Extended Diversion Time Operations Workshop

Dakar

November 4-8, 2019

Module 1

Course Introduction

ICAO

Proudly in partnership with

AIRBUS

BOEING

Course Structure

Module 1
Course Introduction

Module 2
EDTO Foundation

Module 3
Approval Process

Module 4
Type Design & Reliability Considerations

Module 5
Flight Operations Considerations

Module 6
Maintenance Considerations

Module 7
Continued Surveillance

Module 8
Implementing EDTO Regulations

Module 9
Assessment

Module 10 – Wrap Up

Objectives

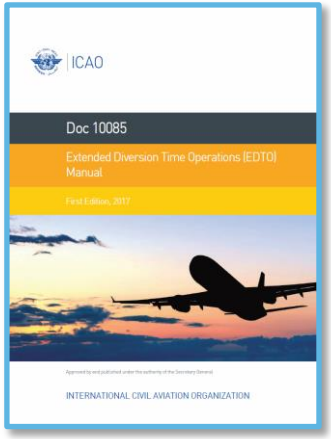
This module consists of an introduction to the course, the instructors and some essential 'housekeeping'. A run through of course materials provided and introduction to the interactive software to be used in the later modules will also be completed.

EDTOM References

Doc 10085: Extended Diversion Time Operations (EDTO) Manual

This course is based on the content of Doc 10085

National regulations may vary from this content



The following symbol indicates a reference to the EDTO Manual throughout the modules of this workshop:

EDTOM

Module 1 - Outline

Part I — **Presentation of ICAO course instructors**

Part II — **Course goals, concept and structure**

Part III — **Administrative information**

ICAO Course Instructors

- **Eric Fortunato -** AIRBUS
- **Mike Mock -** BOEING
- **Ian Knowles -**

More information

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- **Ian Knowles** iknowles@icao.int

Module 1 - Outline

Part I — Presentation of ICAO course instructors

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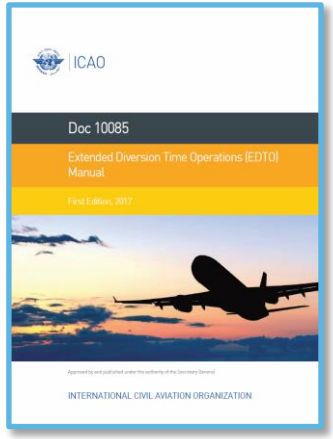
Course Goals

The goals of the ICAO EDTO course are to:

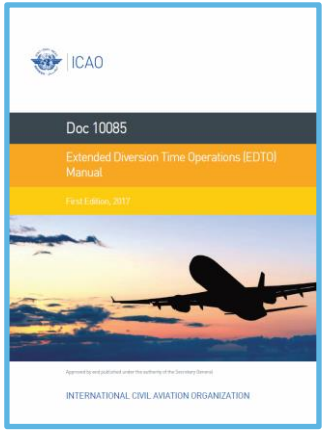
- Provide participants with **knowledge and skills to implement EDTO in National regulations**
  - Based on ICAO Standards and Recommended Practices (SARPs) contained in Annex 6 Part I.
  - With reference to Doc 10085 - Extended Diversion Time Operations Manual (EDTOM) EDTOM
- Develop participants' knowledge to **implement** and **oversee** the key components of an EDTO program, in compliance with ICAO SARPs.

- EDTOM guidance has been developed based on experience of many years of ETOPS operations
  - Drafting of EDTO manual has been conducted by EDTO experts from the Special Operations Task Force under the supervision of the FLTOPS/Panel secretariat.
  - Main contributors: International Coordinating Council of Aerospace Industries Associations (ICCAIA), International Air Transport Association (IATA) and States (Australia, France, Singapore, UK, USA, …)



- The EDTO Manual (Doc 10085) is an outcome of the Regional Safety Oversight Organization (RSOO) Symposium convened by ICAO during October 2011
  - This initiative is aimed at assisting the States in the implementation of the new/revised standards, through guidance material available to RSOOs or other interested parties

- Structure and content of EDTO Manual (Doc 10085):
  - Foreword
  - Definitions and abbreviations
  - **Chapter 1**: Policy and General information
    - Details approval procedures and continuity of certification and operational approval
  - **Chapter 2**: Aircraft airworthiness considerations for EDTO
    - EDTO certification, continued airworthiness, EDTO significant systems…
  - **Chapter 3**: EDTO flight operations requirements
    - Threshold, maximum diversion time and distance, En-route Alternate Aerodrome, Area of operations, EDTO fuel, in-flight Monitoring, diversion, training, …
  - **Chapter 4**: EDTO Maintenance and reliability requirements
    - EDTO maintenance program, Parts control, EDTO Service Check, Reliability program, Propulsion system monitoring (IFSD rate), verification program, dual maintenance limitation, ECM, oil consumption monitoring, APU in-flight start, EDTO release, training, …



Terminology

The following standardized terms and definitions have been adopted in the EDTOM:

Authorization: An authorization entitles an operator, owner or pilot-in-command to undertake the authorized operations.

Acceptance: An acceptance is a written or implicit acknowledgment by the State of the Operator/State of Registry to an operator or owner of a notification submitted by, or on behalf of, that operator or owner.

Approval: An approval is a formal act by the State of the Operator/State of Registry to approve an application or a proposed change submitted by, or on behalf of, an operator or owner. The approval attests to compliance with the applicable provisions.

Specific Approval: A specific approval is an approval which is documented in the operations specifications for commercial air transport operations, or in the list of specific approvals for non commercial operations.

The term '**approval**' is often used as a generic term for the activity of a regulator granting permission to undertake a particular operation. For items relating to Annex 8, the term '**type design approval**' is used to refer to the granting of the type design by the State of Design

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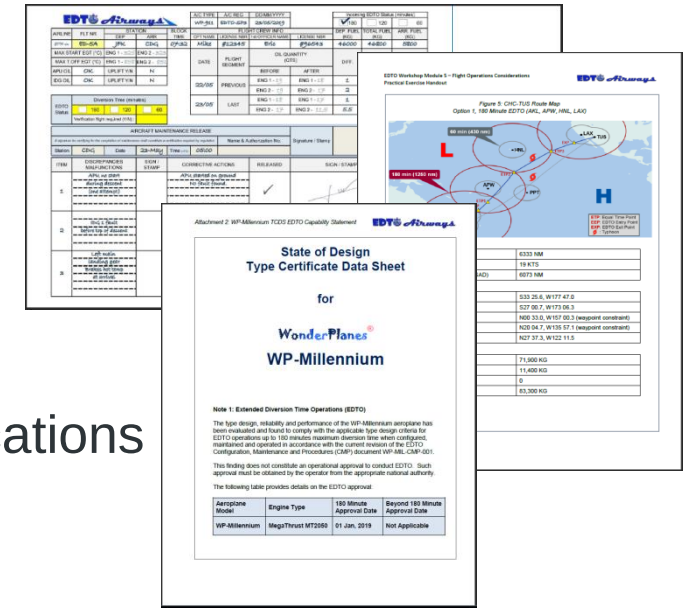
Course Schedule

Session Times		Day				
Start	**End**	**1**	**2**	**3**	**4**	**5**
09:00	**10:30**	Module 1 Module 2	Module 3	Module 5	Module 6	Module 8
10:30	**11:00**	Break				
11:00	**12:00**	Module 2	Module 4	Module 5	Module 6	Assessment Review
12:00	**13:00**	Lunch				
13:00	**14:30**	Module 3	Module 4	Module 5	Module 6	
14:30	**15:00**	Break				
15:00	**16:00**	Module 3	Module 5	Module 6	Module 7	

Course Dynamics

- The workshop is designed with the following format:
  - **Presentations**
    - covering the theory for each section
  - **Practical exercises**
    - to consolidate understanding
    - Questions, polls, example EDTO applications



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Part I — Presentation of ICAO course instructors

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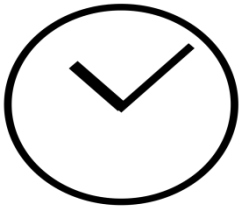
Housekeeping



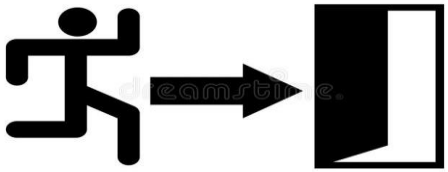
Punctuality

Participation

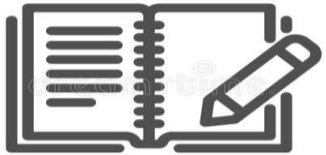
Phones

Smoking

Certificates



Emergency Exits



Feedback

Wi-Fi Access

- WiFi Connection - wacafguest
- Password - W@C@F

Evaluation Procedures

Evaluation of participants' performance:

- A final evaluation test
- Multiple choice, open book
- Minimum pass mark: 80%

Overall course evaluation (Feedback)

Course evaluation :

- Content
- Practical exercises
- Instructors
- Ways and means to improve the training

Interactive Functions

- **Mentimeter (www.menti.com)**
  - Anonymous
  - Web based

- Practice questions…

Questions?

EDTO Workshop

End of Module 1 – Course Introduction