MA Training Programme
ENGM_TWR

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Introduction

This is the official VATSIM Scandinavia training programme for students training for the Gardermoen Tower Major Airport Endorsement (MA). Each mentor is expected to take his student through these sessions. This is to make sure all students have been through the same core content in their training. The training is now based on multiple simulator sessions before starting to control live. The programme will have a steady increase of traffic and difficulty. This will make it easier for the student to monitor the progress of the student as it is not based on how many pilots are showing up for the training.

Qualifications required to start training

In order to start practical Tower controller training at Oslo Gardermoen, a student must meet the following requirements:

- Be an active VATSIM, VATEUD and VACCSCA member
- Passed the official VATEUD theoretical ATSimTest as S1 and S2
- Either:
  - Holding an S2 rating,
  - Be a visiting controller, or
  - Completed training to S2 level and approved for combined S2/S2MA checkout.

Syllabus for Gardermoen TWR

Training and Assessment

Controller training and assessment in VATSIM Scandinavia is managed and logged electronically in the Norwegian Training System Administration (N-TAS). ATC training is guided by a set of mentoring criteria which are designed to fully prepare the student for an examination (or checkout). The electronic training report criteria are discussed below. When completing a mentoring report, mentor are to grade students on their overall performance in four categories:

1. Communications
   a. Standard and specific phraseology
   b. Text communications
   c. Pace and clarity
   d. Confirm incorrect read-backs
   e. Communication priority

2. Coordination
   a. Correct handoff procedure
   b. Coordinating with relevant sectors
   c. Coordinating on non-standard practices

3. Planning
   a. Flight plan and departure list maintenance
   b. Missed approach procedures
   c. Runway change, runway alternation
   d. Low visibility procedures

4. Controlling
   a. Airspace understanding
   b. Appropriate clearances
   c. Instructions
   d. Separation and sequencing
   e. Traffic/weather information
   f. Vectors
Training reports
After each training session, the mentor will complete an electronic training report in which each of the elements discussed above will be displayed. Topics will be grades as follows:

- **Not covered** – This subject is not covered or not relevant.
- **Work required** – Continuous mentor guidance is necessary in order to achieve higher grade.
- **Satisfactory** – A moderate assistance is required.
- **Good** – Occasional and minor mentor guidance is required in order to achieve excellent.
- **Validation standard** – No mentor input is required, candidate is fully competent in this area.

General curriculum
All students shall be competent in the following areas before starting online training:

1. **Understand and decode**…
   1.1. METAR
   1.2. NOTAM
   1.3. SNOWTAM
   1.4. TAF

Curriculum for Gardermoen TWR
S2MA students shall be competent in the following areas:

1. **Control zone**
   1.1. Airspace classification
   1.2. Altitude restrictions/limits
   1.3. VFR reporting points

2. **Delivery**
   2.1. Comply with relevant runway configuration
   2.2. Issue correct Omni-directional clearance
   2.3. Issue correct Prop-SID clearance
   2.4. Issue correct standard IFR clearance
   2.5. Use of correct departure runway in accordance with LoA

3. **Ground**
   3.1. Ensure separation
   3.2. Separate aircraft in accordance with SID/route and WTC.
   3.3. Use of correct stand in accordance with Stand allocation – ENGM
   3.4. Use of correct taxiways
   3.5. Use of holding point NOLAC and SOMBI
   3.6. Use of correct de-ice platform (if applicable)

4. **Tower**
   4.1. Choose correct runway-in-use
   4.2. Spacing on final
   4.3. Night restrictions
   4.4. Traffic information within control zone
   4.5. VFR clearance
      4.5.1. To enter control zone
      4.5.2. To leave control zone
      4.5.3. To operate in traffic pattern (if applicable)
      4.5.4. To operate within control zone
      4.5.5. To transit control zone
   4.6. VFR helicopter procedures
      4.6.1. Clearance
      4.6.2. Lift-off
4.6.3. Special circumstances
   a) Helidoc (medical)
   b) Helipolice (police)

4.6.4. Touchdown / landing

4.7. Aborted take-off
4.8. Arrivals
4.9. Coordination
4.10. Departures
4.11. Go around / missed approach
4.12. Special VFR
4.13. VFR night

5. Special procedures
   5.1. Emergencies
   5.2. Military traffic
   5.3. Spacing on final
   5.4. Use of correct runway configurations
       5.4.1. Segregated Parallel Operations (SPO)
       5.4.2. Mixed Runway Operations (MPO)
       5.4.3. Single Runway Operations (SRO)
       5.4.4. Independent Parallel Approach (IPA)
   5.5. Low visibility procedures

Theoretical part

Introduction session
A theoretical session covering the following:

- Aerodrome structure
  - Runways
  - Taxiways
  - Terminal
    - West pier (domestic)
    - East pier (international)
    - South pier (domestic)
    - North pier (under construction)
- Active runway selection
- SIDs
  - Naming (A = 01L, B = 01R etc.)
  - Prop/Jet SIDs
  - Initial climb
  - Correct departure runway
- Gate assignment (domestic, international, Schengen and non-Schengen, General aviation and Military)
- Preferred taxi routes and available intersections for departure
- Responsibilities during split
- Area of responsibility
- Transition altitude
- Coordination of active runways with relevant sectors
- VFR:
  - Airspace
  - Control zone limits
  - Reporting points
  - VFR routes (if applicable)
Online training programme

After the simulator sessions, a minimum of two online sessions are required. If the mentor thinks the student has reached the desired level, the training is finished and he will have his checkout as soon as possible. If combined rating/major airport endorsement training is applied, and the mentor evaluates, that the student is able to handle one combined rating/MA CPT, the student can continue directly to a Major Airport endorsement training programme with the same mentor.

Gardermoen Theoretical Exam [S2MA]

All students training at Oslo Gardermoen are required to know the airport quite well. When the mentor thinks the student good enough to control on his own, the student will be offered a solo validation which is valid until his checkout date. Please note that the solo validation cannot exceed 4 weeks, or one month. Before the student can receive a solo validation, the student must…

- Agree that he is ready for ENGM TWR checkout,
- Agree to the scheduled checkout date and time (in zulu),
- Receive information about the censor (examiner),
- Pass the Gardermoen Theoretical Exam.
  - In the unlikely event of a failed exam, the student will be contacted by the Chief of Training Norway (accasca23@vatsim-scandinavia.org). A mentor will go through the test with the student, and when the mentor find it appropriate, the student may re-take the exam.

The Gardermoen Theoretical Exam is an exam provided by VATSIM Scandinavia Norway FIR and shall be issued to S2 MA (Major airport) students only. This exam is designed to ensure that all students with S2MA training compromises the theoretical requirements for Oslo Gardermoen and comply with local and special procedures used by an aerodrome controller on Gardermoen.

This exam is assigned to all MA students at Oslo airport Gardermoen. The exam contains of 20 general multiple choice questions regarding local and special procedures, of which 16 of them must be correct in order to pass the exam. In the unlikely event of a failed exam, the student will be able to re-take the exam after a theory session with a mentor who will cover the syllabus the student failed.

Examination

ENGM TWR checkout:
Takes place on ENGM_TWR

Time frame: 90 to 120 minutes