TRAINING PROGRAMME

Contents

1. Changes

VERSION	CHANGES	EFFECTIVE DATE
1.0	Creation of document	1 September 2023

2. Introduction

2.1 Scope

Welcome to the official Maghreb vACC training programme. This document outlines the fundamental framework for training in Maghreb vACC, designed to benefit both members and mentors. It serves as a comprehensive training guideline and a helpful checklist for mentors and instructors at the Maghreb vACC air traffic management (ATM) Training Unit.

Each mentor is expected to guide their students through these concepts, ensuring that all members gain a solid understanding of the core information presented in the MATS and other procedural documentation. The mentor and instructor-led training sessions complement the study of the provided material, fostering a conducive learning environment for all participants.

As students embark on their training journey, they are encouraged to actively participate and ask questions on our Discord server, promoting a collaborative and supportive learning community.

Please note that this document is subject to updates and revisions, both in its text and structure. We will maintain a record of changes by updating the version number accordingly. This allows us to continuously improve and adapt our training program to meet the needs of our valued members and mentors.

2.2 Prerequisites

As per VATSIM rules, all students must be proficient in English for effective communication and provision of ATC services. The training process is comprehensive and demands dedication, commitment, and continuous personal effort. Prior aeronautical knowledge is not a prerequisite; however, having experience as a pilot on the network and possessing a general understanding of aviation can be advantageous, as they will contribute to a smoother and more facilitated training experience.

3. Guidelines

3.1 General

Before a training request is accepted by the training team, mentors and instructors shall ensure that all relevant prerequisites have been completed and the student is eligible for training.

Mentors and instructors are responsible for guiding and providing additional support to the students and shall not be required to explain all procedures that are cons. In the event that a student inadequately prepared for their session, it shall be cancelled and pushed back to a later date.

After each session, the mentor has to grade the student on each competency covered in the session. As the performance of a student may not necessarily fit into one of these grades, the mentor is to use his/her judgement to determine the appropriate evaluation.

Grades are assigned in accordance with the number of inputs required by the mentor and amount of mistakes made during the session.

- N/A: Competency not covered during the session.
- Minor: No inputs were required; little to no mistakes were observed.
- Intermittent: Some inputs were required; some mistakes were observed.
- Constant: Continuous inputs; many mistakes were observed.

When the mentor finds the student's level sufficient, a solo endorsement can be granted by a mentor or instructor, and a rating checkout should be scheduled as soon as possible. Training reports should be written after every session in English in case of conflicts or doubts as to interpretation within VATMENA.

In the event that the student is unable to meet the required competencies required in each mentoring session, the mentor or instructor may repeat modified scenarios offline or may conduct additional online sessions.

3.2 Training FIRs

Maghreb vACC comprises three FIRs, namely the Casablanca FIR, Algiers FIR and Tunis FIR, providing controllers with the flexibility to choose their training location. While members are encouraged to control across the entire vACC, they will receive training specifically within their selected FIR, limited to one choice only.

When controlling outside of one's designated training FIR, controllers are expected to exercise sound judgment and ensure thorough preparation. This includes meticulously reviewing all local Standard Operating Procedures (SOPs) and taking notes to ensure a comprehensive understanding of the procedures in place. Such conscientiousness is strongly encouraged to maintain a high level of proficiency during sessions conducted outside their training FIR.

Furthermore, controllers progressing onto their S3 and C1 training levels, will similarly be permitted to choose a training FIR. This allows them to focus their training efforts and expertise within a specific FIR as they advance in their controller ratings. The freedom to select a training FIR at higher training levels provides controllers with flexibility and specialisation, enabling them to develop a deeper understanding of the unique procedures and airspace intricacies within their chosen FIR.

3.3 Rating Upgrades

As detailed in section 5.1 and 5.2, S2 trainees are expected to fully grasp the local procedures at their training aerodromes and achieve a minimum of 25 hours of practical training within the initial 40 days of their solo period to be eligible for the CPT.

To begin training for the S3 rating, students are expected to have gained substantial experience on Tower, especially during events. Eligibility to commence S3 training is granted after a minimum of 100 hours of overall Tower controlling, and at least 50 hours on their current rating. Additionally, students must have at least two months of experience since passing the S2 CPT. Furthermore, they are required to undergo a Tower checkout session with a mentor, demonstrating a comprehensive understanding of the relevant Standard Operating Procedures (SOPs), as well as a thorough knowledge of departure and arrival routes specific to their training airport.

To initiate C1 training, students should have acquired significant experience in controlling Approach, particularly during busy events. The decision to approve each student's request for C1 training will be made by the Head of ATM Training (ACCMA3).

4. Theoretical Competencies

4.1   General

ATC training is guided by the 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 what items the student must demonstrate a strong understanding of in order to move onto the next competency.

The following competencies are required for all controller ratings:

- Adherence to the CoC;
- Data block management;
- Audio for VATSIM;
- Generate ATIS;
- Selecting the correct runway configuration based on the weather and traffic situation;
- The use of aliases to reduce the workload when controlling text pilots;
- Coordination whilst connected to the network;
- Situational awareness;
- Position and knowledge of AOR;
    - Lateral and vertical airspace definitions;
    - Standard handoff procedures;
    - Airport(s) within AOR;
    - Navigation points: VORs, NDBs and waypoints within the sector;
    - Transition level and transition altitude;
- Workload management and task prioritisation;
- Correct usage of phraseology;
- Able to contact a supervisor (SUP) when appropriate

4.2   Observer (OBS) to Student 1 (S1)

Basic aerodrome operations:

- EuroScope/VatSys first time set-up;
- Audio for VATSIM set-up;
- Controller positions: roles, differences, ratings;
- Introduction to EuroScope;
- Introduction to VFR;
- Phraseology

Ground operations:

- Managing the departure list;
- Squawk code: meaning, use, appropriate SSR codes;
- Managing status tags;
- Handoff of aircraft to the next controller;
- Stand assignment in accordance with real-world allocations;
- Runway crossing clearance;
- Taxiway restrictions;
- Startup and Pushback operations;
- Taxi clearances;
- Handoff of aircraft to the next controller;
- Conditional clearances

4.3 Student 1 (S1) to Student 2 (S2)

Advanced aerodrome operations:

- Airspace classes and boundaries;
- Separation requirements;
- Aircraft tag management;
- Runway separation management;
- Single runway operations;
- IFR clearances format;
- VFR clearances format (leaving the area);
- VFR clearances format (circuits)

Departure operations:

- Lineup clearances;
- Takeoff clearances;
- SOPs adherence when issuing a takeoff clearance;
- Departure sequence;
- Wake turbulence requirements, separation requirements;
- Handoffs to the next controller

Arrival operations:

- Initial contact with inbound aircraft;
- Wake turbulence separation requirements, speed control;
- Runway crossing instruction;
- Initial taxi instructions;
- Go around instructions;
- Handoffs to the next controller

Runway operations:

- Single and dual runway operations;
- Single runway separation minima

VFR operations:

- VFR separation requirements;
- Use of orbits, circuit leg extensions to maintain separation;
- Traffic information;
- Initial contact for inbound VFR traffic;
- Handoff to the next controller;
- Advisory of restricted areas

4.4 Student 2 (S2) to Student 3 (S3)

Approach control introduction:

- Amending tags;
- Airspace separation requirements;
- Minimum vectoring altitude;

Separation techniques:

- Usage of speed control;
- Usage of level clearances;
- Usage of vectoring

Departure traffic:

- Aircraft identification, mode C;
- Speed control and restrictions;
- Vectoring and directs;
- Climb instructions;
- Go around traffic management;
- Transfer of control to the next controller, in due time for the continuous climb with the appropriate separation requirements

Arrival operations:

- Managing aircraft tags;
- Squawk assignment and identification of inbound aircraft;
- Speed, headings and directs for sequencing and maintaining separation;
- Appropriate descent instructions; while taking into account;
    - Other traffic;
    - Class of airspace below;
    - Continuous descent;
- Traffic information for inbound aircraft;
- Estimating track miles for inbound aircraft, rule of thumb for altitude loss based

on the distance covered;
- Holding procedures;
    - Use holdings in high traffic load situations, emergencies or other situations requiring the use of holdings;
    - Request holding for inbound traffic from adjacent sectors;
    - Holding entry clearance;
    - Keep pilots informed of their expected time to leave holding/start approach;
    - Holding exit clearance;
- Sector splits and coordination;
- Handoff to the next controller;
    - Transfer of control;
    - Transfer of communication;
    - Releases (for climb/descend/turn/full);
- VFR traffic;
    - Management;
    - Entry/exit clearance

4.5 Student 3 (S3) to Controller (C1)

En-Route operations:

- Climb and descent instructions;
- Initial contact with inbound aircraft;
- Holding procedures;
    - Enroute holding;
- Sequencing of aircraft inbound for the TMA;
- Use of speed control (IAS and Mach), altitudes and headings as means for maintaining separation;
- Managing VFR traffic;
    - Flight Plan Activation;
    - Service provisions;
- Use of directs;
- Handoff to adjacent en route controllers;
- Knowledge of LOAs;
- Handoff to the next controller

5. Course Outline

5.1   Observer (OBS) to Student 1 (S1)

The S1 Basic Lesson, also known as "Take-off," is a regularly scheduled event conducted on the Maghreb vACC's Discord server. During this session, participants are introduced to essential aeronautical concepts, including fundamental air laws, weather and other operations, familiarization with the vACC's control software, and an overview of the training process. Additionally, it provides a comprehensive starting point to basic air traffic control provisions

Upon completion, students will be guided to take the Tower CBT (computer-based training) and granted authorization to control Tower services at an aerodrome of their choosing for a period of up to 60 days. Subsequently, the students' S1 ratings and solo-approvals will be requested once they successfully finish all CBTs. This session is compulsory for all members aspiring to become air traffic controllers.

5.2   Student 1 (S1) to Student 2 (S2)

To prepare for the S2 Controller Practical Test (CPT), students can request further training no earlier than 14 days after completing the S1 Basic Lesson. It is highly recommended that students make these requests promptly, allowing sufficient time before the end of their solo period. Failure to do so may result in termination of the solo phase, necessitating a restart of their training, as determined by the Head of ATM Training (ACCMA3).

Within this solo period, a sweatbox scenario will be conducted by the mentor and student. Subsequently, they will schedule an on-the-job training (OTJ) session with no controllers below the student's level of training. The student will be trained under the mentor's guidance during the OTJ session. The mentor will notify the ATM Training Unit once the student is deemed ready for the CPT. If the student is not prepared for the CPT by the end of their solo period, the responsibility for further training will be assumed by the Head of ATM Training.

Session	Conduct	Topics	Approvals
101	Sweatbox	• Advanced aerodrome procedures; • IFR procedures	-
102	Sweatbox	• VFR procedures	-
103	Sweatbox	• IFR/VFR combined	-
104	OTJ	• Network competencies	Schedule CPT

5.3   Student 2 (S2) to Student 3 (S3)

Session	Conduct	Topics	Approvals
201	Sweatbox	• Identification; • Basic radar separation techniques; • IFR departures; • Transfer to controller above	-
202	Sweatbox	• Introduction to sequencing; • IFR arrivals	-
203	Sweatbox	• Airspace responsibilities; • Basic holding	-
204	Sweatbox	• IFR and VFR combined	-
205	OTJ	• Consolidation	-
206	OTJ	• Consolidation	Solo endorsement

5.4   Student 3 (S3) to Controller 1 (C1)

Session	Conduct	Topics	Approvals
301	Sweatbox	• Advanced radar separation techniques; • Departures	-
302	Sweatbox	• Advanced holding; • Arrivals	-
303	Sweatbox	• Multiple airport departures and arrivals	-
304	Sweatbox	• En route separation	-
305	Sweatbox	• Multiple airport departures and arrivals combined with transits	-
306	OTJ	• Consolidation	-
307	OTJ	• Consolidation	-
308	OTJ	• Consolidation	Solo endorsement