

# *Extended Diversion Time Operations Workshop*



Alternate

Destination

ETP1

ETP2

Departure

## **Module 8** *Practical Exercise*



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## Background



You are a part of the regulation development department of the Antarctica Civil Aviation Authority (ACAA).

Currently there are no EDTO provisions in the Antarctica Civil Aviation Regulations (ACARs). Two engine aeroplanes are limited to 60 minutes diversion time and no specific diversion time restrictions have been established for aeroplanes with more than two engines.

## Current Regulation - ACAR 121.001



### ACAR 121.001 - Aeroplane Limitations, Type of Route

*No certificate holder may operate a two-engine aeroplane over a route that contains a point farther than 60 minutes flying time (at a one engine inoperative cruise speed, under standard conditions in still air) from an enroute alternate aerodrome.*

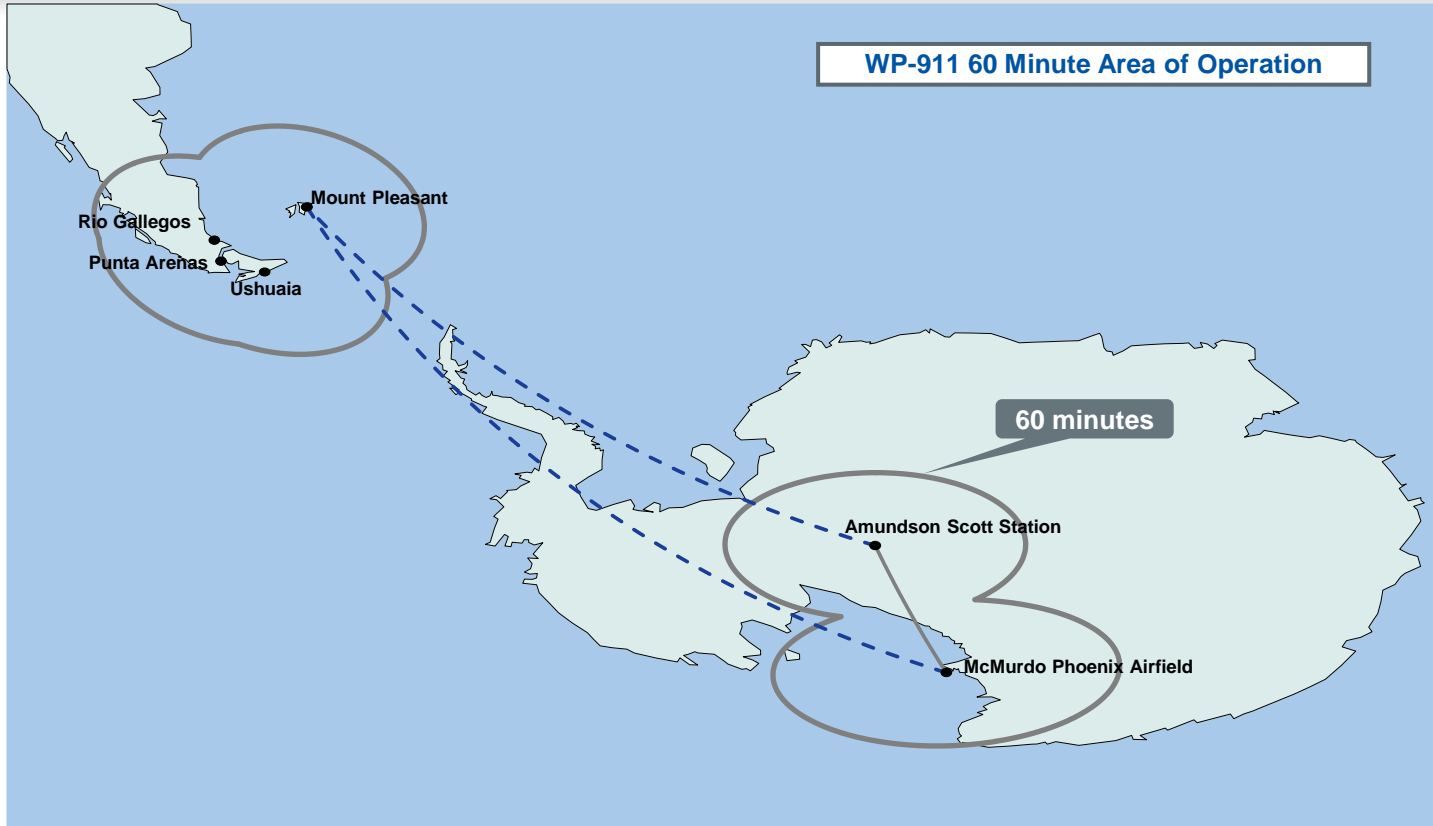
## Background



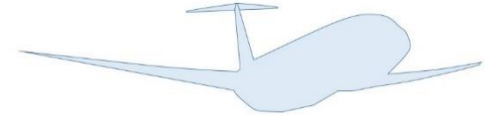
Ice Air, a subsidiary of EDTO Airways, currently conducts domestic cargo operations between McMurdo Phoenix Airfield (NZFX) and Amundson Scott Research Station (NZSP) using WP-911 Freighter aeroplanes.

The airline has a business opportunity to expand its operations to Mount Pleasant, Falkland Islands (EGYP), which would be served by either the current fleet of WP-911s or WP-3 freighter aeroplanes on dry lease from parent company EDTO Airways.

# Module 8 - Practical Exercise



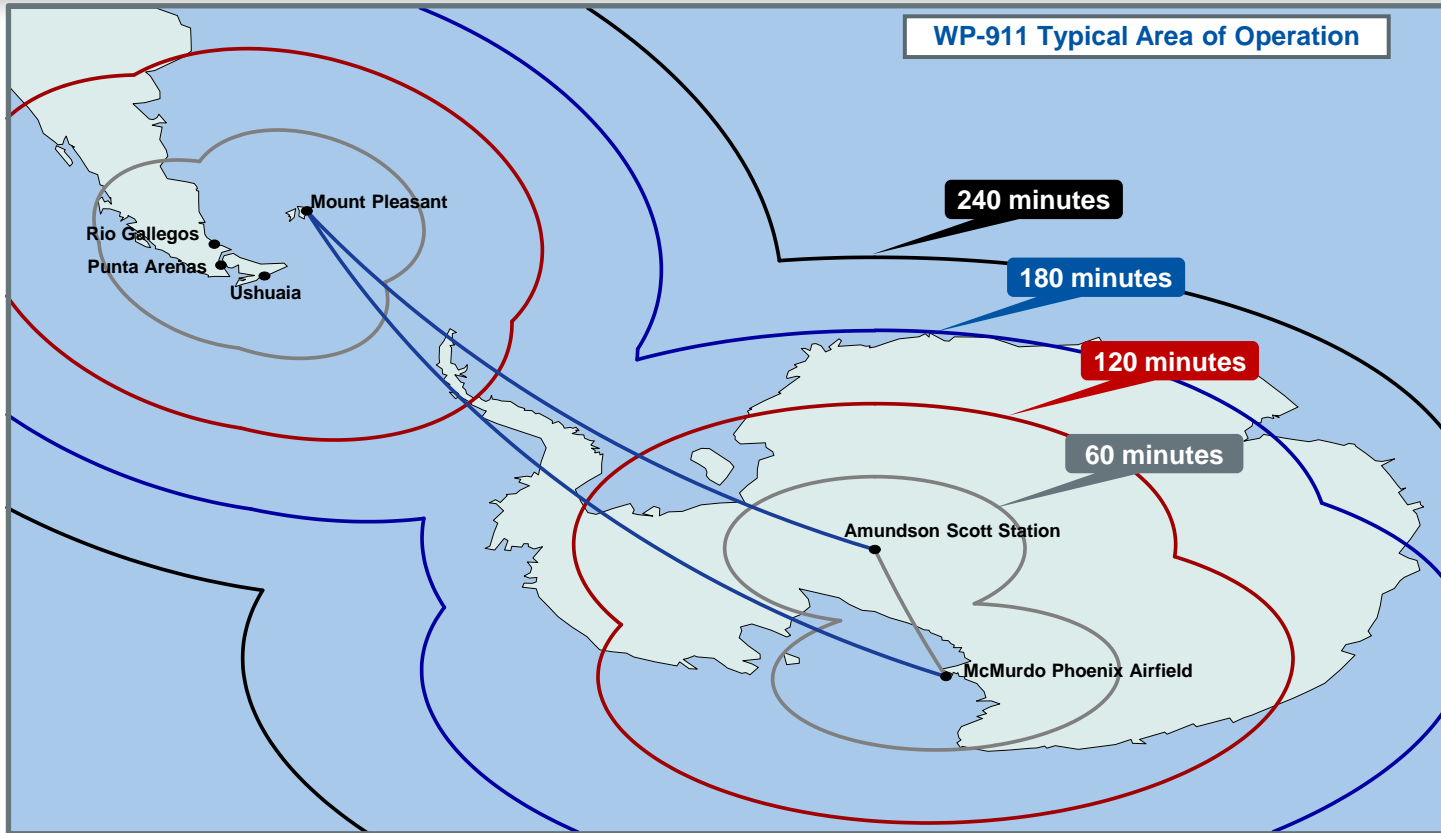
## Assignment



Develop recommendations for updating ACAR 121.001 to include EDTO provisions for all aeroplanes including:

- Threshold and Maximum Diversion Times for two engine aeroplanes
- Threshold and Maximum Diversion Times for aeroplanes with more than two engines
- Other supporting regulations and guidance materials

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**Note: The WP-911 is certified for up to 300 minute EDTO capability by the State of Design based on operations beyond 60 minutes.**

## Proposed Regulation Update



### ACAR 121.001(a) - Aeroplane Limitations, Type of Route: Two Engine Aeroplanes

*Unless authorized for EDTO, no certificate holder may operate a two-engine aeroplane over a route that contains a point farther than **## minutes** flying time (at a one engine inoperative cruise speed, under standard conditions in still air) from an enroute alternate aerodrome. The requirements for EDTO approval up to a Maximum Diversion Time of **## minutes** are provided in this part.*





## Suggested ACAR 121.001(a) Threshold Time for Two Engine Aeroplanes?

- 60 Minutes
- 180 Minutes
- 240 Minutes
- 300 Minutes
- Other Value
- No Limit



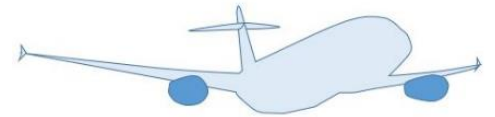
**What considerations influenced your decision?**





## Suggested ACAR 121.001(a) Maximum Diversion Time for Two Engine Aeroplanes?

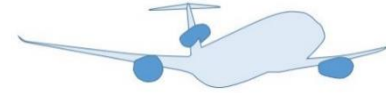
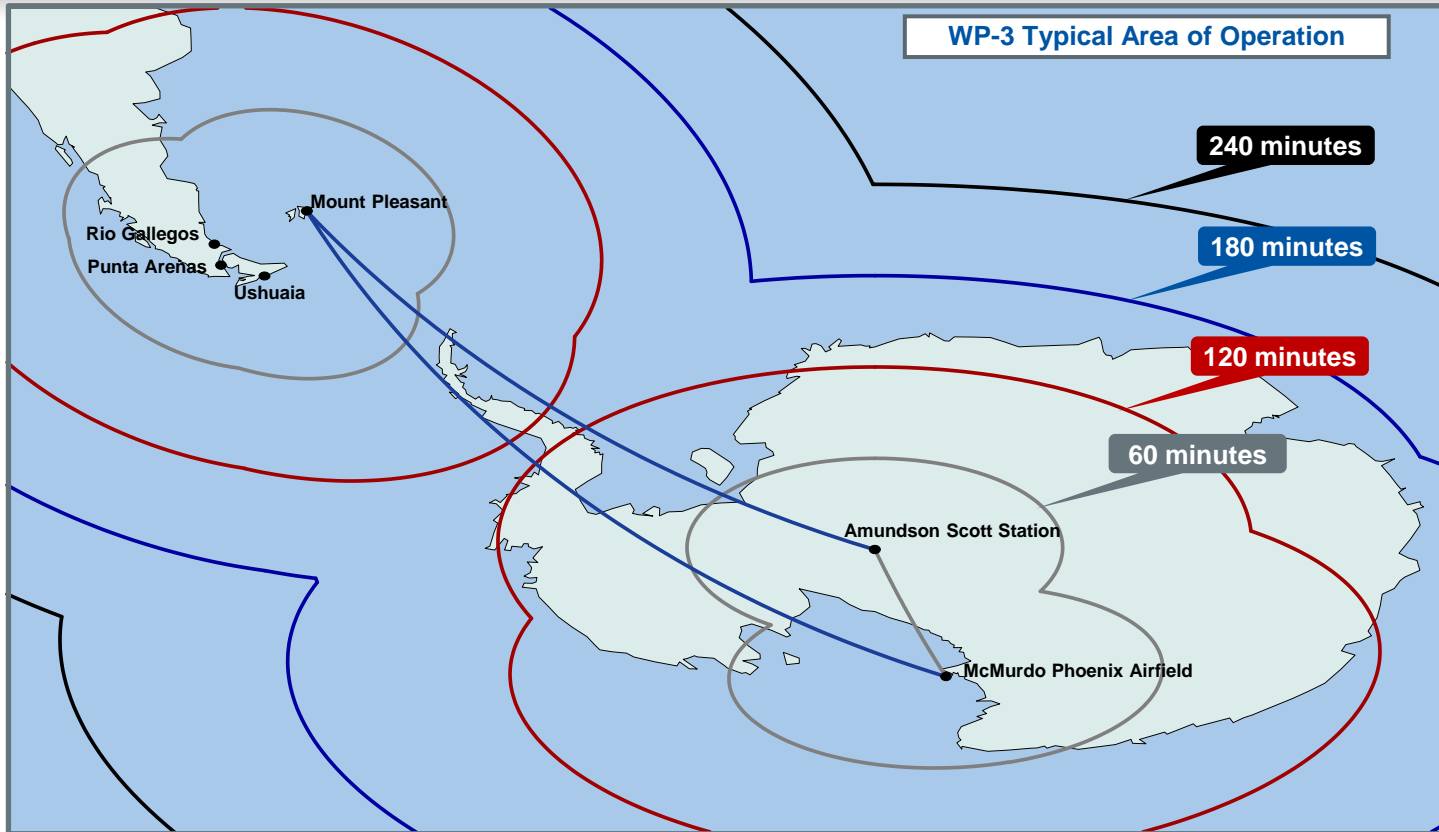
- 60 Minutes
- 180 Minutes
- 240 Minutes
- 300 Minutes
- Other Value
- No Limit



**What considerations influenced your decision?**

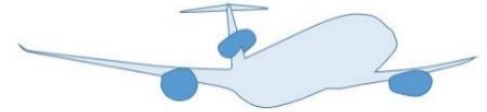


# Module 8 - Practical Exercise



**Note: The WP-3 has an EDTO time limited system capability of 225 minutes.**

## Proposed Regulation Update



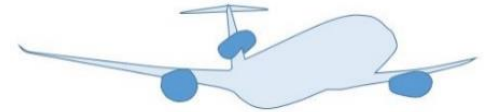
### ACAR 121.001(b) - Aeroplane Limitations, Type of Route: Aeroplanes with more than Two Engines

*Unless authorized for EDTO, no certificate holder may operate an aeroplane with more than two engines over a route that contains a point farther than **## minutes** flying time (at an all engines operating cruise speed, under standard conditions in still air) from an enroute alternate aerodrome. The requirements for EDTO approval up to a Maximum Diversion Time of **## minutes** are provided in this part.*



Suggested ACAR 121.001(b) Threshold Time for Aeroplanes with more than two engines?

- 60 Minutes
- 120 Minutes
- 180 Minutes
- 210 Minutes
- 225 Minutes
- 240 Minutes
- Other Value
- No Limit

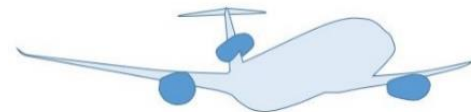


**What considerations influenced your decision?**



Suggested ACAR 121.001(b) Maximum Diversion Time for Aeroplanes with more than two engines?

- 60 Minutes
- 120 Minutes
- 180 Minutes
- 210 Minutes
- 225 Minutes
- 240 Minutes
- Other Value
- No Limit



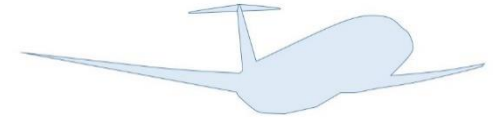
**What considerations influenced your decision?**



## What other supporting regulations will need to be included in this EDTO revision to the ACARs?



SECTION / PARAGRAPH	REGULATION REF		DS	DC	REMARKS
<b>ICAO Reference:</b> <b>Annex 6 Part I, Definitions</b> <input type="checkbox"/> Standard <input type="checkbox"/> Recommended Practice <input type="checkbox"/> Guidance Material	<b>STATE IMPLEMENTATION of EDTO SARPs</b> <b>Difference Status (DS):</b> ND: No Difference NA: Not Applicable SD: Significant Difference <b>Difference Categories (DC):</b> A. More exacting or exceeds B. Different in Character/Other means of compliance C. Less protective/partially implemented/not implemented				
<b>ABBREVIATIONS AND SYMBOLS</b> EDTO – Extended diversion time operations					
<b>CHAPTER 1. DEFINITIONS</b> <b>Extended diversion time operations</b> <i>EDTO:</i> Any operation by an aeroplane with two or more turbine engines where the diversion time to an en-route alternate aerodrome is greater than the threshold time established by the State of the Operator.  <b>Alternate aerodrome.</b> An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing where the necessary services and facilities are available, where aircraft performance requirements can be met and which is operational at the expected time of use. Alternate aerodromes include the following:  <i>En-route alternate.</i> An alternate aerodrome at which an aircraft would be able to land in the event that a diversion becomes necessary while en route.					<i>Additional acronyms, abbreviations and definitions can be found in the Glossary section of ICAO Doc 10085</i>



## Any other considerations for EDTO rule deployment?



# End of Module 8 - Practical Exercise



**Thank You and Well Done!!**