or rating specified in that Flight Instructor Rating Class I;
- (iii) may give directions in relation to such flight instruction to a Flight Instructor Class II and to any person flying or about to fly as pilot-in-command of an aircraft;
- (iv) may certify as to any matter required to be certified by a duly authorised flight instructor pursuant to the provisions of this Order.

PART VI

Instrument Rating

1. Instrument Rating Requirements - Aeroplane:

The requirements for an instrument rating (aeroplane) shall be as follows:-

(1) **Pre-Requisite:**

The applicant shall hold at least the private pilot licence (aeroplane).

(2) **Knowledge:**

The applicant shall have demonstrated a level of knowledge appropriate to the privileges issued to the holder of an instrument rating (aeroplane), in at least the following subjects:-

- (a) Air Law:
- rules and regulations relevant to flight under IFR; related air traffic services practices and procedures;
- (b) Aeroplanes - General Knowledge:
- (i) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aeroplanes under IFR and in instrument meteorological conditions; use and limitations of autopilot;
- (ii) compasses, turning and acceleration errors; gyroscopic instruments, operational limits and precession effects; practices and procedures in the event of malfunctions of various flight instruments;
- (c) Flight Performance and Planning:
- (i) pre-flight preparations and checks appropriate to flight under IFR;
- (ii) operational flight planning; preparation and filing of air traffic services flight plans under IFR; altimeter setting procedures;
- (d) Human Performance and Limitations:
- human performance and limitations relevant to instrument flight in aeroplanes;
- (e) Meteorology:
- (i) application of aeronautical meteorology; interpretation and use of reports, charts and forecasts; codes and abbreviations; use of and procedures for obtaining meteorological information; altimetry;
- (ii) causes, recognition and effects of engine and airframe icing; frontal zone penetration procedures; hazardous weather avoidance;
- (f) Navigation:
- (i) practical air navigation using radio navigation aids;
- (ii) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of radio navigation aids;

(g) Operational Procedures:

- (i) interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations, and instrument procedure charts for departure, en-route, descent and approach;
- (ii) precautionary and emergency procedures; safety practices associated with flight under IFR; and

(h) Radiotelephony:

radiotelephony procedures and phraseology as applied to aircraft operations under IFR; action to be taken in case of communication failure;

(3) **Examination:**

The oral examination shall be based on a syllabus determined by the Authority and shall have particular reference to the classes and types of aeroplane for which the rating is sought.

(4) **Experience:**

- (a) The applicant shall hold a private or commercial pilot licence (aeroplane) and have not less than 50 hours cross-country flight time as pilot-in-command in aeroplanes or helicopters of which not less than 10 hours shall be in aeroplanes and should have undergone satisfactorily a course of approved flight training for the issue of the instrument rating comprised of at least the following:-
 - (i) a single engine instrument rating (aeroplane) course comprising at least 50 hours of flight time by sole reference to instruments under the supervision of a duly authorised instrument flight instructor in aeroplanes or helicopters of which up to 20 hours may be instrument ground time in an approved flight procedures trainer, or up to 35 hours in an approved flight simulator. The remaining instrument flight instruction time shall include at least 15 hours in aeroplanes; or
 - (ii) a multi-engine instrument rating (aeroplane) course comprising at least 55 hours flight time by sole reference to instruments in aeroplanes or helicopters under the supervision of a duly authorised instrument flight instructor of which up to 25 hours may be instrument ground time in an approved flight procedures trainer, or up to 40 hours in an approved flight simulator. The remaining instrument flight instruction time shall include at least 15 hours in multi-engine aeroplanes;

- (b) The holder of a single engine instrument rating (aeroplane), who also holds a multi-engine type or class rating, who applies to obtain a multi-engine instrument rating (aeroplane) shall satisfactorily complete a course comprising at least five hours dual instrument flight instruction under a duly authorised instrument flight instructor in multi-engine aeroplanes.
- (c) The holder of a commercial pilot licence (aeroplane) may apply to the Authority to have the experience requirements of sub-paragraph (a)(i) and (ii), as applicable, reduced by not more than 5 hours.
- (d) Flight time shall be credited in accordance with the requirements of Schedule VII to this Order.

(5) **Flight Instruction:**

The applicant shall have received training from a duly authorised instrument flight instructor who shall ensure that the applicant has experience in at least the following:-

- (i) pre-flight procedures for IFR flight, including the use of the flight manual, appropriate air traffic services documents and other relevant publications in the preparation of an IFR flight plan;
- (ii) pre-flight inspection, use of checklists, taxiing and pre-take-off checks;
- (iii) procedures and manoeuvres for IFR Operation under normal, abnormal and emergency conditions covering at least -
 - transition from visual to instrument flight on take-off;
 - standard instrument departures and arrivals;
 - en-route IFR procedures;
 - holding procedures;
 - instrument approaches to specified minima;
 - missed approach procedures;
 - landings from instrument approaches; and
 - circle to land - if appropriate.
- (iv) in-flight manoeuvres and particular flight characteristics; and

- (v) as appropriate, operation of a multi-engine aeroplane in the above exercises, including operation of the aeroplane by sole reference to instruments with one engine simulated inoperative and engine shut down and restart; (the latter exercise to be carried out at a safe altitude unless carried out in an approved simulator).

(6) **Skill - Aeroplane:**

- (a) The applicant shall demonstrate to the satisfaction of the Authority the ability to perform the procedures and manoeuvres described in subparagraph 1(5) with a degree of competency appropriate to the privileges of the holder of an instrument rating (aeroplane); and to:-
 - (i) operate the aeroplane within its limitations;
 - (ii) complete all manoeuvres with smoothness and accuracy;
 - (iii) exercise good judgement and airmanship;
 - (iv) apply aeronautical knowledge; and
 - (v) maintain control of the aeroplane at all times in a manner such that the successful outcome of the procedure or manoeuvre is never seriously in doubt.
- (b) For a multi-engine aeroplane instrument rating the test shall be taken in a multi-engine aeroplane.
- (c) For a single engine aeroplane instrument rating the test shall be taken in a single engine aeroplane. A multi-engine centreline thrust aeroplane shall be considered a single engine aeroplane for the purposes of a single engine aeroplane instrument rating.

(7) **Renewal and Revalidation of Ratings:**

An applicant for the renewal or revalidation of an instrument rating (aeroplane) shall meet the applicable Joint Aviation Requirements for such a rating where appropriate or where directed.

(8) **Medical Requirements:**

The applicant shall meet the medical requirements for the commercial pilot licence specified in Article 39 of this Order.

2. Instrument Rating Privileges - Aeroplane:

The privileges of the holder of a valid Instrument Rating (Aeroplane) and the Limitations to be observed in exercising such privileges are as follows:-

- (1) To pilot aeroplanes, under instrument flight rules.
- (2) Before exercising the privileges of an instrument rating on multi-engined aeroplanes the holder of the rating shall have demonstrated the ability to operate multi-engined aeroplanes by sole reference to instruments, with one engine inoperative or simulated inoperative.

3. Instrument Rating Requirements - Helicopter:

The requirements for an instrument rating (helicopter) shall be as follows:-

(1) **Pre-Requisite:**

The applicant shall hold at least a private pilot licence (helicopter).

(2) **Knowledge:**

The applicant shall have demonstrated a level of knowledge appropriate to the privileges issued to the holder of an instrument rating (helicopter), in at least the following subjects:-

(a) Air Law:

rules and regulations relevant to flight under IFR; related air traffic services practices and procedures;

(b) Helicopters - General Knowledge:

(i) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of helicopters under IFR and in instrument meteorological conditions; use and limitations of autopilot;

(ii) compasses, turning and acceleration errors; gyroscopic instruments, operational limits and precision effects; practices and procedures in the event of malfunctions of various flight instruments;

(c) Flight Performance and Planning:

(i) pre-flight preparation and checks appropriate to flight under IFR;

(ii) operational flight planning; preparation and filing of air traffic services flight plans under IFR; altimeter setting procedures;

(d) Human Performance and Limitations:

human performance and limitations relevant to instrument flight in helicopters;

- (e) Meteorology:
 - (i) application of aeronautical meteorology; interpretation and use of reports, charts and forecasts; codes and abbreviations; use of and procedures for obtaining meteorological information; altimetry;
 - (ii) causes, recognition and effects of engine, airframe and rotor icing; frontal zone penetration procedures; hazardous weather avoidance;
- (f) Navigation:
 - (i) practical air navigation using radio navigation aids;
 - (ii) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of radio navigation aids;
- (g) Operational Procedures:
 - (i) interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations, and instrument procedure charts for departure, en- route, descent and approach;
 - (ii) precautionary and emergency procedures; safety practices associated with flight under IFR; and
- (h) Radiotelephony:

Radiotelephony procedures and phraseology as applied to aircraft operations under IFR; action to be taken in case of communication failure.

(3) **Examination:**

The oral examination shall be based on a syllabus determined by the Authority, and shall have particular reference to the classes and types of helicopter for which the rating is sought.

(4) **Experience:**

- (a) The applicant shall hold a private, commercial pilot or airline transport pilot licence (helicopter) and have not less than 50 hours cross-

country flight time as pilot-in-command in helicopters or aeroplanes of which not less than 10 hours shall be in helicopters and have undergone satisfactorily a course of approved flight training for the issue of the instrument rating comprised of at least the following:-

not less than 50 hours by sole reference to instruments in aeroplanes or helicopters under the supervision of a duly authorised instrument flight instructor of which up to 20 hours may be instrument ground time in an approved flight procedures trainer, or up to 35 hours in an approved flight simulator. The remaining instrument flight instruction time shall include at least 15 hours in helicopters certificated or approved by the Authority for flight by sole reference to instruments and, of which not less than 5 hours shall be in the helicopter type in respect of which the applicant wishes to qualify.

- (b) The holder of a commercial pilot licence (helicopter) may apply to the Authority to have the experience requirements of sub-paragraph (a)(i) reduced by not more than 5 hours.
- (c) Flight time shall be credited in accordance with the requirements of Schedule VII to this Order.

(5) **Flight Instruction:**

The applicant shall have received training from a duly authorised instrument flight instructor who shall ensure that the applicant has experience in at least the following:-

- (i) pre-flight procedures for IFR flight, including the use of the flight manual, appropriate air traffic services documents and other relevant publications in the preparation of a flight plan;
- (ii) pre-flight inspection, use of checklists, taxiing and pre-take-off checks;
- (iii) procedures and manoeuvres for IFR operation under normal, abnormal and emergency conditions covering at least:-
 - transition from visual to instrument flight on take-off;
 - standard instrument departures and arrivals;
 - en-route IFR procedures;
 - holding procedures;
 - missed approach procedure;
 - landings from instrument approaches; and

- circle to land - if appropriate.
- (iv) in-flight manoeuvres and particular flight characteristics; and
- (v) as appropriate, operation of a multi-engine helicopter in the above exercises, including operation of the helicopter by sole reference to instruments with one engine simulated inoperative.

(6) Skill - Helicopters:

The applicant shall demonstrate to the satisfaction of the Authority the ability to perform the procedures and manoeuvres described in subparagraph 3(5) with a degree of competency appropriate to the privileges of the holder of an instrument rating (helicopter); and to

- (i) operate the helicopter within its limitations;
- (ii) complete all manoeuvres with smoothness and accuracy;
- (iii) exercise good judgement and airmanship;
- (iv) apply aeronautical knowledge; and
- (v) maintain control of the helicopter at all times in a manner such that the successful outcome of a manoeuvre or procedure is never seriously in doubt.

(7) Renewal and Revalidation of Ratings:

An applicant for the renewal or revalidation of an instrument rating (helicopter) shall comply with the applicable Joint Aviation Requirements where appropriate or where directed.

(8) Medical Requirements:

The applicant shall meet the medical requirements specified for the commercial pilot licence in Article 39 of this Order.

4. Instrument Rating Privileges - Helicopter:

The privileges of the holder of a valid Instrument Rating (Helicopter) and the limitations to be observed in exercising such privileges are as follows:-

- (1) To pilot helicopters, under instrument flight rules.
- (2) Before exercising the privileges of an instrument rating on multi-engined helicopters the holder of the rating shall have demonstrated the ability to

operate multi-engined helicopters by sole reference to instruments, with one engine inoperative or simulated inoperative.

PART VII

TYPE AND CLASS RATINGS - AEROPLANES AND HELICOPTERS

1. For the issue, renewal, validation or re-validation of a type or class rating, aeroplane or helicopter, the applicant shall, where directed, meet the applicable Joint Aviation Requirements or as otherwise directed.

2. **Multi-Crew Co-operation (MCC):**

An applicant for a type rating on an aircraft requiring a multi-pilot crew shall successfully undergo an approved course of MCC training appropriate to the type of duties the applicant intends to undertake, to the satisfaction of the Authority and, where directed, in accordance with the applicable Joint Aviation Requirements.

PART VIII

GLIDER PILOT LICENCE

1. **Glider Pilot Licence Requirements**

The requirements for a glider pilot licence to fly a glider shall be as follows:-

- (1) **Knowledge:**

The applicant shall pass an examination in at least the following subjects:-

- (a) Air Law:

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

- (b) Aeroplanes - General Knowledge:

- (i) principles of operation of glider systems and instruments;
 - (ii) operating limitations of gliders; relevant operational information from the flight manual or other appropriate document;
- (c) Flight Performance and Planning:
- (i) effects of loading and mass distribution on flight characteristics; mass and balance calculations;
 - (ii) use and practical application of launching, landing and other performance data;
 - (iii) pre-flight and en-route flight planning appropriate to glider operations under VFR; appropriate air traffic services procedures; position reporting procedures; altimeter setting procedures; operations in areas of high density traffic;
- (d) Human Performance and Limitations:
- human performance and limitations relevant to the glider pilot;
- (e) Meteorology:
- application of elementary aeronautical meteorology; use of and procedures for obtaining meteorological information; altimetry;
- (f) Navigation:
- practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;
- (g) Operational Procedures:
- (i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
 - (ii) appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;
 - (iii) different launch methods and associated procedures;
- (h) Principles of flight:
- principles of flight relating to gliders; and
- (i) Radiotelephony:

radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in the event of communication failure.

(2) **Examination - Gliders:**

The examination shall be based on a syllabus determined by the Authority.

(3) **Experience - Glider:**

- (a) The applicant shall have satisfactorily completed as a pilot of gliders not less than 6 hours of flight time including two hours solo flight time during which not less than 20 launches and landings have been performed.
- (b) When the applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and, if so, the amount by which the flight time requirements of sub-paragraph 3(a) may be reduced accordingly.
- (c) Flight time shall be credited in accordance with the requirements of Schedule VII to this Order.

(4) **Flight Instruction - Glider:**

The applicant shall have gained under appropriate supervision, operational experience in at least the following areas:-

- (i) pre-flight operations, including mass and balance determination, glider assembly and inspection;
- (ii) techniques and procedures for the launching method used, including appropriate airspeed limitations, emergency procedures and signals used;
- (iii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
- (iv) control of the glider by external visual reference;
- (v) flight throughout the flight envelope;
- (vi) recognition of, and recovery from, incipient and full stalls and spiral dives;
- (vii) normal and cross-wind launches, approaches and landings;

- (viii) cross-country flying using visual reference and dead-reckoning;
- (ix) emergency procedures.

(5) **Skill - Glider:**

The applicant shall have demonstrated to the satisfaction of the Authority the ability to perform as pilot-in-command of a glider, the procedures and manoeuvres described in sub-paragraph 1(4), with a degree of competency appropriate to the privileges of the holder of a glider pilot licence and to:-

- (i) operate the glider within its limitations;
- (ii) complete all manoeuvres with smoothness and accuracy;
- (iii) exercise good judgement and airmanship;
- (iv) apply aeronautical knowledge; and
- (v) maintain control of the glider at all times in a manner such that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

(6) **Medical Fitness:**

The Applicant shall meet the medical requirements specified in Article 39 of this Order.

(7) **Age Limits:**

Age limits shall be in accordance with Article 38 of this Order.

2. Glider Pilot Licence Privileges and Limitations:

The privileges of the holder of a valid Glider Pilot Licence and the limitations to be observed in exercising such privileges are as follows:-

(1) **Privileges:**

to act, but not for remuneration (save where given in the circumstances mentioned in the proviso to paragraph (2) of Article 2 of this Order), as pilot-in-command of any glider provided that the licence holder has operational experience in the launching method used;

(2) **Limitations:**

The holder of a glider pilot licence shall have completed at least 10 hours of flight time as a pilot of gliders before acting as a pilot-in-command of a glider carrying a passenger or passengers.

PART IX

FREE BALLOON PILOT LICENCE

1. Free Balloon Licence Requirements

The requirements for free balloon pilot licence to fly a free balloon using hot air or gas shall be as follows:-

(1) **Knowledge:**

The applicant shall pass an examination in at least the following subjects:-

(a) Air Law:

rules and regulations relevant to the holder of a free balloon pilot licence; rules of the air; appropriate air traffic services practices and procedures;

(b) Free Balloons - General Knowledge:

- (i) principles of operation of free balloon systems and instruments;
- (ii) operating limitations of free balloons; relevant operational information from the flight manual or other appropriate document;
- (iii) physical properties and practical application of gases used in free balloons;

(c) Flight Performance and Planning:

- (i) effects of loading and mass distribution on flight characteristics; mass and balance calculations;
- (ii) use and practical application of launching, landing and other performance data; including the effect of temperature
- (iii) pre-flight and en-route flight planning appropriate to free balloon operations under VFR; appropriate air traffic services procedures; position reporting procedures; altimeter setting procedures; operations in areas of high density traffic;

(d) Human Performance and Limitations:

human performance and limitations relevant to the free balloon pilot;

(e) Meteorology:

application of elementary aeronautical meteorology; use of and procedures for obtaining meteorological information; altimetry;

(f) Navigation:

practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;

(g) Operational Procedures:

(i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;

(ii) appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;

(iii) tethering and ballasting practices and procedures;

(h) Principles of flight:

principles of flight relating to free balloons; and

(i) Radiotelephony:

radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in the event of communication failure.

(2) **Examination - Free Balloons:**

The examination shall be based on a syllabus determined by the Authority.

(3) **Experience - Free Balloons:**

(a) The applicant shall have satisfactorily completed as a pilot of free balloons not less than 16 hours of flight time including at least 8 launches and ascents of which one must be solo;

- (b) Flight time shall be credited in accordance with the requirements of Schedule VII to this Order.

(4) **Flight Instruction - Free Balloon:**

The applicant shall have gained under appropriate supervision, operational experience in at least the following areas :-

- (i) pre-flight operations, including balloon assembly, rigging, inflation, mooring and inspection;
- (ii) techniques and procedures for the launching and ascent, including appropriate limitations, emergency procedures and signals used; (iii) collision avoidance precautions;
- (iv) control of a free balloon by external visual reference;
- (v) recognition of and recovery from rapid descents;
- (vi) cross-country flying using visual reference and dead-reckoning;
- (vii) approaches and landings, including ground handling;
- (viii) emergency procedures;

(5) **Skill - Free Balloon:**

The applicant shall have demonstrated to the satisfaction of the Authority the ability to perform as pilot-in-command of a free balloon, the procedures and manoeuvres described in sub-paragraph 1(4), with a degree of competency appropriate to the privileges of the holder of a free balloon pilot licence and to:-

- (i) operate the free balloon within its limitations;
- (ii) complete all manoeuvres with smoothness and accuracy;
- (iii) exercise good judgement and airmanship;
- (iv) apply aeronautical knowledge; and
- (v) maintain control of the free balloon at all times in a manner such that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

(6) **Medical Fitness:**

The Applicant shall meet the medical requirements specified in Article 39 of this Order.

(7) **Age Limits:**

Age limits shall be in accordance with Article 38 of this Order.

2. **Free Balloon Pilot Licence Privileges and Limitations:**

The privileges of the holder of a valid Free Balloon Pilot Licence and the limitations to be observed in exercising such privileges are as follows:-

(1) **Privileges:**

to act, as pilot-in-command of any free balloon provided that the licence holder has operational experience in hot air or gas balloons as appropriate;

(2) **Limitations:**

If the privileges of the licence are to exercised at night, the licence holder shall have gained, under appropriate supervision, operational experience in free balloons in night flying.

SCHEDULE II

FLIGHT ENGINEER

The requirements for a flight engineer licence shall be as follows:-

1. **Knowledge**

(1) The applicant shall have demonstrated a level of knowledge appropriate to the privileges issued to the holder of a flight engineer licence, in at least the following subjects:-

(a) **Air Law:**

rules and regulations relevant to the holder of a flight engineer licence;
rules and regulations governing the operation of civil aircraft pertinent to the duties of a flight engineer;

(b) **Aircraft general knowledge:**

- (i) basic principles of powerplants, gas turbines; characteristics of fuels; fuel systems including fuel control; lubricants and lubrication systems; afterburners and injection systems; function and operation of engine ignition and starter systems;
 - (ii) principles of operation, handling procedures and operating limitations of aircraft powerplants; effects of atmospheric conditions on engine performance;
 - (iii) airframes, flight controls, structures, wheel assemblies, brakes and anti-skid units, corrosion and fatigue life; identification of structural damage and defects;
 - (iv) ice and rain protection systems;
 - (v) pressurisation and air-conditioning systems, oxygen systems;
 - (vi) hydraulic and pneumatic systems;
 - (vii) basic electrical theory, electric systems (AC and DC), aircraft wiring systems, bonding and screening;
 - (viii) principles of operation of instruments, compasses, auto-pilots, radio communication equipment, radio and radar navigation aids, flight management systems, displays and avionics;
 - (ix) limitations of appropriate aircraft;
 - (x) fire protection, detection, suppression and extinguishing systems; and
 - (xi) use and serviceability checks of equipment and systems of appropriate aircraft.
- (c) **Flight performance and planning:**
- (i) Effects of loading and mass distribution on aircraft handling, flight characteristics and performance; mass and balance calculations; and
 - (ii) use and practical application of performance data including procedures for cruise control;
- (d) **Human performance and limitations:**
- Human performance and limitations relevant to the flight engineer;
- (e) **Operational procedures:**

- (i) Principles of maintenance, procedures for the maintenance of airworthiness, defect reporting, pre-flight inspections, precautionary procedures for fuelling and use of external power; installed equipment and cabin systems;
- (ii) normal, abnormal and emergency procedures; and
- (iii) operational procedures for carriage of freight and dangerous goods;

(f) **Principles of Flight:**

Fundamentals of aerodynamics.

(g) **Radiotelephony:**

Radiotelephony procedures and phraseology.

(h) **Navigation:**

Fundamentals of navigation; principles and operation of self-contained systems.

(i) **Meteorology:**

Operational aspects of meteorology.

(2) **Examination**

The examination shall be based on a syllabus determined from time to time by the Authority and shall include an examination on each type of aircraft for which the licence is sought.

2. Experience

- (1) The applicant shall have completed, under the supervision of a person accepted by the Authority for that purpose, not less than 100 hours of flight time in the performance of the duties of a flight engineer on board an aircraft of the type for which the licence is sought, or one of similar characteristics, during the twelve months preceding the date of application. The Authority shall determine whether experience as a flight engineer in a flight simulator, which it has approved, is acceptable as part of the total flight time of 100 hours. Credit for such experience shall be limited to a maximum of 50 hours.
- (2) When the applicant has flight time as a pilot, the Authority shall determine whether such experience is acceptable and, if so, the extent to which the

flight time requirements of sub-paragraph 2(1) of this Schedule can be reduced accordingly.

- (3) The applicant shall have operational experience in the performance of the duties of a flight engineer, under the supervision of a flight engineer accepted by the Authority for that purpose, in at least the following areas:-

(a) **Normal procedures:**

- (i) pre-flight inspections;
- (ii) fuelling procedures, fuel management;
- (iii) inspection of maintenance documents;
- (iv) normal flight deck procedures during all phases of flight;
- (v) crew co-ordination and procedures in case of crew incapacitation;
- (vi) defect reporting;

(b) **Abnormal and alternate (standby) procedures:**

- (i) recognition of abnormal functioning of aircraft systems;
- (ii) use of abnormal and alternate (standby) procedures;

(c) **Emergency procedures:**

- (i) recognition of emergency conditions;
- (ii) use of appropriate emergency procedures;

3. Skill

- (1) The applicant shall have demonstrated to the satisfaction of the Authority the skill required for the safe operation, as flight engineer, of an aircraft type for which the licence is sought, the duties and procedures described in sub-paragraph 2(3) of this Schedule with a degree of competency appropriate to the privileges of the holder of a flight engineer licence, and to:-

- (i) use aircraft systems within the aircraft's capabilities and limitations;
- (ii) exercise good judgement and airmanship;
- (iii) apply aeronautical knowledge;

- (iv) perform all the duties as part of an integrated crew with the successful outcome never in doubt; and
 - (v) communicate effectively with the other flight crew members.
- (2) The use of an appropriate synthetic flight trainer for performing any of the procedures required during the demonstration of skill described in subparagraph 3(1) of this Schedule shall be approved by the Authority.

4. Medical Fitness

The applicant shall meet the medical requirements specified in Article 48 of this Order.

5. Re-issue of Licence and Revalidation or Renewal of Rating

The applicant shall demonstrate, to the satisfaction of the Authority, in the course of a proficiency check with an authorised examiner on an aircraft type for which the licence is sought, competence to perform the duties and procedures in subparagraph 3(1) of this Schedule. Ratings shall, where directed, be renewed in accordance with the applicable Joint Aviation Requirements.

6. Flight Engineer Licence Holder - Age Limitation

The holder of a Flight Engineer licence who has attained the age of 65 years shall not exercise the privileges of that licence on an aeroplane engaged in a commercial air transport operation, unless and to the extent that such a person shall be exempted from the provisions of this Order by a direction of the Authority for the purposes of Article 36 thereof.

SCHEDULE III

FLIGHT RADIOTELEPHONY OPERATOR ENDORSEMENT

The requirements for Flight Radiotelephony Operator Endorsement of a Pilot Licence shall be as follows:-

1. Knowledge

- (1) Flight Radiotelephony Operator Licence Endorsement - The applicant shall pass an examination (which shall include practical tests) in-
 - (a) a practical knowledge of radiotelephone operation and procedure;
 - (b) the sending correctly and receiving correctly of spoken messages by telephone apparatus;
 - (c) the Radio Regulations annexed to the current International Telecommunications Convention applying to radiotelephone communications and specifically that part of those Regulations relating to the safety of life;
 - (d) the current communication procedures for air navigation services issued by the International Civil Aviation Organisation insofar as they apply to radiotelephony.

2. Experience

- (1) Flight Radiotelephony Operator Licence Endorsement -

The applicant shall not be required to furnish evidence of radio experience.

3. Renewal of Licence Endorsement

- (1) Flight Radiotelephony Operator Licence Endorsement

An applicant for renewal shall produce satisfactory evidence of having carried out radio communication, under the provisions of a pilot licence, during the six months immediately preceding the date of application for renewal.

SCHEDULE IV

AIRCRAFT MAINTENANCE ENGINEER

PART I

The requirements for the issue of an aircraft maintenance licence shall be as follows:-

CATEGORY A - Aircraft (excluding engines)

Aeroplanes

1. Knowledge

- (1) The applicant shall pass an examination (which may include practical tests) in-
 - (a) aviation law insofar as it affects the functions of an aircraft maintenance engineer;
 - (b) practical arithmetic and elementary physics;
 - (c) the principles of flight;
 - (d) the principles of construction, assembly, functioning, maintenance, functional testing and inspection of aircraft components, installations, systems and equipment, but excluding engines and installed radio equipment;
 - (e) defect rectification;
 - (f) the incorporation of minor modifications, replacements and repairs.
- (2) The examination shall be based on such syllabus as may be directed from time to time and shall, to such extent as may be appropriate have particular reference to the type or types of aircraft for which the licence is sought.

2. Experience

- (1) Subject to the provisions of sub-paragraph (2) of this paragraph, the applicant shall have had not less than 3 years' practical aeronautical engineering experience, including not less than 2 years (one year in the case of airframes of aircraft the maximum total authorised weight of which is less than 5,700 kg.) recent practical experience on maintenance of airframes prior to flight on either-
 - (a) the type of aircraft for which the licence is sought, or
 - (b) an aircraft of a type similar in constructional characteristics,

provided that, in case (b), the applicant shall also have undergone satisfactorily a course of training approved by the Authority on the type of aircraft for which the licence is sought.
- (2) The period of 3 years specified in sub-paragraph (1) of this paragraph may, at the discretion of the Authority, be reduced if the applicant has undergone satisfactorily a course of training approved by the Authority.

3. Additional Ratings

An applicant for an additional rating shall-

- (a) furnish satisfactory evidence of recent appropriate experience in the practical maintenance of airframes prior to flight of either-
 - (i) the type of aircraft for which the additional rating is sought; or
 - (ii) an aircraft of a type similar in constructional characteristics and approximately the same maximum permissible gross weight;

provided that, in case (ii), the applicant shall also have undergone satisfactorily a course of training approved by the Authority on the type of aircraft for which the additional rating is sought;
- (b) pass an examination in such of the subjects specified in paragraph 1 of this Schedule as the Authority may in the particular case require.

4. Rotorcraft

A licence in Category A will not be issued except in conjunction with a licence in Category C to cover the particular type of engine installed and except to an applicant who satisfies the requirements set out in paragraphs 10 and 11 of this Schedule.

5. Aircraft, other than Aeroplanes and Rotorcraft

The applicant shall meet such requirements as to knowledge and experience as may be directed from time to time.

CATEGORY C - Engines (other than those installed in rotorcraft)

6. Knowledge

- (1) The applicant shall pass an examination (which may include practical tests) in-
 - (a) aviation law insofar as it affects the functions of an aircraft maintenance engineer;
 - (b) practical arithmetic and elementary physics;
 - (c) the principles of aero-engine construction and operation including accessories;
 - (d) maintenance, functional testing and methods of repair of aero-engines including components and accessories;

- (e) knowledge of the fuel, oil, coolant and ignition systems;
 - (f) inspection of propellers;
 - (g) inspection of power plant after installation, repair or modification;
 - (h) defect rectification.
- (2) The examination shall be based on such syllabus as may be directed from time to time, and shall, to such extent as may be appropriate, have particular reference to the type or types of engines for which the licence is sought.

7. Experience

- (1) Subject to the provisions of sub-paragraph (2) of this paragraph, the applicant shall have had not less than 3 years practical aeronautical engineering experience, including not less than 2 years (one year in the case of aero-engines of aircraft the maximum total authorised weight of which is less than 5,700 kg.) recent practical experience on maintenance of aero-engines prior to flight on either-
- (a) the type of aero-engine for which the licence is sought; or
 - (b) an aero-engine of a type similar in constructional characteristics and approximately comparable horse power;
- provided that, in case (b), the applicant shall also have undergone satisfactorily a course of training approved by the Authority on the type of aero-engine for which the licence is sought.
- (2) The period of 3 years specified in sub-paragraph (1) of this paragraph may at the discretion of the Authority be reduced if the applicant has undergone satisfactorily a course of training approved by the Authority.

8. Additional Ratings

An applicant for an additional rating shall-

- (a) furnish satisfactory evidence of appropriate recent experience in the practical maintenance of aero-engines prior to flight of either-
 - (i) the type of aero-engine for which the additional rating is sought; or

- (ii) an aero-engine of a type similar in constructional characteristics and approximately comparable horse power;

provided that, in case (ii), the applicant shall also have undergone satisfactorily a course of training approved by the Authority on the type of aero-engine for which the additional rating is sought;

- (b) pass an examination in such of the subjects specified in paragraph 6 of this Schedule as the Authority may in the particular case require.

9. Engines installed in Rotorcraft

A licence in Category C to cover an engine installed in a Rotorcraft will not be issued except in conjunction with a licence in Category A to cover the particular type of Rotorcraft in which the engine is installed and except to an applicant who satisfies the requirements set out in paragraphs 10 and 11 of this Schedule.

CATEGORY A and C - Rotorcraft (including installed engines)

10. Knowledge

- (1) The applicant shall pass an examination which may include practical tests in-
 - (a) aviation law insofar as it affects the functions of an aircraft maintenance engineer;
 - (b) practical arithmetic and elementary physics;
 - (c) principles of rotorcraft flight;
 - (d) principles of construction, assembly, functioning, maintenance, functional testing of rotorcraft components and engines, including components and accessories but excluding radio;
 - (e) knowledge of fuel, oil, coolant and ignition equipment;
 - (f) defect rectification;
 - (g) inspection of rotors;
 - (h) inspection of power plant after installation, repair and modification;
 - (i) incorporation of minor modifications, replacements and repairs.
- (2) The examination shall be based on such syllabus as may be directed from time to time and shall to such extent as may be appropriate have particular reference to the type or types of rotorcraft for which the licence is sought.

11. Experience

- (1) Subject to the provisions of sub-paragraph (2) of this paragraph, the applicant shall have not less than 3 years practical aeronautical engineering experience, including not less than 18 months experience on practical maintenance of rotorcraft (including engines) of which not less than 12 months have been recent experience on either-
 - (a) the type of aircraft for which the licence is sought;
 - (b) an aircraft of similar size, weight and construction and approximately the same maximum permissible gross weight;provided that, in case (b), the applicant shall also have undergone satisfactorily a course of training approved by the Authority on the type of aircraft for which the licence is sought.
- (2) The period of 3 years specified in sub-paragraph (1) of this paragraph may at the discretion of the Authority be reduced if the applicant has undergone satisfactorily a course of training approved by the Authority.

12. Additional Ratings

An applicant for an additional rating shall-

- (a) have had satisfactory recent experience in the practical maintenance of rotorcraft (including engines) prior to flight, of either-
 - (i) the type of aircraft for which the licence is sought;
 - (ii) an aircraft of a similar type in construction and approximately the same maximum permissible gross weight;provided that, in case (ii), the applicant shall also have undergone satisfactorily a course of training approved by the Authority in the type of aircraft and aero-engine for which the licence is sought.
- (b) pass an examination in such subjects specified in paragraph 10 of this Schedule as the Authority in the particular case may require.

CATEGORY X - Compasses

13. Knowledge

- (1) The applicant shall pass an examination (which may include practical tests) in-

- (a) aviation law insofar as it affects the functions of an aircraft maintenance engineer;
 - (b) practical arithmetic and elementary physics;
 - (c) the principles of construction of aircraft compasses and the methods and procedures for the inspection and approval of the installation or replacement and compensation of compasses in aircraft.
- (2) The examination shall be based on such syllabus as may be directed from time to time, and shall, to such extent as may be appropriate, have particular reference to the type of compass for which the licence is sought.

14. Experience

- (1) If the application relates to direct-reading magnetic compasses the applicant shall have had not less than 6 months' recent practical experience in the installation or replacement and compensation of direct-reading magnetic compasses in aircraft.
- (2) If the application relates to remote-reading compasses, the applicant shall have had, in addition to the experience specified in sub-paragraph (1) of this paragraph, not less than 6 months' recent practical experience in the installation or replacement and compensation in aircraft of the type of remote-reading compass for which the licence is sought.

15. Additional Ratings

An applicant for a rating to cover an additional type of remote-reading compass shall-

- (a) furnish satisfactory evidence of -
 - (i) not less than 3 months' recent practical experience on the installation or replacement and compensation of the type for which the additional rating is sought; and
 - (ii) adequate experience in the installation or replacement and compensation of compasses in aircraft, including practical experience during the 6 months immediately preceding the date of application for the additional rating;
- (b) pass an examination in such of the subjects specified in paragraph 13 of this Schedule as the Authority may in the particular case require.

CATEGORY X - Instruments

16. Knowledge

- (1) The applicant shall pass an examination (which may include practical tests) in-
 - (a) aviation law insofar as it affects the functions of an aircraft maintenance engineer;
 - (b) practical arithmetic and elementary physics;
 - (c) the principles of operation, construction, and methods and procedures for the inspection and approval of the repair, overhaul, modification and testing, of aircraft instruments (including aero-engine instruments) and associated equipment;
 - (d) knowledge of materials used in the construction of instruments in aircraft (including aero-engine instruments).
- (2) The examination shall be based on such syllabus as may be directed from time to time.

17. Experience

- (1) The applicant shall have had not less than 3 years' practical instrument engineering experience, including not less than 18 months' recent practical experience in the overhaul, repair, calibration and installation in aircraft of all types of physically and mechanically operated aircraft and aero-engine instruments.
- (2) If the licence is to include a rating for electrically operated instruments, the applicant shall, in addition to having the experience specified in sub-paragraph (1) of this paragraph, either-
 - (a) be the holder of a current licence in Category X -Electrical Equipment and have had not less than 6 months' recent practical experience in the overhaul, repair, replacement and modification of electrically operated aircraft and aero-engine instruments; or
 - (b) have had not less than 1 year of recent practical experience on the overhaul, repair, replacement and modification of electrically operated aircraft and aero-engine instruments.

18. Additional Ratings

An applicant for an additional rating to cover electrically operated instruments shall-

- (a) meet the requirements specified in sub-paragraph (2) of paragraph 17 of this Schedule;
- (b) pass an examination in such of the subjects specified in paragraph 16 of this Schedule as the Authority may in the particular case require.

CATEGORY X - Electrical Equipment

The basic licence will cover all types of aircraft in which the nominal pressure of the main generated supply does not exceed 30 volts direct current.

19. Knowledge

- (1) The applicant shall pass an examination (which may include practical tests) in-
 - (a) aviation law insofar as it affects the functions of an aircraft maintenance engineer;
 - (b) practical arithmetic and elementary physics;
 - (c) theory of electricity and electronics;
 - (d) the principles of construction, and methods and procedures for the inspection and approval of the repair, overhaul, modification and functional testing, of aircraft electrical equipment;
 - (e) knowledge of materials used in the construction of electrical equipment in aircraft.
- (2) The examination shall be based on such syllabus as may be directed from time to time and shall, to such extent as may be appropriate, have particular reference to the type of electrical equipment installed in the type or types of aircraft for which a rating is sought.

20. Experience

- (1) The applicant shall have had not less than 3 years' practical aeronautical electrical engineering experience, of which not less than 1 year shall have been recent practical experience in the overhaul, repair, replacement and

modification of aircraft electrical equipment, including 3 months' recent experience in the inspection and testing of electrical installations in aircraft.

- (2) If the licence is to include a rating for a type of aircraft in which the nominal voltage of the main generated supply exceeds 30 volts direct current, the applicant shall meet the experience requirements in sub-paragraph (1) of this paragraph and shall have had as part thereof a minimum of one year's recent practical experience in the inspection and testing of electrical installations, including those incorporating electronic apparatus, in aircraft, 6 months of which must have been spent on such installations on the type of aircraft for which the rating is sought, provided that the applicant shall also have undergone satisfactorily a course of training approved by the Authority on electrical installations on the type of aircraft for which a rating is sought.

21. Additional Ratings

An applicant for an additional rating for a type of aircraft in which the nominal pressure of the main generated supply exceeds 30 volts direct current shall-

- (a) meet the requirements of paragraph 20 of this Schedule;
- (b) pass an examination in such of the subjects specified in paragraph 19 of this Schedule as the Authority may in the particular case require.

CATEGORY X - Automatic Pilots

22. Knowledge

- (1) The applicant shall pass an examination (which may include practical tests) in-
 - (a) aviation law insofar as it affects the functions of an aircraft maintenance engineer;
 - (b) practical arithmetic and elementary physics;
 - (c) theory of electricity and electronics;
 - (d) principle of construction and operation of automatic pilots and associated equipment;
 - (e) methods and procedures for the inspection and approval of the repair, overhaul, modification and functional testing of automatic pilots and associated equipment, and associated workshop processes.
- (2) The examination shall be based on such syllabus as may be directed from time to time, and shall, to such extent as may be appropriate, have particular

reference to the type or types of automatic pilot for which the licence is sought.

23. Experience

The applicant shall have had not less than 3 years' practical instrument engineering experience, including not less than 18 months' practical experience on the overhaul, repair, replacement, modification, calibration, installation and testing of automatic pilots, of which not less than 9 months shall have been recent experience on the type of automatic pilot for which the licence is sought.

24. Additional Ratings

An applicant for a rating to cover an additional type of automatic pilot shall-

- (a) furnish satisfactory evidence of -
 - (i) not less than six months' recent practical experience on the repair, modification, calibration, installation and testing of automatic pilots of the type for which the additional rating is sought; or
 - (ii) not less than three months' recent practical experience on the repair, modification, calibration, installation and testing of automatic pilots of the type for which the additional rating is sought and has undergone satisfactorily a course of training approved by the Authority;
- (b) pass an examination in such of the subjects specified in paragraph 22 of this Schedule as the Authority may in the particular case require.

CATEGORY X - Radio

25. Knowledge

- (1) The applicant shall pass an examination (which may include practical tests) in-
 - (a) aviation law insofar as it affects the functions of an aircraft maintenance engineer;
 - (b) practical arithmetic and elementary physics;
 - (c) the general principles of electricity and the theory of radio, including circuits and units, receivers and transmitters; power supplies; interference; propagation and aerials; intercommunication devices;

- (d) the principles of operation of navigational aids and the associated equipment in aircraft and on the ground;
 - (e) the use of aircraft radio installation diagrams and appropriate instructional manuals;
 - (f) methods and procedures for the inspection and approval of the repair, modification and functional testing of radio and associated apparatus.
- (2) The examination shall be based on such syllabus as may be directed from time to time and shall, to such extent as may be appropriate, have particular reference to the type or types of radio equipment for which the licence is sought.

26. Experience

- (1) The applicant shall have not less than 3 years practical experience in the maintenance, repair, replacement, modification and installation of aircraft radio and associated equipment of which not less than one year shall have been recent experience on the type of aircraft radio equipment for which the licence is sought.
- (2) If the licence is to include a rating for radar and pulsed hyperbolic systems, the applicant shall, in addition to having the experience specified in subparagraph (1) of this paragraph, have not less than one year's recent experience in the maintenance, repair, replacement, modification and installation of such systems.

27. Additional Ratings

An applicant for an additional rating to cover radar and pulsed hyperbolic systems shall-

- (a) meet the requirements of paragraph 26 of this Schedule;
- (b) pass an examination in such of the subjects specified in paragraph 25 of this Schedule as the Authority may in the particular case require.

PART II

REQUIREMENTS FOR RE-ISSUE OF LICENCE

An applicant for the re-issue of an aircraft maintenance licence shall demonstrate to the Authority satisfactory experience in the exercise of the privileges of that licence in the twelve months immediately preceding the date of application for re-issue. For the purpose of so satisfying the Authority, the applicant shall produce satisfactory evidence of experience in each of the licence rating categories held. An applicant for the re-issue of a JAA licence shall comply with the applicable Joint Aviation Requirements.

SCHEDULE V

PART I

AIR TRAFFIC CONTROL OFFICER

1. Requirements for Issue of a Licence

The requirement for issue of an air traffic controller licence shall be as follows :-

(1) **Knowledge:**

The applicant for an air traffic controller licence shall pass an examination in at least the following subjects:-

(a) Air Law:

rules and regulations relevant to air traffic control;

(b) Air Traffic Control Equipment:

principles, use and limitations of equipment used in air traffic control;

(c) General Knowledge:

principles of flight; principles of operation and functioning of aircraft, powerplants and systems; aircraft performance relevant to air traffic control operations;

(d) Human Performance and Limitations:

human performance and limitations relevant to air traffic control;

(e) Language:

the language nationally designated for use in air traffic control and ability to speak such language without accent or impediment which would adversely affect radio communications;

(f) Meteorology:

aeronautical meteorology; use an appreciation of meteorological documentation and information; origin and characteristics of weather phenomena affecting flight operations and safety; altimetry;

(g) Navigation:

principles of air navigation; principle, limitation and accuracy of navigation systems and visual aids;

(h) Operational Procedures:

air traffic control, communication, radiotelephony and phraseology procedures (routine, non-routine and emergency); use of the relevant aeronautical documentation; safety practices associated with flight;

(i) Human Performance:

human factors and performance relevant to air traffic control operations.

(2) **Experience:**

The applicant shall have completed an approved training course and not less than three months' satisfactory service engaged in the actual control of air traffic under the supervision of an appropriately rated air traffic controller.

(3) **Medical Fitness:**

The applicant shall meet the requirements specified in Article 11 of the Order.

2. Requirements for Issue of an Air Traffic Controller Rating

An applicant for the issue or renewal of an air traffic controller rating shall demonstrate a level of knowledge and skill and shall have such experience and training as are appropriate to the to the privileges to be issued and as specified in a direction under Article 64 of the Order. When two ratings are sought concurrently by an applicant the applicable requirements shall be determined by

the Authority on the basis of the requirements for each rating but shall not be less than those requirements for the more demanding rating.

PART II

FLIGHT INFORMATION SERVICE OFFICER

1. Requirements For Issue Of A Licence

The requirement for issue of a flight information service officer licence shall be as follows :-

(1) **Knowledge:**

The applicant for a flight information service officer shall pass an examination in at least the following subjects:-

(a) Air Law:

rules and regulations relevant to the provision of a flight information service;

(b) Air Traffic Control Equipment:

principles, use and limitations of equipment used in air traffic control;

(c) General Knowledge:

principles of flight; principles of operation and functioning of aircraft, powerplants and systems; aircraft performance relevant to air traffic control operations;

(d) Human Performance and Limitations:

human performance and limitations relevant to the provision of a flight information service;

(e) Language:

the language nationally designated for use in air traffic control and ability to speak such language without accent or impediment which would adversely affect radio communications;

(f) Meteorology:

aeronautical meteorology; use an appreciation of meteorological documentation and information; origin and characteristics of weather phenomena affecting flight operations and safety; altimetry;

(g) Navigation:

principles of air navigation; principle, limitation and accuracy of navigation systems and visual aids;

(h) Operational Procedures:

air traffic control, communication, radiotelephony and phraseology procedures (routine, non-routine and emergency); use of the relevant aeronautical documentation; safety practices associated with flight;

(2) **Experience:**

The applicant shall have completed an approved training course and not less than three months satisfactory service engaged in the actual provision of a flight information service under the supervision of an appropriately rated air traffic controller.

(3) **Medical Fitness:**

The applicant shall meet the requirements specified in Article 11 of the Order.

SCHEDULE VI

RADIO OFFICER

1. Requirements for Issue of a Licence

The requirement for issue of a radio officer licence shall be as follows -

(1) **Knowledge:**

The applicant for a radio officer licence shall pass an examination in at least the following subjects:-

(a) Air Law:

rules and regulations relevant to aeronautical telecommunications;

(b) Aeronautical Station Telecommunications Equipment:

principles, use and limitations of equipment used in aeronautical telecommunications in an aeronautical station;

(c) General Knowledge:

air traffic and air navigation services provided by the State and as provided in the Oceanic Areas in the North Atlantic Region;

(d) Language:

the English language as designated for use in air to ground communications and ability to speak such language without accent or impediment which would adversely affect radio communications;

(e) Operational Procedures:

radiotelephony procedures and phraseology; the telecommunications network; aeronautical mobile and fixed telecommunications services' procedures;

(f) Meteorology:

aeronautical meteorology relevant to telecommunications; use of meteorological information and documentation;

(g) Human Factors:

human performance and limitations relevant to aeronautical telecommunications in an aeronautical station;

and shall demonstrate such knowledge of other subjects as may be directed.

(2) **Experience:**

The applicant shall -

have completed an approved training course and passed the associated examinations within the twelve month period immediately preceding the application for a licence and shall have served satisfactorily for not less than two months under the supervision of an appropriately rated radio officer, or,

have served satisfactorily for not less than six months under the supervision of an appropriately rated radio officer within the twelve month period immediately preceding application for a licence and shall have undertaken such training and passed such examinations as may be directed.

(3) **Medical Fitness:**

The applicant shall meet the requirements as directed in accordance with Article 14 of the Order.

(4) **Skill:**

The applicant shall demonstrate a satisfactory level of skill in operating the telecommunications equipment in use with any associated computer equipment and in transmitting and receiving radio telephone messages with efficiency and accuracy.

SCHEDULE VII

LOGGING AND CREDITING OF FLIGHT TIME

The logging and crediting of flight time shall be as follows:-

1. Logging of flight time in pilot's Logbooks

Particulars of each flight during which the holder of a pilot logbook acted either as a member of the flight crew of an aircraft or for the purpose of qualifying for the issue or re-issue of a licence or the issue, revalidation or renewal of a rating under this Order, as the case may be, shall be recorded in the logbook at the end of each flight or as soon thereafter as is reasonably practicable, including:-

- (a) the date and the places at which the holder embarked on and disembarked from the aircraft and the time spent during the course of a flight when acting in either capacity;
- (b) the type and registration marks of the aircraft;
- (c) the capacity in which the holder acted in flight;
- (d) particulars of any special conditions under which the flight was conducted, including night flying and instrument flying; and
- (e) particulars of any skill test or examination undertaken whilst in flight.

2. Crediting of Flight Time

(1) **Pilot-in-command or pilot under instruction:**

- (a) The holder of a pilot or student pilot licence shall be entitled to be credited in full with all solo, dual instruction under a duly authorised flight instructor and pilot-in-command flight time.
- (b) A student pilot who is undergoing training for the issue of a licence shall be entitled to be credited in full with all dual instruction time under a duly authorised flight instructor.

(2) **Co-pilot:**

The holder of a pilot licence, when acting as co-pilot of an aircraft required to be operated with a co-pilot and while validly type-rated on that aircraft, may be credited with not more than one-half of the co-pilot flight time towards the total flight time required for a higher grade of pilot licence.

(3) **Co-pilot performing the functions and duties of a pilot-in-command:**

The holder of a pilot licence, when acting as co-pilot of an aircraft required or approved by the Authority to be operated with a co-pilot and while validly type rated on that aircraft and performing, under the supervision of a duly authorised pilot-in-command, the functions and duties of a pilot-in-command, may be credited in full with this flight time towards the total flight time required for a higher grade of pilot licence, provided the method of supervision employed is acceptable to the Authority.

(4) **Flight Engineer:**

The holder of a Flight Engineers licence, when acting as a Flight Engineer on an aircraft required to be operated with a Flight Engineer, and while validly type rated on that aircraft, may be credited with not more than one third of such Flight Engineer flight time towards the total flight time required for a pilot licence.

(5) **Training Flights:**

A student pilot, or the holder of a pilot licence undergoing a training or dual instruction flight under a duly authorised flight instructor, or a flight under the supervision of a duly authorised pilot-in-command, or a skill test, as the case may be, for the issue or re-issue of a licence or the issue, revalidation or renewal of a rating under this Order, shall, on completion of such flight, have the logbook concerned certified accordingly by the instructor or pilot-in-command as appropriate.

MEDICAL REQUIREMENTS

1. General

Subject to the provisions of paragraph 3 of this Schedule, an applicant for the issue or re-issue of a licence or the issue, revalidation or renewal of a rating therein to act in any capacity as a flight crew member of an aircraft, where compliance with the applicable Joint Aviation Requirements is not required by the Authority shall meet the appropriate medical requirements set out herein, provided that-

- (a) an applicant who fails to satisfy the appropriate medical requirements may, at the discretion of the Authority be regarded as eligible for the issue or re-issue of a licence if the licence is to be restricted to flight within the state. The issue or re-issue of any licence to be so restricted may be made subject to such conditions and limitations as the Authority may consider appropriate in the particular case;
 - (b) an applicant for the re-issue or revalidation of a licence, other than a JAA licence, who is for the time being on duty as a flight crew member of an aircraft in a region distant from the usual place of medical examination, may, exceptionally, have the satisfactory medical examination required for the re-issue or revalidation of the licence, at the discretion of the Authority -
 - (i) deferred once for a period of six months in the case of a flight crew member of a private aircraft; or
 - (ii) deferred for two consecutive periods of three months each in the case of a flight crew member of a commercial transport or aerial work aircraft, on condition that the applicant obtains locally on each occasion a favourable medical certificate after having been examined by a qualified physician performing public medical functions in that region or experienced in the examination of aviation personnel or, if such is not available, by a physician legally qualified to practise.
2. An applicant who attends for medical examination for the issue, re-issue or revalidation of a licence shall furnish to the medical examiner or medical board, as the case may be, a declaration signed by that applicant stating whether or not the applicant has previously undergone such a medical examination, and if so, when and with what result. A false declaration may entail the cancellation of any licence or rating issued, re-issued or revalidated as a result of the examination.
3. Where an applicant for the issue, re-issue or revalidation of a licence, other than a JAA licence, or for the inclusion of a rating in a licence, other than a JAA licence, or the renewal or revalidation of a rating, fails to satisfy the requirements, the

licence or rating concerned may nevertheless be issued, renewed or revalidated, as the case may be, subject to the following conditions:

- (a) that the medical report indicates that:
 - (i) the condition of the applicant is not such as to introduce any hazard either of sudden incapacity or of inability to perform the duties concerned safely during the validity period of the licence; and
 - (ii) failure to attain the requirements is capable of being compensated;
- (b) that the Authority has satisfactory evidence that the applicant has already acquired and demonstrated such ability, skill and experience as to compensate for any deficiency concerned;
- (c) that the licence shall be endorsed with any special limitations when the safe performance of flight duties is dependent on compliance with such limitations.

Physical Requirements

4. Class 1 Medical Assessment

The medical examination and assessment shall be based on the following requirements of mental and physical fitness:

The applicant shall be required to be free from any abnormality, congenital or acquired, or any active or latent, acute or chronic, physical disability or any wound, injury or sequelae from operation or any effect or side-effect of any prescription or non-prescription therapeutic medication taken that would entail any degree of functional incapacity which is likely to interfere with the safe operation of an aircraft or with the safe performance of that person's duties.

The medical examination shall include a full enquiry into the family and personal history of the applicant. The information obtained shall be given in a statement made and signed by the applicant and shall be taken into consideration by the medical board. The applicant shall not suffer from any disease or disability which could render that applicant likely to become suddenly unable either to operate an aircraft safely or to perform assigned duties safely and shall have no established medical history or clinical diagnosis of a psychosis, alcoholism, drug dependence, a personality disorder which has resulted in overt acts, a mental abnormality or significant neurosis such as might render the applicant unable to safely exercise the privileges of the licence applied for or held.

Examination of the nervous system

The applicant shall have no history of significant mental or nervous trouble and shall be required to be free from any mental impairment, or presumptive evidence

of latent epilepsy or from any progressive disease of the nervous system and from any non-progressive disease of that system, the effects of which are likely to interfere with the safe handling of an aircraft. Cases of past or present insanity and cases in which syphilis, past or present, has affected the central nervous system shall be assessed as permanently unfit, unless, in the latter case, the applicant for initial issue of a licence furnishes satisfactory evidence to the examiner of having undergone adequate treatment.

Injuries of the head

Cases of simple concussion, or simple fracture of the skull without associated intracranial injury shall be assessed as temporarily unfit until such time as the medical board is satisfied that the effects of the concussion or fracture are no longer likely to jeopardise safety in flight. If the period of incapacity exceeds one month, the licence shall, when re-issued, be made valid only for a period of two months in the first instance. Thereafter its validity shall be restricted to consecutive periods of two months until the medical board reports that the after-effects of the concussion or fracture are no longer likely to cause a sudden incapacity in flight.

Cases of head injury associated with intracranial injuries shall be assessed as permanently unfit if a local lesion of the brain or meninges persists.

General surgical examination

The applicant shall neither suffer from any wound or injury, nor have undergone any operation nor possess any abnormality, congenital or acquired, which is considered by the medical board likely to interfere with the safe handling of an aircraft at any altitude throughout a prolonged or difficult flight and shall be required to be completely free from hernia.

Locomotor System

Any active disease of the bones, joints, muscles or tendons and all serious functional sequelae of congenital or acquired disease shall be assessed as unfit. On issue or re-issue of a licence, the functional after-effects of lesion affecting the bones, joints, muscles or tendons and certain anatomical defects compatible with safe handling of aircraft at any altitude and throughout a prolonged or difficult flight may be assessed as fit.

Digestive tract

Any sequelae of disease or surgical intervention on any part of the digestive tract and its adnexae, liable to cause sudden incapacity in flight, in particular any obstructions due to stricture or compression, shall be assessed as unfit.

Thoracic cage

Any extensive mutilation of the chest wall with collapse of the thoracic cage and sequelae of surgical procedures resulting in decreased respiratory efficiency at altitude shall be assessed as unfit.

Urinary System

Any sequelae of disease or surgical procedures on the kidneys and the urinary tracts liable to cause sudden incapacity, in particular any obstructions due to stricture or compression, shall be assessed as unfit. Compensated nephrectomy without hypertension or uraemia may be assessed as fit.

An applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexae or the urinary system, which has involved a total or partial excision or a diversion of any of these organs shall be assessed as unfit until such time as the medical board, having had access to the details of the operation concerned, considers that the effects of the operation are not liable to cause sudden incapacity in the air.

General Medical examination

The applicant shall not suffer from any disease or disability which could result in flight in that person suddenly becoming unable to handle aircraft safely.

The heart shall not possess any abnormality, congenital or acquired, which is likely to interfere with the safe handling of aircraft. Respiratory arrhythmia, occasional extra systoles which disappear on exercise, increase of pulse rate from excitement or exercise, or a slow pulse not associated with auriculoventricular dissociation may be regarded as coming within "normal" limits. Electrocardiography shall form part of the medical examination for the issue of a licence and shall be included in re-examinations of candidates no less frequently than every five years up to the age of forty and thereafter no less frequently than, every two years. Routine electrocardiography is for case-finding purposes only and must be supported by a thorough cardio-vascular investigation where that is found to be necessary.

The systolic and diastolic blood pressures shall be within normal limits. The use of drugs to control high blood pressure shall not be acceptable unless the use of those drugs which, according to accredited medical conclusion, is compatible with the safe exercise of the applicant or licence holder's rating or privileges.

There shall be no significant functional or structural abnormality of the circulatory tree.

There shall be no acute disability of the lungs or any active disease of the structures of the lungs, mediastinum or pleura. Radiography shall form a part of the medical examination for the issue of a licence and thereafter in all doubtful clinical cases.

Cases of pulmonary emphysema should be assessed as unfit only if the condition is causing symptoms.

Cases of active pulmonary tuberculosis, duly diagnosed, shall be assessed as unfit. Cases of quiescent or healed lesions which are known to be tuberculous or are presumably tuberculous, in origin, may be assessed as fit. Cases of doubt about the activity of a lesion, where symptoms of activity of the disease are lacking, clinically, shall be assessed as temporarily unfit for a period of not less than three months from the date of the medical examination. At the end of the three months' period, a further radiographic record shall be made and compared carefully with the original. If there is no sign of extension of the disease and there are no general symptoms or symptoms referable to the chest, the applicant may be assessed as fit but in these circumstances the licence shall be made valid only for a period of three months in the first instance. Thereafter, provided there continues to be no sign of extension of the disease as shown by radiographic examinations carried out at the end of each three months' period, the validity of the licence shall be restricted to consecutive periods of three months. When the applicant has been under observation under this scheme for a total period of at least two years and comparison of all the radiographic records shows no changes or only retrogression of the lesion, the lesion shall be regarded as "quiescent" or "healed".

Cases of disabling disease with important impairment of function of the gastrointestinal tract and its adnexae shall be assessed as unfit.

Cases of significant metabolic, nutritional or endocrine disorders shall be assessed as unfit. Proven cases of diabetes mellitus shall be assessed as unfit; doubtful cases shall be assessed as unfit until the condition is proved to be non diabetic.

Cases of severe and moderate enlargement of the spleen persistently below the costal margin shall be assessed as unfit. Cases of significant, localised and generalised enlargement of the lymphatic glands and of diseases of the blood shall be assessed as unfit; those due to a transient condition should be assessed as only temporarily unfit.

Cases presenting any signs of organic disease of the kidney shall be assessed as unfit, those due to a transient condition may be assessed as temporarily unfit. The urine shall contain no abnormal element considered by the medical board to be pathological. Cases of affections of the urinary passages and of the genital organs

shall be assessed as unfit; those due to a transient condition may be assessed as temporarily unfit.

An applicant for the first issue of a licence who has a personal history of syphilis shall be required to furnish evidence, satisfactory to the medical board, of having undergone adequate treatment.

The cases of applicants of the female sex who have undergone gynaecological operations shall be considered individually. Applicants of the female sex who have a history of severe menstrual disturbances that have proved unamenable to treatment and that are likely to interfere with the safe handling of aircraft shall be assessed as unfit. In the event of presumed pregnancy the applicant shall be assessed as temporarily unfit. After confinement or miscarriage the applicant shall not be permitted to exercise the privileges of her licence until she has undergone a new medical examination and been assessed as fit.

Eye examination

The functions of the eye and its adnexae shall be normal. There shall be no active pathological condition, acute or chronic, of either eye or adnexae which is considered likely to interfere with its proper function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges. The applicant shall be required to have normal fields of vision and to have a distant visual acuity of not less than 6/9 (20/30, 0.7) in each eye separately, with or without the use of correcting lenses. Where correcting lenses are required the applicant shall have a visual acuity without correction in each eye separately of not less than 6/60 (20/200, 0.1) or the refractive error falls within the range of ± 3 dioptres and those lenses shall always be worn when exercising the privileges of the applicant's licence.

The applicant shall also have the ability to read an N5 (Times New Roman type-face) chart or its equivalent at a distance selected by that applicant in the range of 30 cm to 50 cm and the ability to read the N14 chart or its equivalent at a distance of 100 cm. If this requirement is met only by the use of correcting lenses, the applicant may be assessed as fit provided that such lenses are available for immediate use when exercising the privileges of the licence concerned.

The applicant shall also be required to demonstrate the ability to readily perceive those colours the perception of which is necessary for the safe exercise of the applicant's licence and rating privileges and shall be tested for the ability to correctly identify a series of pseudoisochromatic plates in daylight or in artificial light of the same colour temperature.

Ear examination

The applicant shall be required to be free from any hearing defect which would interfere with the safe exercise of the applicant's licence and rating privileges. There shall be -

- (a) no active pathological process, acute or chronic, of the internal ear or middle ear cleft;
- (b) no unhealed (unclosed) perforation of the tympanic membranes, except that a single dry perforation of non-infectious origin need not render the applicant ineligible, provided that the appropriate hearing requirements set out in this Schedule can be met;
- (c) no permanent obstruction of the Eustachian tubes;
- (d) no permanent disturbances of the vestibular apparatus. Transient conditions may be assessed as temporarily unfit.

The applicant, when tested on a pure tone audiometer at the time of initial licence issue and not less than once every five years up to the age of forty years and thereafter not less than once every three years shall not have a hearing loss in either ear separately of more than 35dB at any of the frequencies 500, 1000 or 2000 Hz or more than 50dB at 3000 Hz or such greater hearing loss as may be assessed as acceptable using an alternative method.

Nose, throat and mouth examination

There shall be free nasal air entry on both sides. There shall be no serious malformation nor serious, acute or chronic affection of the buccal cavity or upper respiratory tract. Defects of speech and stuttering shall be assessed as unfit.

5. Class 2 Medical Assessment

The medical examination and assessment shall be based on the following requirements of mental and physical fitness-

The applicant shall be required to be free from such active or latent, acute or chronic physical disability as would entail a degree of functional incapacity which is likely to interfere with the safe performance of the duties concerned at any altitude throughout a prolonged or difficult flight.

The medical examination shall include a full inquiry into the family and personal history of the applicant. The information obtained shall be given in a statement made and signed by that applicant and shall be taken into consideration by the medical board.

The applicant shall not suffer from any disease or disability which could render that applicant likely to become suddenly unable either to operate an aircraft safely or to perform assigned duties safely and shall have no established medical history or clinical diagnosis of a psychosis, alcoholism, drug dependence, a personality disorder which has resulted in overt acts, a mental abnormality or significant neurosis such as might render the applicant unable to safely exercise the privileges of the licence applied for or held.

Examination of the nervous system

The applicant shall have no history of significant mental or nervous trouble and shall be required to be free from any mental impairment, or presumptive evidence of latent epilepsy or from any progressive disease of the nervous system and from any non-progressive disease of that system, the effects of which are likely to interfere with the safe performance of the duties concerned. Cases of past or present insanity and cases in which syphilis, past or present, has affected the central nervous system shall be assessed as permanently unfit, unless, in the latter case, the applicant for initial issue of a licence furnishes satisfactory evidence to the examiner of having undergone adequate treatment.

Injuries of the head

Cases of simple concussion or simple fracture of the skull without associated intracranial injury shall be assessed as temporarily unfit until such time as the medical board is satisfied that the effects of the concussion or fracture are no longer likely to jeopardise safety in flight. If the period of incapacity exceeds one month, the licence shall when re-issued be made valid only for a period of two months in the first instance. Thereafter its validity shall be restricted to consecutive periods of two months until the medical board reports that the after-effects of the concussion or fracture are no longer likely to cause a sudden incapacity in flight.

Cases of head injury associated with intracranial injuries shall be assessed as permanently unfit if a local lesion of the brain or meninges persists.

Cases of head injury in which there has been an operation on the skull with loss of bony substance involving the two tables of the cranial vault shall be assessed as permanently unfit.

General surgical examination

The applicant shall neither suffer from any wound or injury, nor have undergone any operation, nor possess any abnormality, congenital or acquired, which is considered by the medical board likely to interfere with the safe performance of

the duties concerned at any altitude throughout a prolonged or difficult flight and shall be required to be completely free from hernia.

Locomotor System

Any active disease of the bones, joints, muscles or tendons and all serious functional sequelae of congenital or acquired disease shall be assessed as unfit. On the issue or re-issue of a licence, the functional after-effects of lesion affecting the bones, joints, muscles or tendons and certain anatomical defects compatible with the safe performance of the duties concerned at any altitude and throughout a prolonged or difficult flight may be assessed as fit.

Digestive tract

Any sequelae of disease or surgical intervention on any part of the digestive tract and its adnexae, liable to cause sudden incapacity in flight, in particular any obstructions due to stricture or compression, shall be assessed as unfit.

Thoracic cage

Any extensive mutilation of the chest wall with collapse of the thoracic cage and sequelae of surgical procedures resulting in decreased respiratory efficiency at altitude shall be assessed as unfit.

Urinary System

Any sequelae of disease or surgical procedures on the kidneys and the urinary tracts liable to cause sudden incapacity, in particular any obstructions, due to stricture or compression, shall be assessed as unfit. Compensated nephrectomy without hypertension or uraemia may be assessed as fit.

An applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexae or the urinary system, which has involved a total or partial excision or a diversion of any of these organs shall be assessed as unfit until such time as the medical board, having had access to the details of the operation concerned, considers that the effects of the operation are not liable to cause sudden incapacity in the air.

General medical examination

The applicant shall not suffer from any disease or disability which could render that person in flight liable suddenly to become unable to perform the duties concerned safely. The heart shall not possess any abnormality, congenital or acquired, which is likely to interfere with safe performance of duties. Respiratory arrhythmia, occasional extra systoles which disappear on exercise, increase of pulse rate from excitement or exercise, or a slow pulse not associated with auriculoventricular dissociation may be regarded as coming within "normal" limits.

Electrocardiography shall form part of the heart examination for the first issue of a licence and in re-examinations in all doubtful cases. Routine electrocardiography is for case-finding purposes only and must be supported by a thorough cardiovascular investigation where that is found to be necessary.

The systolic and diastolic blood pressures shall be within normal limits. The use of drugs to control high blood pressure shall not be acceptable unless the use of those drugs which, according to accredited medical conclusion, is compatible with the safe exercise of the applicant or licence holder's rating or privileges.

There shall be no significant functional or structural abnormality of the circulatory tree.

There shall be no acute disability of the lungs or any active disease of the structures of the lungs, mediastinum or pleura. Radiography shall form a part of the medical examination for the issue of a licence and thereafter in all doubtful clinical cases.

Cases of pulmonary emphysema should be assessed as unfit only if the condition is causing symptoms.

Cases of active pulmonary tuberculosis, duly diagnosed, shall be assessed as unfit. Cases of quiescent or healed lesions which are known to be tuberculous, or are presumably tuberculous in origin, may be assessed as fit.

Cases of doubt about the activity of a lesion, where symptoms of activity of the disease are lacking clinically, shall be assessed as temporarily unfit for a period of not less than three months from the date of the medical examination. At the end of the three months' period, a further radiographic record shall be made and compared carefully with the original. If there is no sign of extension of the disease and there are no general symptoms or symptoms referable to the chest, the applicant may be assessed as fit, but in these circumstances the licence shall be made valid only for a period of three months in the first instance. Thereafter, provided there continues to be no sign of extension of the disease as shown by radiographic examination carried out at the end of each three months' period, the validity of the licence shall be restricted to consecutive periods of three months. When the applicant has been under observation under this scheme for a total period of at least two years and comparison of all the radiographic records shows no changes or only retrogression of the lesion, the lesion shall be regarded as "quiescent" or "healed".

Cases of disabling disease with important impairment of function of the gastrointestinal tract and its adnexae shall be assessed as unfit.

Cases of significant metabolic, nutritional or endocrine disorders shall be assessed as unfit. Proven cases of diabetes mellitus shall be assessed as unfit; doubtful cases shall be assessed as unfit until the condition is proven to be non-diabetic.

Cases of severe and moderate enlargement of the spleen persistently below the costal margin shall be assessed as unfit. Cases of significant, localised and generalised enlargement of the Lymphatic glands and of diseases of the blood shall be assessed as unfit; those due to transient condition should be assessed as only temporarily unfit.

Cases presenting any signs of organic disease of the kidney shall be assessed as unfit, those due to a transient condition may be assessed as temporarily unfit. The urine shall contain no abnormal element considered by the medical board to be pathological. Cases of affections of the urinary passages and of the genital organs shall be assessed as unfit; those due to a transient condition may be assessed as temporarily unfit.

An applicant for the first issue of a licence who has a personal history of syphilis shall be required to furnish evidence, satisfactory to the medical board, that of having undergone adequate treatment.

The cases of applicants of the female sex who have undergone gynaecological operations shall be considered individually. Applicants of the female sex who have a history of severe menstrual disturbances that have proved unamenable to treatment and that are likely to interfere with the safe performance of their duties shall be assessed as temporarily unfit. In the event of presumed pregnancy the applicant shall be assessed as temporarily unfit. After confinement or miscarriage the applicant shall not be permitted to exercise the privileges of her licence until she has undergone a new medical examination and been assessed as fit.

Eye Examination

The functions of the eye and its adnexae shall be normal. There shall be no active pathological condition, acute or chronic, of either eye or adnexae which is considered likely to interfere with its proper function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges. The applicant shall be required to have normal fields of vision and to have a distant visual acuity of not less than 6/12 (20/40, 0.5) in each eye separately, with or without the use of correcting lenses. Where correcting lenses are required the applicant shall have a visual acuity without correction in each eye separately of not less than 6/60 (20/200, 0.1) or the refractive error falls within the range of ± 5 dioptries and those lenses shall always be worn when exercising the privileges of the applicant's licence.

The applicant shall also have the ability to read an N5 (Times New Roman type-face) chart or its equivalent at a distance selected by that applicant in the range of 30 cm to 50 cm. If this requirement is met only by the use of correcting lenses, the applicant may be assessed as fit provided that such lenses are available for immediate use when exercising the privileges of the licence concerned.

The applicant shall also be required to demonstrate the ability to readily perceive those colours the perception of which is necessary for the safe exercise of the

applicant's licence and rating privileges and shall be tested for the ability to correctly identify a series of pseudoisochromatic plates in daylight or in artificial light of the same colour temperature.

Ear examination

The applicant shall be required to be free from any hearing defect which would interfere with the safe exercise of the applicant's licence and rating privileges. There shall be-

- (a) no active pathological process, acute or chronic, of the internal ear or middle ear cleft;
- (b) no permanent disturbances of the vestibular apparatus. Transient conditions may be assessed as temporarily unfit.

The applicant shall be able to hear an average conversational voice in a quiet room, using both ears, at a distance of 2m from the examiner, with the back turned to the examiner.

Nose, throat and mouth examination

There shall be free nasal air entry on both sides. There shall be no serious malformation nor serious, acute or chronic affection of the buccal cavity or upper respiratory tract. Applicants suffering from a serious degree of stuttering shall be assessed as unfit.

6. Class 3 Medical Assessment

The medical examination and assessment shall be based on the following requirements of mental and physical fitness:

The applicant shall be required to be free from any abnormality, congenital or acquired, or any active or latent, acute or chronic, physical disability or any wound, injury or sequelae from operation or any effect or side-effect of any prescription or non-prescription therapeutic medication taken that would entail any degree of functional incapacity which is likely to interfere with the safe performance of that persons' duties.

The medical examination shall include a full inquiry into the family and personal history of the applicant. The information obtained shall be given in a statement made and signed by that applicant and shall be taken into consideration by the medical examiner.

The applicant shall not suffer from any disease or disability which could render that applicant likely to become suddenly unable to perform assigned duties safely and

shall have no established medical history or clinical diagnosis of a psychosis, alcoholism, drug dependence, a personality disorder which has resulted in overt acts, a mental abnormality or significant neurosis such as might render the applicant unable to safely exercise the privileges of the licence applied for or held.

Examination of the nervous system

The applicant shall have no history of significant mental or nervous trouble and shall be required to be free from any mental impairment, or presumptive evidence of latent epilepsy and shall be required to be free from any progressive disease of the nervous system and from any non-progressive disease of that system, the effects of which are likely to interfere with the safe handling of an aircraft. Cases of past or present insanity and cases in which syphilis, past or present, has affected the central nervous system shall be assessed as permanently unfit, unless, in the latter case, the applicant for initial issue of a licence furnishes satisfactory evidence to the examiner of having undergone adequate treatment.

Injuries of the head

Cases of simple concussion or simple fracture of the skull without associated intracranial injury shall be assessed as temporarily unfit until such time as the medical examiner is satisfied that the effects of the concussion or fracture are no longer likely to jeopardise safety in flight.

Cases of head injury associated with intracranial injuries shall be assessed as permanently unfit if a local lesion of the brain or meninges persists.

Cases of head injury in which there has been an operation on the skull with loss of bony substance involving the two tables of the cranial vault shall be assessed as permanently unfit; cases repaired by plates ensuring present and future integrity of the central nervous system may be assessed as fit. The licence shall not be re-issued until a period of one year has expired.

General surgical examination

The applicant shall neither suffer from any wound or injury, nor have undergone any operation, nor possess any abnormality, congenital or acquired, which is likely to interfere with the safe handling of an aircraft and shall be required to be free from hernia. Cases in which the medical examiner is satisfied that a well-fitted truss will be worn may be assessed as fit.

Locomotor System

Any active disease of the bones, joints, muscles or tendons and all serious functional sequelae of congenital or acquired disease shall be assessed as unfit. Certain qualifying functional after-effects of lesion affecting the bones, joints, muscles or tendons and certain anatomical defects compatible with safe handling of aircraft in flight may be assessed as fit.

Digestive tract

Any sequelae of disease or surgical intervention on any part of the digestive tract and its adnexae, liable to cause sudden incapacity in flight, in particular any obstructions due to stricture or compression, shall be assessed as unfit.

Thoracic cage

Any extensive mutilation of the chest wall with collapse of the thoracic cage and sequelae of surgical procedures resulting in decreased respiratory efficiency at altitude shall be assessed as unfit.

Urinary System

Any sequelae of disease or surgical procedures on the kidneys and the urinary tracts liable to cause sudden incapacity, in particular any obstructions due to stricture or compression, shall be assessed as unfit. Compensated nephrectomy without hypertension or uraemia may be assessed as fit.

An applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexae or the urinary system, which has involved a total or partial excision or a diversion of any of these organs shall be assessed as unfit until such time as the medical examiner, having had access to the details of the operation concerned, considers that the effects of the operation are not liable to cause sudden incapacity in the air.

General medical examination

The applicant shall not suffer from any disease or disability which could render that person in flight liable suddenly to become unable to handle aircraft safely.

The heart shall not possess any abnormality congenital or acquired which is likely to interfere with the safe handling of aircraft. Respiratory arrhythmia, occasional extra systoles which disappear on exercise, increase of pulse rate from excitement or exercise or a slow pulse not associated with auriculoventricular dissociation may be regarded as coming within "normal" limits.

Electrocardiography shall form part of the heart examination for the first issue of a licence and in re-examinations in all doubtful cases. Routine electrocardiography is for case-finding purposes only and must be supported by a thorough cardiovascular investigation where that is found to be necessary.

The systolic and diastolic blood pressures shall be within normal limits with due regard to age. The use of drugs to control high blood pressure shall not be acceptable unless the use of those drugs which, according to accredited medical conclusion, is compatible with the safe exercise of the applicant or licence holder's rating or privileges.

There shall be no significant functional or structural abnormality of the circulatory tree. The presence of varicosities shall not necessarily entail unfitness.

There shall be no acute disability of the lungs nor any active disease of the structures of the lungs, mediastinum or pleura. Radiography shall form a part of the medical examination for the issue of a licence and in all doubtful clinical cases.

Cases of pulmonary emphysema should be assessed as unfit only if the condition is causing symptoms.

Cases of active pulmonary tuberculosis, duly diagnosed, shall be assessed as unfit. Cases of quiescent or healed lesions which are known to be tuberculous, or are presumably tuberculous, in origin may be assessed as fit.

Cases of disabling disease with important impairment of function of the gastrointestinal tract and its adnexae shall be assessed as unfit.

Proven cases of diabetes mellitus shall be assessed as unfit; doubtful cases shall be assessed as unfit until the condition is proven to be non-diabetic.

Cases of significant localised and generalised enlargement of the Lymphatic glands and of diseases of the blood shall be assessed as unfit. Those due to a transient condition should be assessed as only temporarily unfit.

Cases presenting any signs of organic disease of the kidneys shall be assessed as unfit, those due to a transient condition may be assessed as temporarily unfit. The urine shall contain no abnormal element considered by the medical examiner to be pathological. Cases of affections of the urinary passages and of the genital organs shall be assessed as unfit; those due to a transient condition may be assessed as temporarily unfit.

An applicant for the first issue of a licence who has a personal history of syphilis shall be required to furnish evidence, satisfactory to the medical examiner, of having undergone adequate treatment.

Cases of presumed pregnancy shall be assessed as temporarily unfit.

Eye examination

The functions of the eye and its adnexae shall be normal. There shall be no active pathological condition, acute or chronic, of either eye or adnexae which is considered likely to interfere with its proper function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges. The applicant shall be required to have normal fields of vision and to have a distant visual acuity of not less than 6/9 (20/30, 0.7) in each eye separately, with or without the use of correcting lenses. Where correcting lenses are required the applicant shall have a visual acuity without correction in each eye separately of not less than 6/60 (20/200, 0.1) or the refractive error falls within the range of +3 dioptries and those lenses shall always be worn when exercising the privileges of the applicant's licence.

The applicant shall also have the ability to read an N5 (Times New Roman type-face) chart or its equivalent at a distance selected by that applicant in the range of 30 cm to 50 cm and the ability to read the N14 chart or its equivalent at a distance of 100 cm. If this requirement is met only by the use of correcting lenses, the applicant may be assessed as fit provided that such lenses are available for immediate use when exercising the privileges of the licence concerned.

The applicant shall also be required to demonstrate the ability to readily perceive those colours the perception of which is necessary for the safe exercise of the applicant's licence and rating privileges and shall be tested for the ability to correctly identify a series of pseudoisochromatic plates in daylight or in artificial light of the same colour temperature.

Ear examination

The applicant shall be required to be free from any hearing defect which would interfere with the safe exercise of the applicant's licence and rating privileges.

There shall be-

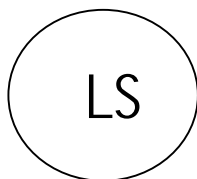
- (a) no active pathological process, acute or chronic, of the internal ear or middle ear cleft;
- (b) no permanent disturbances of the vestibular apparatus. Transient conditions may be assessed as temporarily unfit.

The applicant, when tested on a pure tone audiometer at the time of initial licence issue and not less than once every five years up to the age of forty years and thereafter not less than once every three years shall not have a hearing loss in either ear separately of more than 35dB at any of the frequencies 500, 1000 or 2000 Hz or more than 50dB at 3000 Hz or such greater hearing loss as may be assessed as acceptable using an alternative method.

Nose, throat and mouth examination

There shall be no serious malformation or serious, acute or chronic affection of the buccal cavity or upper respiratory tract. Cases of speech defects and stuttering shall be assessed as unfit.

GIVEN under the common seal of the Irish Aviation Authority this 20th day of October, 2000



**Paul Duffy
Tom Quinn**

**Director
Director**

Price £14.00

EXPLANATORY NOTE

(This note is not part of the Order and does not purport to be a legal interpretation)

This Order revokes and re-enacts with modifications the Air Navigation (Personnel Licensing) Order, 1966 (S.I. No. 165 of 1966). Paragraph (2) of Article 3 of this Order provides that, notwithstanding the revocation, those provisions of the revoked Orders relating to the licences and ratings, which are continued in force by this Order, shall continue to have effect in relation to such licences and ratings during the currency thereof. The principal modifications are as follows:-

The introduction of provisions in relation to "JAA licences" issued in accordance with JAR-FCL for flight crew licences and JAR 66 in respect of aircraft maintenance licences.. Provisions for Flight Navigator and Flight Radio Operator Licences have been deleted. Provisions for aeronautical station operators are now included for the first time. Amendment (Personnel Licensing) Orders issued since 1966 have been updated and incorporated into this Order - viz:

- Air Navigation (Personnel Licensing) (Amendment) Order, 1988 (S.I. No. 324 of 1988);
- Air Navigation (Personnel Licensing) (Amendment) Order, 1996 (S.I. No. 50 of 1996);
- Air Navigation (Personnel Licensing) (Amendment) (No. 2) Order, 1996 (S.I. No. 321 of 1996);
- Air Navigation (Personnel Licensing) (Amendment) Order, 1997 (S.I. No. 101 of 1997);
- Air Navigation (Personnel Licensing) (Amendment) Order, 1999 (S.I. No. 21 of 1997);
- Air Navigation (Personnel Licensing) (Amendment) (No. 2) Order, 1999 (S.I. No. 159 of 1999).