



HUMAN FACTORS IN CIVIL AVIATION AUTHORITIES

- ▶ **DURATION** : 04.
- ▶ **LANGUAGE** : English.

▶ **TARGET POPULATION**

- Civil aviation authority, and aircraft maintenance staff;
- All aviation roles especially safety-critical ones;
- Pilots, flight crew, airline managers and operational staff;
- Air traffic controllers and ANSP management.

▶ **INTRODUCTION**

Human Factors (HF) is a multi-disciplinary science that aims to understand the way that people's characteristics, capabilities and limitations work within a socio-technical system. HF research looks at a range of situations such as the design of equipment and tasks, training and selection. This knowledge needs to be applied to the aviation environment, which is dynamic and constantly changing. Understanding how people actually perform under operational circumstances enables the development of systems and procedures that support people to contribute to aviation safety.

This course provides delegates with a viewpoint on HF issues from a system perspective and how to practically seek to optimize the work of the people within the system. It will explore principles of human performance in line with the ICAO Human performance principles. Delegates will learn how people's capabilities and limitations interact within the system to affect their performance in an operational environment. It will translate this knowledge into practical applications that can be used within the delegate's professional environments to support optimum human performance.

▶ **COURSE OBJECTIVE**

By the end of this course, participants will be able to demonstrate understanding of:

- Be conversant about basic aviation Human Factors concepts;
- Understand key human performance issues relevant to aviation operations;
- Integrate Human Factors knowledge into key areas of aviation operations;
- Apply operational Human Factors knowledge to safety investigation activities;
- Develop and explore the approaches to the understanding of HF within their organization;
- Putting into practice the practical assessment and management of human performance.

▶ **COURSE CONTENT**

This training course will include the following topics:



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- Definitions, concepts and history;
 - ICAO Human Performance Principles;
 - Aviation Human Factors, management and the organization;
 - Systems and Organization Factors;
 - Fatigue and stress and how to manage them;
 - Changing perspectives on human performance;
 - Human error and threat management;
 - Human information processing and operational decision-making;
 - Individual and group capabilities and limitations;
 - Threat and Error Management (TEM) in flight operations, air traffic control and cabin operations;
 - Automation in the workplace;
 - The design of Standard Operating Procedures (SOPs) and checklists;
 - Resource management training on the flight deck and in air traffic control;
 - Common system applications of HF including; design of work and equipment, design of checklists and procedures, personnel selection, training;
 - HF of safety promotion activities and implementing change;
 - Investigating incidents involving HF, and developing robust incident closure actions;
 - Practical application of HF principles and models.