



International Virtual Aviation Organisation

Aerodrome Controller (ADC) exam

Briefing Guide and Exam Standards

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Note: Left vertical revision marks indicate changes from previous version

1. Requirements

Previous rating requirements: have your Advanced ATC Trainee rating (AS3, previously S3) and at least 50 hours of logged time on IVAN as an ATC (pilot hours are not taken into account),

Theoretical exam: complete the ADC online test (45 minutes to answer 20 questions randomly chosen in the database),

Practical exam: examiner will check your theoretical knowledge and your proficiency in tower exercises

2. Applying for the exam

The theoretical exam can be requested on the [Training Department page](#) of the IVAO site by using the [Upgrade / Request Exam] menu or by directly assessing your [exam status page](#). After your successful theoretical exam, you can apply for the practical part of the exam with no delay. Unlike the theoretical exam, which is automated and general, the practical exam is done at the division level. If you are not a member of an active division, or your division doesn't have a competent examiner the exam system will assign one automatically. Once your exam is 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 is valid since it is the only way for the examiner to get in touch with you.*

3. Validation of the exam

After the practical ADC test 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.

4. Aerodrome Controller Exam

The ADC exam is a series of tasks to appreciate basic ATC theoretical knowledge and controlling skills. [We expect you to do a practical training in your division prior you apply for this exam.](#)

4.1 IVAO software and communication modes

You can use any IVAO approved client for the exam. Visit the [IVAO virtual ATC client page](#) (IvAc) for a complete list (the page also includes a link to the [IvAc manuals](#)). 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,
- retrieve a distant station METAR and TAF

4.2 Theoretical knowledge for the tower exam

- Decode METAR / TAF
- Ability to explain the charts for ADC operation including SID , ground charts, VFR in/out charts
- Good knowledge of VFR rules, SVFR, Night VFR and controlled VFR. (as applicable in the division)
- Explain Y and Z flight plan including procedures for giving the appropriate clearance
- Knowledge of the VFR –procedures (traffic pattern, compulsory reporting points, altitudes and other restrictions if issued for the airport)
- Knowledge of airspace set up including TMA and FIR around the airport including airspace classifications, also related from the point of view of separation, information, responsibilities pilot / controller
- Explain the contents of a flight strip
- Explain IVAC (main functions)
- Knowledge of RVR, remaining TORA from intersections / Cat II/III operations.
- Handling of a Missed Approach
- Knowledge TRL/TA, QNH, QFE, QDM, QDR, wake turbulence separations according a/c mass, important aerodrome MET- phenomena (wind shear) and how to inform the pilot about it

4.3 Practical performance during the exam

4.3.1 General requirements

1.1 - You have to log on as tower controller. No separate ground controller is permitted during the exam. There must be a radar controller who is responsible for the airspace above during the exam.

1.2 - For the exam the examiner will usually be connected as X_TWR. It is recommended that an exam does not take place on the Tower and Approach positions at the same time.

1.3 - The airport, where the exam will take place must have IFR procedures available.

1.4 - Using IVAO approved software is required.

1.5 - 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.

1.6 - To evaluate a tower controller exam, the minimum traffic required is as follows:

- a)** at least 2 VFR aircraft during the exam. At least one VFR aircraft within the control zone whilst 1 VFR or 2 IFR aircraft arrive/depart,
- b)** at least 4 IFR outbounds , one of them with a vectored departure,
- c)** at least 4 IFR inbounds,
- d)** at least 1 emergency,

Note: Emergency calls made on another frequency do not count.

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

- e)** at least one missed approach,
- f)** at least one text only aircraft.

1.7 - If the VFR traffic exceeds 3 aircraft simultaneously in the control zone the examinee may decide to accept more VFR traffic or hold VFR outside the control zone or on ground, depending on his/her ability to handle it. 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.

1.8 - 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.

1.9 - 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 (0/100) – which means a delay of 90 days before applying again.

4.3.2 Practical performance

Basic knowledge regarding tower tasks will be checked during the whole exam.

- Fill out ATIS correctly
- Chose correct rwy(s) in use (taking wind direction and TAF as well as existing LoA issued by IVAO FIR Staff)
- check filed flight plans (route only SID up to the first point entering Airway) - It is **NOT** required to check the RQ FL for flights
- Ability to give a non SID IFR clearance with radar-vectors
- Ability to give a non SID IFR clearance specified by APP/CTR, fixes, altitudes or radials
- 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
- Correct traffic management, expeditious traffic flow and the ability to decide which R/T has priority in sequence
- Handle landing traffic from initial call to the gate (also missed approach)
- Perform correct handoffs to the next unit (APP / CTR) including correct flight strip marking
- Emergency handling
- Correct phraseology and English proficiency

5. 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).

Some special situations may result in an **automatic exam failure**:

NOTE: The exam will still be continued for the regular time ,even if one of these events occurs

- Separation error
- Landing/Takeoff clearance while another aircraft is still on this runway
- Landing/Takeoff clearance if another aircraft is cleared to line up on this runway
- Landing/Takeoff clearance if another aircraft is cleared to cross this runway

The score for those exams will be 51/100 or less depending on the total result of the exam

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

- No charts available (only if they are offered by IVAO) (49/100)
- No theoretical knowledge (35/100)
- Violation against IVAO R+R (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 (0/100)

Your overall score will be calculated by your examiner. 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.

APPENDIX

Training materials

1. [Academy – Bare basics](#)

- Connecting instructions
- Air Traffic Control Units and Positions
- Airspace structure
- Airspace classification
- ATIS – Automatic Terminal Information Service
- Clearance and instructions
- Flight rules
- Flight plan
- Communications – Phraseology basic words
- Communications – Alphabet & Call Signs
- Communications -Numbers
- Communications -Read Back
- Squawk codes & Transponders
- Right of way

2. [Academy – On and around the airfield](#)

- Preparing for Duty
- DELIVERY -Clearance Delivery
- GROUND -Surface Movement Control
- TOWER -Aerodrome Control
- VFR Flight

3. [Academy – More information](#)

- Coordinations
- Hand off
- Traffic Information
- Greenwich Mean Time or Universal Time
- METAR -(Short) TAF: Aviation Weather Reports

Note: The Training Department of your division may also publish some recommended material on its web site (either in English or in your own language) and will include the necessary links in the localized version of this document.