S2 TRAINING PROGRAM - NORWAY

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General

This is the official training program for S2 students within Norway. Each mentor is responsible for making sure that the students, have a sufficient level on each of the outlined points. This document also outlines the standards for a later examination, and what is expected from the students.

Requirements to start S2 training

In order to start practical tower training at a regional aerodrome in Norway, a student must meet the following requirements:

- Be an active VATSIM, VATEUD and VATSCA member.
- Complete S1 endorsement within Norway.
- Passed the official VATEUD theoretical ATSimTest for S1.

Syllabus for S2 students

ATC training is guided by criteria outlined below, to prepare the students for an examination. The criteria are also made to ensure that every student has the knowledge needed to pass an examination, and be as professional ATC as possible.



Theoretical part

S2 student shall understand the following theory:

1. General Basic Theory

- a. The role of ATC
- b. Flight Rules (IFR/VFR/SVFR)
- c. Separation (Concept + Minimum horizontal/vertical, LOP/LoA)
- d. Airspace (Classes used and separation requirements)
- e. Meteorology (METAR/TAF/Windy.com/Skyvector.com)
- f. Altimetry (QNH/QFE, Transition altitude)
- g. AIP charts and text pages
- h. Euroscope management
- i. Data Block management
- j. Generate ATIS
- k. Audio for VATSIM

2. Delivery Procedures (DEL)

- a. How to open and edit a flight plan
- b. Creating an abbreviated flight plan
- c. Rules for odd/even cruise level
- d. Route structure and SID points
- e. Navigation capabilities and RNAV SIDs
- f. Coordination

3. Ground Procedures (GND)

- a. Maneuvering area vs. apron (where does ATC really have controlling power?)
- b. Pushbacks, safe and/or conditional instructions
- c. Safe taxi instructions
- d. Coordination

4. Tower Procedures (TWR)

- a. Runway(s)
 - i. TORA/TODA/ASDA/LDA, published distances
 - ii. Thresholds, displaced thresholds, touchdown zone, clearway
 - iii. Approach types available (precision, non-precision, ILS CAT I/II/III)
- b. Control Zone
 - i. Horizontal and vertical layout, including geography & reporting points
 - ii. Approach paths (possible offset angles, steep glidepaths, curved RNPs)
- c. Runway separation
- d. Time/speed/distance of final aircraft vs departing aircraft
- e. Wake Turbulence (What it is, who is responsible, what separation is required)
- f. Use of Radar vs simulating "looking out the window"



Practical part

S2 student shall be competent in the following areas:

1. Delivery

- a. Situational awareness and scanning
- b. Communication priority
- c. Correct ICAO phraseology and using plain language when none exist

2. Delivery Procedures (DEL)

- a. Issuing IFR clearances in accordance with local regulations
- b. Amending flight plans as necessary
- c. Check and correct requested flight level to correspond to the direction of flight.
- d. Coordinate and non-standard practices with overlaying ATS units, as necessary

3. Ground Procedures (GND)

- a. Issue start-up and pushback clearances
- b. Detect and resolve conflicts involving aircraft on the apron and taxiways
- c. Safe, orderly, and expeditious movement of aircraft on the ground
- d. Comply with any restrictions applied by overlaying ATS unit(s) (e.g. start-up intervals)
- e. Conditional pushback and taxi clearances

4. Tower Procedures (TWR)

- a. Select suitable active runway
- b. Implementation of Low Visibility Procedures (LVP)
- c. Issue correct take-off and landing clearances
- d. Departure sequencing for minimum delay (wake-category and routing)
- e. Conditional taxi and line-up clearances
- f. Applies correct runway separation and wake turbulence separation
- g. Handles missed approaches
- h. Ensures safety at all times
- i. Coordinate with adjacent and overlaying ATS unit(s)
- j. Manages VFR flights
 - i. VFR operations in the vicinity of an aerodrome
 - ii. VFR zone entry/exit
 - iii. Traffic information
 - iv. Manage multiple VFR flight simultaneously
- k. VFR helicopter operations
 - i. Handling helicopters within Final Approach and Take-off Area (FATO)
 - ii. Handling helicopters located outside of the maneuvering area
- I. A general understanding of Special VFR (SVFR) flight and the restrictions that follow
- m. Provide traffic information as appropriate
- n. Integration of IFR and VFR flights within controlled airspace



Training Program

A minimum of three online sessions are required, before a student can be granted solo endorsement, and be setup for a CPT. When mentor finds student's level sufficient, a solo endorsement can be granted by a staff member, and a checkout should be scheduled as soon as possible. Training reports should be written after every session in English.

Examination

S2 Tower (TWR) checkout:

Takes place on a regional aerodrome within Norway (if not combined with major endorsement)

CPT duration: 90 to 120 minutes

