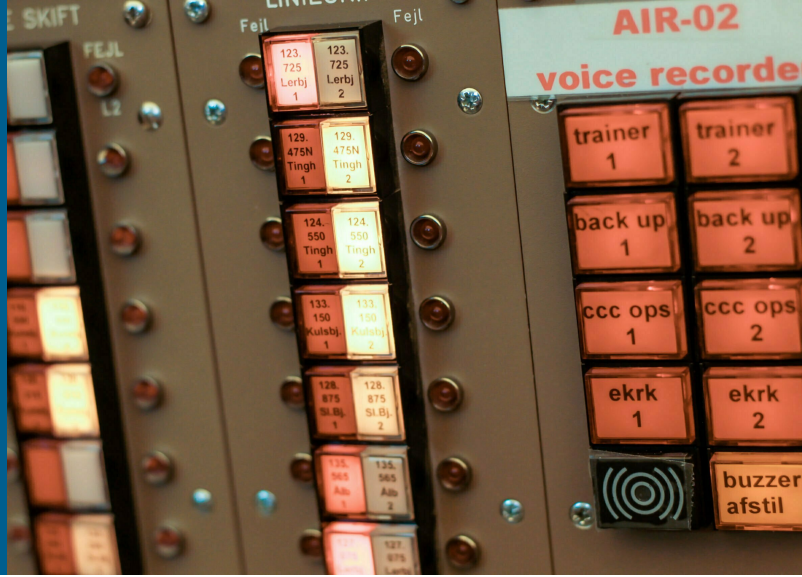


# ATSEP Basic ICAO Americas Region



## Course aim

The ATSEP Basic ICAO Americas Region course is designed for technical personnel operating and maintaining air traffic management (ATM) equipment.

After completing this course, the participants have knowledge and understanding of:

- The subjects described under 'Content in Brief' in accordance with the EASA ANNEX XIII - Part-PERS requirements for service providers concerning personnel training and competence assessment Subpart A - Air Traffic Safety Electronic Personnel.
- The operational and technical side of ATM.
- Human factors and safety management.
- The importance of teamwork.

## Course structure

We deliver the course in a Virtual Classroom on weekdays from 08:00-16:00 UTC-5, which is 09:00-17:00 UTC-4.

The training is delivered by professional international instructors and contains theoretical lessons, practical group assignments, and exercises. Additionally, participants share their experiences amongst each other and join discussions based on the course material and inputs from instructors. Active participant involvement is an important part of this course: group discussions and assignments help them gain a deeper understanding of the subject and course material.

### Theoretical training

The theory offers in-depth information on how to apply different technologies in ATM, covering various aspects of operating and maintaining ATM equipment.

### Practical video demonstrations

Through video demonstrations, participants gain an understanding of the work of air traffic controllers (radar simulator) and pilots (flight simulator). This part of the training helps the students understand the technical equipment they work with from the perspective of the end-users.

## Content in brief

### Introduction

The ATM work environment.

**Air Traffic Familiarisation (ATF)**

The role of ATC in the ATM environment.

**Aeronautical Information Services (AIS)**

The organisation of AIS.

**Meteorology (MET)**

The impact of meteorology on aircraft and ATS operations, the importance of meteorological information in ATM.

**Communications (COM)**

The principles used in voice and data communication.

**Navigation (NAV)**

The principles of navigation and navigational aids and their use in ATM.

**Surveillance (SUR)**

The basic principles used in primary radar, secondary radar and other surveillance systems, and their use in ATM operations.

**Data Processing (DAT)**

The principles used in data processing and their use in ATM operations.

**System Monitoring and Control (SMC)**

The SMC function and description of its basic principles.

**Maintenance Procedures (MTN)**

General maintenance strategy and procedures.

**Facilities (FAC)**

Facilities and level of performance required. The physical classroom course can include study visits to air traffic control facilities and an aviation-related environment.

**Safety management**

Safety management principles and regulations.

Risk policy and procedures.

Risk assessment and risk analysis.

Accident prevention.

Safety assessment.

Safety I and Safety II principles.

Safety thinking.

**Introduction to human factors**

The importance of human factors in the work of ATSEP staff.

The Just Culture thinking as well as the No Blame culture.

The 'Swiss cheese' model.

**Human error**

Classification of human errors into slips, mistakes, lapses, and violations.

The concept of violations and why they might occur.  
Rasmussen performance levels and the connection between the level of knowledge and skills and types of human errors that might occur.

## **Human performance**

The human body and the basic needs of humans.  
Human limitations such as e.g. fatigue.  
Human information processing.  
Personal fitness.  
The differences between social human relations and professional interactions.

## **Teamwork**

The importance of good teamwork.  
The reasons for lack of teamwork and low effectiveness.  
Preventing lack of teamwork and promoting good teamwork.  
Identifying reasons for conflict.  
Handling human conflict.

## **Communication**

The importance of good communication.  
Verbal and non-verbal communication including communication exercises.  
Factors that affect communication.  
The importance of preventing possible misunderstandings in communication between ATSEP and non-ATSEP staff.

## **Stress**

Stress in the work of ATSEP staff and understanding the danger of distractions.  
The short and long-term effects of stress.  
Recognising the symptoms of stress in yourself and others.  
Stress-relieving techniques.  
Awareness of the CISM program and the importance of critical incident stress management.

## **Professional conduct**

Professional conduct and approach to the work of ATSEP staff.  
The importance of maintaining and updating professional knowledge and skills.

## **Functional safety**

## **Information Systems Security**

## Prerequisites

There are no prerequisites for taking part in this course.

## Compliance with regulations

The course is compliant with ICAO Doc 10057.