

CHAPTER 4 LICENCES AND RATINGS FOR PERSONNEL OTHER THAN FLIGHT CREW MEMBERS

4.1 General rules concerning licences and ratings for personnel other than flight crew members

- 4.1.1 An applicant shall, before being issued with any licence or rating for personnel other than flight crew members, meet such requirements in respect of age, knowledge, experience and where appropriate, medical fitness and skill, as are specified for that licence or rating.
- 4.1.2 An applicant, for any licence or rating for personnel other than flight crew members, shall demonstrate, in a manner determined by MCAA, such requirements in respect of knowledge and skill as are specified for that licence or rating.

4.2 Aircraft maintenance (technician/engineer/mechanic)

Aircraft maintenance (technician/engineer/mechanic) licensing will be in accordance with MCAR 66.

4.3 Student air traffic controller

Reserved

4.4 Air traffic controller licence

Air traffic controller licensing will be in accordance with MCAR 65 & CAAP MOS 65.

4.5 Air traffic controller ratings

Air traffic controller ratings will be in accordance with MCAR 65 & CAAP MOS 65.

4.6 Flight operations officer/flight dispatcher licence

4.6.1 Requirements for the issue of the licence

4.6.1.1 Age

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

4.6.1.2 Knowledge

The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a flight operations officer licence, in at least the following subjects:

Air law

- a) rules and regulations relevant to the holder of a flight operations officer licence; appropriate air traffic services practices and procedures;

Aircraft general knowledge

- b) principles of operation of aeroplane powerplants, systems and instruments;
- c) operating limitations of aeroplanes and powerplants;
- d) minimum equipment list;

Flight performance calculation, planning procedures and loading

- e) effects of loading and mass distribution on aircraft performance and flight characteristics; mass and balance calculations;
- f) operational flight planning; fuel consumption and endurance calculations; alternate aerodrome selection procedures; en-route cruise control; extended range operation;
- g) preparation and filing of air traffic services flight plans;
- h) basic principles of computer-assisted planning systems;

Human performance

- i) human performance relevant to dispatch duties including principles of threat and error management.

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

Meteorology

- j) aeronautical meteorology; 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;
- k) interpretation and application of aeronautical meteorological reports, charts and forecasts; codes and abbreviations; use of, and procedures for obtaining, meteorological information;

Navigation

- l) principles of air navigation with particular reference to instrument flight;

Operational procedures

- m) use of aeronautical documentation;
- n) operational procedures for the carriage of freight and dangerous goods;
- o) procedures relating to aircraft accidents and incidents; emergency flight procedures;
- p) procedures relating to unlawful interference and sabotage of aircraft;

Principles of flight

- q) principles of flight relating to the appropriate category of aircraft; and

Radio communication

- r) procedures for communicating with aircraft and relevant ground stations.

4.6.1.3 *Experience*

4.6.1.3.1 The applicant shall have gained the following experience:

- a) a total of two years of service in any one or in any combination of the capacities specified in 1) to 3) inclusive, provided that in any combination of experience the period serviced in any capacity shall be at least one year:
 - 1) a flight crew member in air transportation; or
 - 2) a meteorologist in an organization dispatching aircraft in air transportation; or
 - 3) an air traffic controller; or a technical supervisor of flight operations officers or air transportation flight operations systems; *or*
- b) at least one year as an assistant in the dispatching of air transport; *or*
- c) have satisfactorily completed a course of approved training.

4.6.1.3.2 The applicant shall have served under the supervision of a flight operations officer for at least 90 working days within the six months immediately preceding the application.

4.6.1.4 Skill

The applicant shall have demonstrated the ability to:

- a) make an accurate and operationally acceptable weather analysis from a series of daily weather maps and weather reports; provide an operationally valid briefing on weather conditions prevailing in the general neighbourhood of a specific air route; forecast weather trends pertinent to air transportation with particular reference to destination and alternates;
- b) determine the optimum flight path for a given segment, and create accurate manual and/or computer generated flight plans; and
- c) provide operating supervision and all other assistance to a flight in actual or simulated adverse weather conditions, as appropriate to the duties of the holder of a flight operations officer licence.
- d) recognize and manage threats and errors;

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

4.6.2 Privileges of the holder of the licence and the condition to be observed in exercising such privileges

Subject to compliance with the requirements specified in 1.2.5, the privileges of the holder of a flight operations officer licence shall be to serve in that capacity with responsibility for each area for which the applicant meets the requirements specified in ASC-OPS1-1.

4.7 Aeronautical station operator licence

Note. *This licence is not intended for personnel providing Aerodrome Flight Information Service (AFIS). Guidance on the qualifications to be met by these personnel can be found in ICAO Circular 211, Aerodrome Flight Information Service (AFIS).*

4.7.1 Requirements for the issue of the licence

4.7.1.1 Before issuing an aeronautical station operator licence, MCAA will require the applicant to meet the requirements of 4.7.1. Unlicensed individuals may operate as aeronautical station operators, under the supervision of a licensed aeronautical station operator, on the condition that they meet the same requirements and under such requirements that may be specified.

4.7.1.2 Age

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

4.7.1.3 Knowledge

The applicant shall have demonstrated a level of knowledge appropriate to the holder of an aeronautical station operator, in at least the following subjects:

General knowledge

- a) air traffic services provided within the State;

Operational procedures

- b) radiotelephony procedures; phraseology; telecommunication network;

Rules and regulations

- c) rules and regulations applicable to the aeronautical station operator; and

Telecommunication equipment

- d) principles, use and limitations of telecommunication equipment in an aeronautical station.

4.7.1.4 *Experience*

The applicant shall have:

- a) satisfactorily completed an approved training course within the 12-month period immediately preceding application, and have served satisfactorily under a qualified aeronautical station operator for not less than two months; or
- b) satisfactorily served under a qualified aeronautical station operator for not less than six months during the 12-month period immediately preceding application.

4.7.1.5 *Skill*

The applicant shall demonstrate, or have demonstrated, competency in:

- a) operating the telecommunication equipment in use; and
- b) transmitting and receiving radiotelephony messages with efficiency and accuracy.

4.7.2 Privileges of the aeronautical station operator and the conditions to be observed in exercising such privileges

Subject to compliance with the requirements specified in 1.2.5 and 1.2.9, the privileges of the holder of an aeronautical station operator licence shall be to act as an operator in an aeronautical station. Before exercising the privileges of the licence, the holder shall be familiar with all pertinent and current information regarding the types of equipment and operating procedures used at that aeronautical station.

4.8 Aeronautical meteorological personnel

Note. *The requirements for training and qualifications for all aeronautical meteorological personnel are the responsibility of the World Meteorological Organization (WMO) in accordance with the Working Arrangements between the International Civil Aviation Organization and the World Meteorological Organization (Doc 7475). The requirements can be found in WMO Document 258 — Guidelines for the education and training of personnel in meteorology and operational hydrology — Volume I: Meteorology.*