



IATA-RTP TRAINING COURSE

BOOST YOUR KNOWLEDGE AT BATC







Human Factors in Aviation

2020

Human Factors in Aviation

5-day classroom course (40 hours)

This course can be customized for your company and delivered at the location of your choice.

The study of Human Factors is about understanding human behavior and performance. When applied to aviation operations, Human Factors knowledge is used to optimize the fit between people and the systems in which they work in order to improve safety and performance. Gain a comprehensive overview of the effect and management of Human Factors in aviation with this foundation course. The operational Human Factors knowledge gained on this course can also be applied to safety investigation activities.

Objectives

Upon completion of this course you will be able to:

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

Target audience

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

Key topics

- Definitions, concepts and history
- Aviation Human Factors, management and the organization
- Human performance in aviation operations
- Fatigue and stress and how to manage them
- Human information processing and operational decision-making
- Human error and threat management
- Threat and Error Management (TEM) in flight operations, air traffic control and cabin operations
- Resource management training on the flight deck and in air traffic control
- Automation in the workplace
- The design of Standard Operating Procedures (SOPs) and checklists

Activities

- Case studies
- Group exercises

Prerequisites

There are no prerequisites for this course.

Recommended level

- Management
- Professional





Human Factors in Aviation

2020

Certificate awarded

An IATA Certificate is awarded upon successful completion of the course and final examination

Table of contents

Introduction to Human Factors

- The difference between Human Factors and human performance
- The history and disciplines of aviation Human Factors
- The SHELL model of applied Human Factors

Human Factors, management and organizations

- Accident causation in complex systems
- The "organizational accident"
 Concept of defences explained in depth

Human Factors, management and organizations (continued)

- The Reason model
- The importance of organizational culture in employee safety reporting

Human performance in aviation operations

- Workload in aviation operations and the importance of its management
- Difference between workload and taskload
- Workload management
- Specific human performance issues related to aviation operations

Fatigue and stress

- Causes, symptoms and effect of fatigue
- Fatigue Risk Management System (FRMS)
- Stress and its effects on operational performance

Human information processing

- Information processing in plain language
- Information processing and safety
- Influences on perception
- Short-term and long-term memory

Associated diplomas

You may also apply this course toward an IATA Diploma in Safety Management in Civil Aviation

Operational decision making

- Types of decision making
- The importance of cues
- Bias in operational decision making

Human error

- A frequent dilemma
- The traditional view of error management
- The contemporary view of error management

Threat and error management (TEM)

- The components of the TEM model
- TEM in flight operations
- TEM in air traffic control
- TEM in cabin operations
- Group exercises

Resource management training in the flight deck and Air Traffic Control

- The objective of resource management training in aviation
- Historical perspective
- CRM training, purpose and typical contents
- TRM training, purpose and typical contents

Automation, Standard Operating Procedures (SOPs) and checklists

- Implications of automation in aviation
- Automation in the flight deck
- Automation in air traffic management (ATM)
- The importance of SOPs
- Design of standard operational procedures
- Factors in procedural deviations
- Checklists: importance; objectives and concepts

Category	Price (USD, before taxes)
Regular	\$3,100.00
Members	\$2,790.00
Developing Nations	\$2,170.00