AERODROME CONTROLLER (ADC)

EXAM BRIEFING GUIDE AND EXAM STANDARDS

1. Introduction

This briefing is created to help candidates understand the purpose of this exam.

2. Requirements

Before applying for this exam, you shall meet the following requirements:

1. Have your Advanced ATC Trainee rating (AS3) since more than 60 days and
2. Have at least 50 hours of logged time on IVAN as an ATC (pilot hours are not taken into account)

3. Applying for the exam

The theoretical and practical exam can be requested by directly accessing your exam status page.

The exam has two parts which shall be successfully validated in this order:

1. Theoretical exam: complete successfully the ADC online test
2. Practical exam: examiner will check your theoretical knowledge and your proficiency in tower position.

Requests for practical exams are only possible for members of active divisions. Members of inactive divisions will have to change to an active division in order to get higher ratings (R&R 4.6.2.1)

Once your exam has been registered, the examiner will contact you via your e-mail address given on your details page. Before requesting for the exam, check that this e-mail address is valid since it is the only way for the examiner to get in touch with you.

We recommend you to do a practical training in your division prior to applying for this exam.
It is recommended that an exam does not take place on the Tower and Approach positions at the same time.

4. Theoretical Aerodrome Controller Exam

All theoretical exams consist of 20 randomly selected multiple-choice questions (MCQ).

- Each question includes 3 to 5 proposed answers among which only one is correct.
- You have a maximum of 45 minutes to fill in the examination paper, and should you exceed this limit, the exam will be automatically recorded as failed (default failed score = 0/100).
- These MCQ exams are automatically corrected (each question will be marked 0 for a wrong answer or 5 for a right answer).
- The pass-mark for the exam is 75/100 (corresponding to at least 15 correct answers)

The theoretical questions are mainly extracted from our training documentation and software manual:
https://www.ivao.aero/training/documentation/index.php?section=asx
https://www.ivao.aero/training/documentation/index.php?section=adc

All questions are based on ICAO/JAR OPS Rules and Regulations if not stated otherwise in the question.

Note that you can submit your answers as often as you want during the 45 minutes of the exam. Only the last submission will be taken into account. We greatly recommend you submit your examination paper on a regular basis in order to avoid to be marked 0 if you are disconnected or if you exceed the 45 minutes limit.

After your successful theoretical exam, you can apply for the practical part of the exam without delay.

Warning: Our system does not allow the resetting of theoretical exams, as in this case the same exam will appear again. Consequently, the Training department will always refuse to reset unfilled or timed out exams. In order to shorten the time for applying again, members should save their answers on a regular basis so as to avoid the exam being marked 0 if a disconnection or a time out occurs.

5. Practical Aerodrome Controller Exam

The ADC exam is a series of tasks to appreciate your basic ATC theoretical knowledge and controlling skills.
The practical exam is done only at the division level.

Note that these are our minimum standards. Your local division may have set additional requirements that should be published on its web site.

5.1. Training material

The training material is available on the IVAO website following these links below:
https://www.ivao.aero/training/documentation/index.php?section=asx
https://www.ivao.aero/training/documentation/index.php?section=adc

5.2. IVAO software, connection and communication modes

You shall only use one IVAO ATC client approved by the HQ training department for the exam.

The examiner will check your ability to correctly use the main functions of the software, mainly:
- establish a text and/or voice communication with pilots,
- fill out a correct ATIS,
- be able to transmit by text on your ATC frequency and privately, and make conference in chat tab
- retrieve a distant station ATIS, METAR and TAF

Your ATIS must always contain the following remark: "Exam in progress – no unauthorised Emergencies".

You must connect to the network using the requested position only using ICAO_POS format (eg. LPPT_TWR).

The examiner should connect to the network using _X_ suffix to the examined position (eg. LPPT_X_TWR)

During active practical exams no Emergency (MAYDAY) or Urgency (PAN) situations may be initiated by any participating pilot unless specifically requested by the examiner.

Declaring any unrequested Emergency, PAN or squawking 7700 or 7600 will lead to a forced disconnection by the examiner or any supervisor.

We strongly recommend voice communication for the exam. We do not recommend a "text-text" or "text-voice" communication method due to the increased level of difficulty and incompatibilies with certain tasks. Should a member be unable to use voice or the voice/text method due to a medical disability or a poor network connection, please contact the HQ Training Department before requesting the exam in order to establish an individual procedure.

5.3. Theoretical knowledge

During the practical exam, the examiner shall question you about theoretical knowledge:

- Explain IVAC including main functions and the contents of a flight strip
- Decode METAR / TAF including knowledge of RVR
- Knowledge of controller altimetry including TRL/TA, QNH, QFE, QDM, QDR,
- Ability to explain the charts for ADC operation including IAC, SID, ground charts including remaining TORA from intersections / Cat II/III operations and VFR in/out charts
- Knowledge of airspace set up including CTR, CTA, TMA and FIR around the airport including airspace classifications, also related from the point of view of separation, information, responsibilities of pilot versus controller
- Explain I,V, Y and Z flight plan including procedures for giving the appropriate clearance
- Knowledge of the VFR procedures including traffic pattern, compulsory reporting points, altitudes and other restrictions if issued for the airport
- Knowledge of VFR rules including Special VFR, Night VFR and controlled VFR (as applicable in the division), cruise altitudes and flight levels, semi-circular rules, VMC minima
- Knowledge of IFR rules including initial IFR clearance, cruise altitudes and flight levels, semi-circular rules
- Handling of a Missed Approach
- Wake turbulence separations for departure
- Important aerodrome phenomena (wind shear) and how to inform the pilot about it

5.4. Practical performance during the exam

5.4.1. General requirements

1. You have to log on as tower controller. No separate ground controller is permitted during the exam.
2. There must be a radar controller who is responsible for the airspace above during the exam.
3. The airport, where the exam will take place must have IFR procedures available.
4. Using IVAO approved software is required.
5. The Examinee will be expected to find the necessary charts himself. However, in countries where charts are not easily and freely available, it is the responsibility of the examiner/division to provide the necessary material and/or links so that both examiner and examinee can work on the same charts.
6. To evaluate a tower controller exam, the minimum traffic required is as follows:
   a. at least 2 VFR aircraft during the exam or at least one VFR aircraft within the control zone whilst 1 VFR or 2 IFR aircraft arrive/depart,
   b. at least 4 IFR outbound , one of them with a vectored departure,
   c. at least 4 IFR inbound,
   d. at least 1 emergency (Emergency calls made on another frequency do not count)
   e. at least one missed approach,
   f. at least one text only aircraft.
7. If the VFR traffic exceeds 3 aircraft simultaneously in the control zone or 2 aircraft in the traffic pattern, the examinee may decide to accept more VFR traffic or hold VFR outside the control zone or on the ground, depending on his/her ability to handle it.
8. If the weather is not suitable for VFR traffic the examinee may apply Special VFR rules. The examiner can ask a pilot to fly in VMC. The examinee has to be informed about that.

9. We strongly recommend voice communication on all exams. We do not recommend a 'text-text' or 'text-voice' communication method due to the increased level of difficulty and incompatibilities with certain tasks. Should a member be unable to use voice or the voice / text method, please contact the HQ Training Department before requesting the exam in order to establish an individual procedure. For some exercises, the examinee possibly has to transmit in text mode.

> Note: Emergencies and/or radio-communication failures during the Exam will ONLY be done on request of the examiner

5.4.2. Practical performance

1. Basic knowledge regarding tower tasks will be checked during the whole exam.
2. Fill out ATIS correctly
3. Choose correct runway(s) in use (taking wind direction and TAF as well as existing LoA issued by IVAO FIR Staff)
4. Check filed flight plans (route only SID up to the first point entering an Airway) - It is NOT required to check the RQ FL for flights
5. Ability to give a non-SID IFR clearance with radar-vectors
6. Ability to give a non-SID IFR clearance specified by APP/CTR, fixes, altitudes or radials
7. Ability to handle ground traffic (VFR+IFR) from parking position to take off and vice versa Handle all traffic flying in the control zone including all necessary R/T service
8. Correct traffic management, expeditious traffic flow and the ability to decide which R/T has priority in sequence
9. Handle landing traffic from initial call to the gate (also missed approach)
10. Perform correct handoffs to the next unit (APP / CTR) including correct flight strip marking
11. Emergency handling
12. Correct phraseology and English proficiency

6. Evaluation and marking method

The examiner will score separately all required tasks (including both theoretical questions and practical exercises) on a dedicated marking sheet.

Each score will reflect the exactness and range of your knowledge (for theoretical data) and your ability to accurately execute the exercises (and your performance for doing so).

The maximum score is 100 points. The pass mark is 75/100.

In all cases, your examiner will give you the detailed results during the debriefing, so as you can identify your errors and correct them in case the exam is failed.

Some special situations may result in an automatic exam failure (maximum score = 51/100):

Radio Communication proficiency failure
English Communication proficiency failure
Insufficient theoretical knowledge
Poor theoretical knowledge
No charts
Loss of separation
Landing/Take-off clearance while another aircraft is still on the runway
Landing/Take-off clearance if another aircraft is cleared to line up on the runway ahead
Landing/Take-off clearance if another aircraft is cleared to cross the runway
Inability manage VFR on circuit pattern
One task marked "0"
Keeping or Clearing an aircraft into or through an area it should not be allowed to enter due to restrictions (prohibited, VMC loss ...)
Issuing altitude clearance below MSA for IFR. (example in go-around clearance)
Control instruction that put the aircraft in immediate terrain collision situation

NOTE: The score for those exams shall be 51/100 or less depending on the total result of the exam.
This does not mean that the exam is not continued until finished.

An exam is considered as failed and the practical part will stop immediately or will not be performed if:

- Examinee has extremely poor theoretical knowledge (score shall be at or below 10/100)
- Examinee makes any violation against IVAO Rules and Regulation (score shall be 0/100)
- Examinee does not turn up for the exam and a valid reason is not given within 48 hours. This will cause the exam to be considered as failed (score shall be 1/100 or 0/100 depending of examiner)
- Examinee decides to stop the exam at any time after it has begun (score shall be 1/100 or 0/100 depending of examiner).
- In case of any cheating during a practical exam, regardless if during the theoretical or the practical part, the result will be 0/100 and a blocking of 6 months for exams will be appointed to the examinee.

If the examinee fails to arrive for the exam at the time organised, the examiner should wait for 15 minutes. After that period, the examiner can log off the network. The examinee then has 48 hours to provide a valid reason for the failure to attend by email. If no email is received in time the exam will be marked as failed.

Should a PC crash occur which is out of the applicant's control, the exam will have to start again or will be delayed to take place on another day, the decision being up to the examiner.

7. Validation of the exam

After evaluation, your examiner will send his evaluation to the training director who will assign a validator.

The validator will verify the marking based on the comments and marking sheet of the examiner.

If your exam is validated as a success your rating will be updated at 1200z the following day.

The validation process needs a validation delay estimated from one day minimum to an average maximum of one week.