

# Advisory Circular CAA-AC-PEL018

September 2022

#### KNOWLEDGE TESTING FOR A LICENCE OR RATING

#### 1.0 PURPOSE

This Advisory Circular is issued to give guidance on the knowledge testing for a licence, certificate or rating. Aeronautical knowledge areas applicable to the respective licences and ratings can be found in the Civil Aviation (Personnel Licensing) Regulations 2022.

#### 2.0 REFERENCES AND FORMS

- 2.1 Regulation 36 and relevant regulations in Parts III, IV, VI, VII, VIII and IX of the Civil Aviation (Personnel Licensing) Regulations 2022;
- 2.2 The prescribed Forms

## 3.0 GUIDANCE AND PROCEDURES

#### 3.1 General Information

The booking of the examinations may be done at the Authority's Personnel Licensing (PEL) Office and the prescribed application forms for booking of the examination may be obtained from the Authority's PEL Office.

## 3.2 Knowledge Testing

- **3.2.1** Knowledge tests are provided for the issue of the following licences, ratings and certificates:
- a) Private Pilot Licence;
- b) Commercial Pilot Licence;
- c) Multi Crew Pilot Licence;
- d) Instrument rating;
- e) Airline Transport Pilot Licence;

- f) Flight Instructor rating;
- g) Ground Instructor Licence;
- h) Flight Engineer Licence;
- i) Air Traffic Controller Licence;
- j) Aircraft Maintenance Engineer Licence;
- k) Flight Operations Officer Licence;
- 1) Flight Radiotelephony Operator Licence; and
- m) Cabin Crew Member Certificate.
- **3.2.2** The requirement for the specific knowledge tests are as detailed in the relevant regulations of the specific Licence under the Civil Aviation (Personnel Licensing) Regulations 2022 for the specific licence, certificate or rating sought.

## 3.3 Booking and Payment of the Examination

- **3.3.1** All examinations are booked in the PEL office
- **3.3.2** Applicants are required to provide the PEL office (where applicable), with the instructors written recommendation certifying that the applicant has been instructed and is qualified to sit for the examination sought.
- **3.3.3** All examination fees shall be paid on booking and not later than the set booking date.
- **3.3.4** No cash refund for any fees paid.

## 3.4 Examination Venue

Examinations are conducted at the venue to be advised at the time of booking for the examination.

# 3.5 Invigilator and his Responsibilities

- **3.5.1** Suitable invigilator(s) must be available who understand the nature of the examinations and the requirements for their conduct. The invigilator must be a properly trained and qualified individual appointed by the Authority to administer aviation knowledge tests. The invigilator administering the aviation knowledge test must positively identify each applicant, ensure proper test authorisation is presented, and ensure proper completion of the Test Centre Requirements
- **3.5.2** The invigilator shall not administer a test to an applicant who does not have satisfactory documentation of test authorization, as is required by Regulation 36 of the Civil Aviation (Personnel Licensing) Regulations 2022.

- 3.5.3 The invigilator will provide each applicant with –
- a) A set of instructions for taking the test either by computer or in paper format;
- b) The required supplementary materials free of extraneous marks;
- c) An accountable number of sheets of scratch paper;
- **3.5.4** Inspect the aid(s) the applicant plans to use during the test to ensure that they meet the guidelines issued;
- **3.5.5** Ensure that the proper examination is available;
- **3.5.6** Answer applicant's questions regarding the proper use of equipment;
- **3.5.7** Ensure that all electronic gadgets not relevant for the examination are switched off and kept safely
- **3.5.8** Monitor all activities in the examination room and be on the alert for any misconduct;
- **3.5.9** Collect printed examinations, handouts and scratch paper at the close of the examination;
- **3.5.10** Advice the applicant prior to the beginning of the examination that if a break is necessary, examination time continues uninterrupted and the invigilator will monitor the applicant's whereabouts during this break.

## 3.6 Time Allowed for Examination

The time allowed for the completion of each examination shall be given to the applicant at the time of taking the examination. The invigilator will use terms such as "start now" and "finish now", "no more writing please", and must require that these instructions be obeyed.

## 3.7 Misconduct During Examination

If an applicant appears to be cheating, the invigilator shall immediately discontinue the examination and escort the applicant from the room to avoid disturbing others who may be taking examinations. The invigilator will collect all the applicant's examination materials, including supplementary materials, and advise the applicant that further examination may continue only after the Authority completes an investigation.

# 3.8 Examination Passing Grades

**3.8.1** In order to qualify, candidates must obtain not less than 70% of the possible marks for each subject.

- **3.8.2** The aeronautical knowledge areas for the respective licences and ratings are as follows:
- a) Private Pilot Licence Subjects:
- (i) Air Law
- (ii) Aircraft General Knowledge
- (iii) Flight Performance and Planning
- (iv) Human Performance
- (v) Meteorology
- (vi) Navigation
- (vii) Operational Procedures
- (viii) Principles of Flight
- (ix) Radio Telephony.

# Pass Mark per subject is 70%

- b) Commercial Pilot Licence Subjects:
- (i) Air Law
- (ii) Aircraft General Knowledge
- (iii) Flight Performance and Planning
- (iv) Human Performance
- (v) Meteorology
- (vi) Navigation
- (vii) Operational Procedures
- (viii) Principles of Flight
- (ix) Radio Telephony

# Pass Mark per subject is 70%

- c) Airline Transport Licence Subjects:
- (i) Air Law
- (ii) Aircraft General Knowledge
- (iii) Flight Performance and Planning
- (iv) Human Performance
- (v) Meteorology
- (vi) Navigation
- (vii) Operational Procedures
- (viii) Principles of Flight

(ix) Radio telephony

# Pass Mark per subject is 70%

- d) Flight or Ground Instructor Licence Subjects:
- (i) the learning process;
- (ii) elements of effective teaching;
- (iii) student evaluation and testing;
- (iv) course development;
- (v) lesson planning;
- (vi) classroom training techniques;
- (vii) techniques of applied instructions;
- (viii) use of training aids;
- (ix) analysis and correction of student errors; and
- (x) human performance relevant to ground instruction and
- (xi) Knowledge test on the aeronautical knowledge areas specified in Regulations 61, 70, 86 or 104 as applicable.

#### Overall Pass Mark is 70%

- e) Flight Engineer Licence Subjects:
- (i) Air Law
- (ii) Aircraft General Knowledge
- (iii) Flight Performance and Planning
- (vi) Human Performance
- (iv) Operational Procedures
- (v) Principles of Flight: Fundamentals of Aerodynamics
- (vi) Radio Telephony: Radio Telephony Procedures and Phraseology

# Pass Mark per subject is 70%

- f) Air Traffic Controller Licence Subjects:
- (i) Air Law
- (ii) Air Traffic Control Equipment
- (iii) General Knowledge
- (iv) Human Performance
- (v) Meteorology
- (vi) Navigation
- (vii) Operational Procedures

# Pass Mark per subject is 70%

- g) Flight Operations Officer Licence Subjects:
- (i) Air Law
- (ii) Aircraft General Knowledge
- (iii) Flight Performance calculation and Planning procedures
- (iv) Human Performance
- (v) Meteorology
- (vi) Navigation
- (vii) Operational Procedures
- (viii) Principles of Flight
- (ix) Radio communication: procedures for communication with aircraft and relevant ground stations

## Pass Mark per subject is 70%

## h) Flight Radio Telephony Operator Licence Subjects:

- (i) the ICAO spelling alphabet;
- (ii) departure and position reporting;
- (iii) obtaining meteorological information;
- (iv) transmission and procedures of distress and urgency signals;
- (v) communication techniques and procedures;
- (vi) the necessity for brevity in radiotelephony communication and priorities;
- (vii) pre-flight briefing;
- (viii) classification of directional finding bearings;
- (ix) radiotelephony facilities and frequencies available in the Flight Information Region
- (FIR);
- (x) elementary knowledge of the relationship between wavelength and frequency;

- (xi) radiotelephony procedures and phraseology;
- (xii) ability to use the radio equipment of the type installed in the aircraft; and
- (xiii) the ability to carry out emergency procedures.

#### Overall Pass Mark is 70%

## i) Cabin Crew Member Certificate Subjects:

- (aa) An applicant for a cabin crew member certificate shall have met the knowledge requirements for cabin crew member certificate under Regulation 196 of the Civil Aviation (Personnel Licensing) Regulations 2022.
- (i) fire and smoke training;
- (ii) water survival training;
- (iii) survival training appropriate to the areas of operation such as polar, desert, jungle or sea;
- (iv) medical aspects and first aid;
- (v) passenger handling;
- (vi) communication;
- (vii) discipline and responsibilities;
- (viii) Crew resource management.
- (bb) The applicant should have clear knowledge of the following –
- (i) the responsibility of cabin crew member to deal promptly with emergencies involving fire and smoke and, in particular, emphasis on the importance of identifying the actual source of the fire:
- (ii) The importance of the cabin crew member informing the flight crew member immediately, as well as the specific actions necessary for co-ordination and assistance, when fire or smoke is discovered;
- (iii) the necessity for the cabin crew member doing frequent checking of potential fire-risk areas including toilets and the associated smoke detectors;
- (iv) the classification of fires and the appropriate type of extinguishing agents and procedures for particular fire situations, the techniques of application of extinguishing agents, the consequences of misapplication, and of use in a confined space; and
- (v) the general procedures of ground based emergency services at aerodromes

#### Overall Pass Mark is 70%

## (J) Aircraft Maintenance Engineer Licence

The detailed information concerning knowledge requirements and examination for issue or extension of Aircraft Maintenance Engineer Licence are contained in the Schedule to the Civil Aviation (Personnel Licensing) (Aircraft Maintenance Engineers) Regulations 2022

#### 3.9 Examination Pass Standards

- **3.9.1** Except for Airline Transport Pilot Licence examinations, a total pass of all subjects should be accomplished within a three months period from the date of commencement of the first sitting.
- **3.9.2** For Airline Transport Pilot Licence examinations, a total pass of all subjects should be accomplished within one year from the date of commencement of the first sitting.

#### 3.10 Attendance at the Examination

- **3.10.1** Candidates should be present at the examination centre with proof of identity at least fifteen (15) minutes prior to the scheduled time for the commencement of each examination paper. Candidates may enter the examination room only during the fifteen (15) minutes preceding the start of the examination to prepare examination material. Candidates must not remain in the room after they finish the examination period unless they are taking an examination in the next period.
- **3.10.2** Bags, briefcases, cellular phones, programmable calculators, beepers, laptops, etc are NOT PERMITTED in the examination room, but if suitable facilities are not available, such personal belongings may be placed at the rear of the examination room, under the direction of the invigilating officer.
- **3.10.3** Examination results will be formally communicated to candidates in writing.
- **3.10.4** Candidates are **NOT** permitted to bring their own tables, reference books or papers, including instruction books for calculators and computers into the examination room.
- **3.10.5** Candidates will **NOT** be permitted to use calculators which are programmable; those having a navigation function; those having a hard copy printout; or devices having an alphanumeric data bank. However they may use simple wrist or hand held electronic calculators in the examinations.
- **3.10.6** All used or unused writing paper and other materials supplied to the candidate must be returned to the invigilator at the end of the examination.

# 3.11 Rules to be Applied for Conduct of Examination

- **3.11.1** Candidates are not allowed to use any loose paper other than that provided at the examination. All papers are to be returned with the answer sheet to the invigilator on completion.
- **3.11.2** Silence is to be observed in examination room at all times.
- **3.11.3** If a candidate wishes to speak to the invigilating officer, he or she should remain seated and raise his or her hand. It should be noted that the invigilating officer will consider only those questions from candidates, which relate to the general conduct of the examinations and he will not enter into discussion on the interpretation of words or questions contained in the examination papers.
- **3.11.4** A candidate may leave the room if he finishes before time when the permission of the invigilating officer. Candidates are to stop work when so directed and must remain seated until all answer material has been collected.
- **3.11.5** Any candidate who attempts to remove unauthorized examination materials from the room will be liable to disqualification from those examinations, which have been taken.

## 3.12 Validity of Knowledge Test Results

Each Knowledge Test Result is valid for a period as stated in the specific Civil Aviation (Personnel Licensing) Regulations 2022 for each specific type of the licence.



**Uganda Civil Aviation Authority**