Seminar on Satellite-Aided Distress Tracking

Agenda Item 11 – the Global Aeronautical Distress and Safety System (GADSS)

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Three primary GADSS functions for ATS and SAR

1. Aircraft tracking – aircraft operator requirement since 2018

2. Autonomous Distress Tracking (ADT) – new-built aircraft equipage 1 January ~~2023~~ 2024

3. Post flight localization and recovery

Annex 6 — *Operation of Aircraft*, Part I — *International Commercial Air Transport — Aeroplanes*

3.5 AIRCRAFT TRACKING

3.5.1 The operator shall establish an aircraft tracking capability to track aeroplanes throughout its area of operations.

Note.— Guidance on aircraft tracking capabilities is contained in the Aircraft Tracking Implementation Guidelines (Cir 347).

3.5.2 **Recommendation**.*— The operator should track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) under the following conditions:*

a) the aeroplane has a maximum certificated take-off mass of over 27 000 kg and a seating capacity greater than 19; and

b) where an ATS unit obtains aeroplane position information at greater than 15 minute intervals.

Note.— See Annex 11, Chapter 2, for coordination between the operator and air traffic services providers regarding position report messages.

3.5.3 The operator shall track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) that is planned in an oceanic area(s) under the following conditions:

a) the aeroplane has a maximum certificated take-off mass of over 45 500 kg and a seating capacity greater than 19; and

b) where an ATS unit obtains aeroplane position information at greater than 15 minute intervals.

Note 1.— Oceanic area, for the purpose of aircraft tracking, is the airspace which overlies waters outside the territory of a State.

When the ATS reporting interval is greater than 15 min
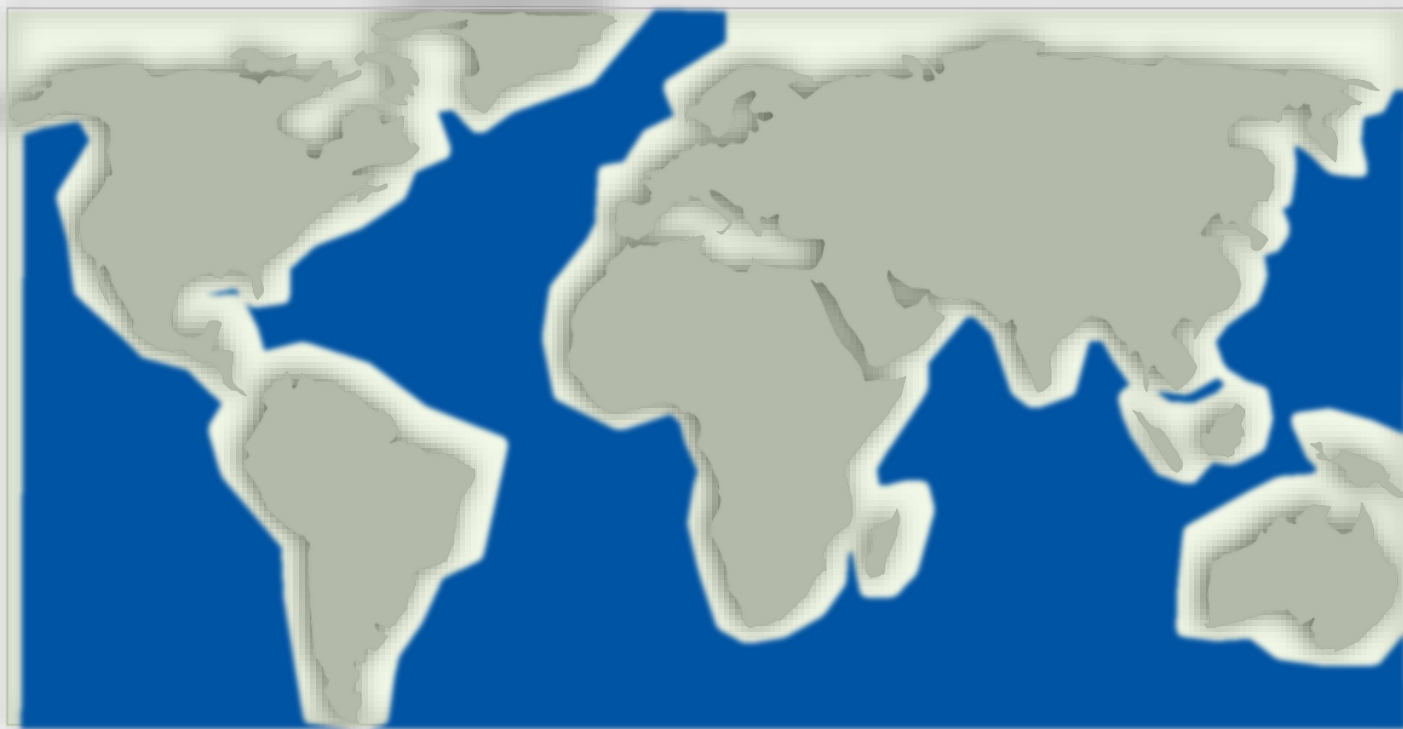
Requirement
to track

Recommendation
Operators to track at
15 minute intervals

Requirement
Operators to track at
15 minute intervals

Became
Applicable
8 Nov 2018

Seating capacity greater
than 19 Seats

MTOM

27,000 Kg (Should)

45,500 Kg (Shall)
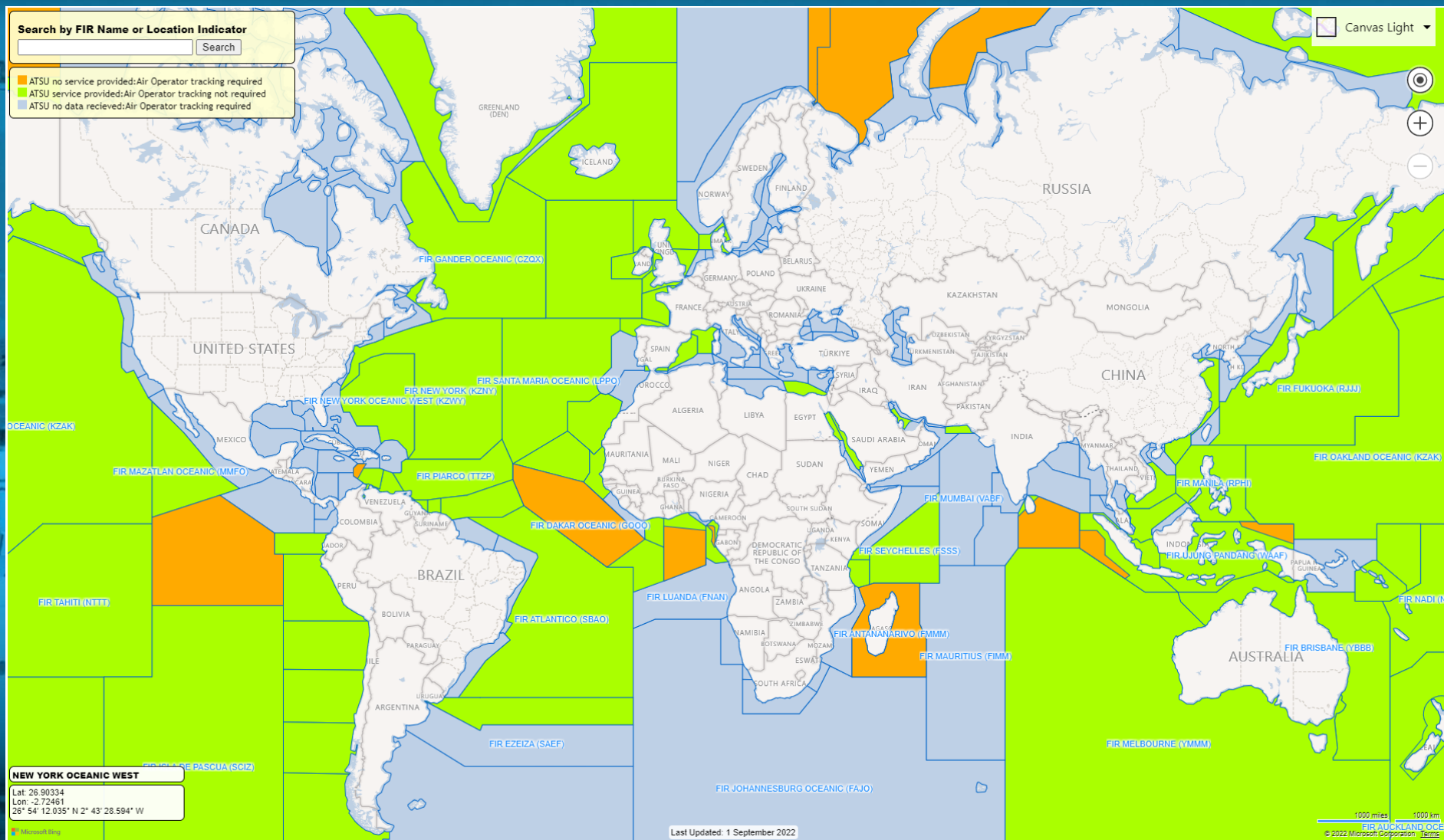
aircrafttracking@icao.int

ADT: Annex 6 — *Operation of Aircraft*, Part I — *International Commercial Air Transport — Aeroplanes*

- Requirements – outlined later
  - On large commercial aircraft; few aircraft at first but ADT device and software are new
- Provides the requirement but not how to implement (ATS Units and RCCs need procedures, not a copy of Annex 6)

Annex 6 — *Operation of Aircraft*, Part I — *International Commercial Air Transport* — *Aeroplanes*

6.18 LOCATION OF AN AEROPLANE IN DISTRESS

- 6.18.1 As of 1 January 2025, all aeroplanes of a maximum certificated take-off mass of over 27, 000 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2024, shall autonomously transmit information from which a position can be determined by the operator, at least once every minute, when in distress, in accordance with Appendix 9.

- 6.18.2 **Recommendation.—** *All aeroplanes of a maximum certificated take-off mass of over 5 700 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2023, should autonomously transmit information from which a position can be determined at least once every minute, when in distress, in accordance with Appendix 9.*

- 6.18.3 The operator shall make position information of a flight in distress available to the appropriate organizations, as established by the State of the Operator.
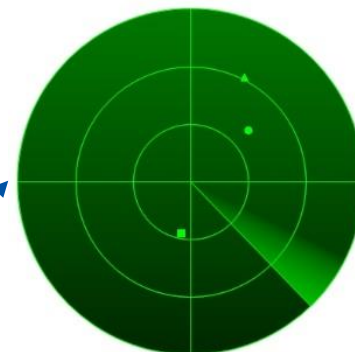
LADR – What is it?

???

6.18 LOCATION OF AN AIRCRAFT IN DISTRESS
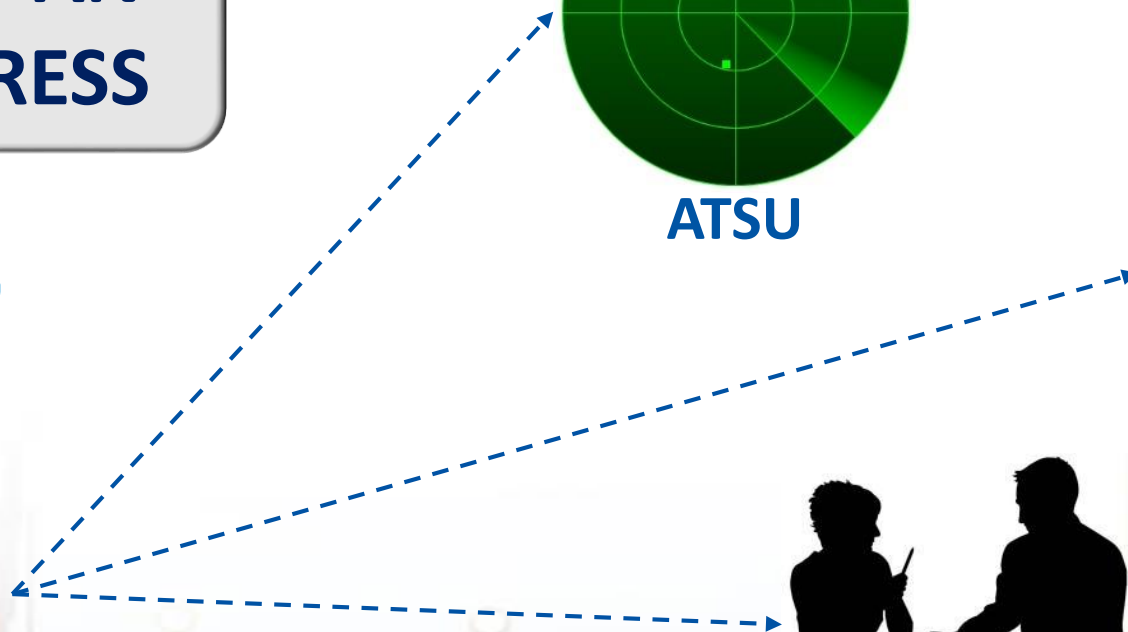
ATSU
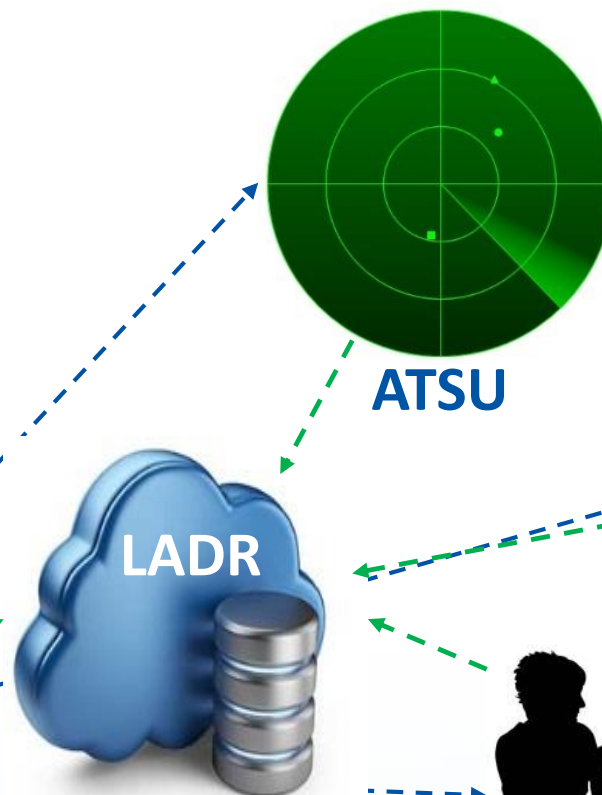
RCC

Other

Oceanic Airways

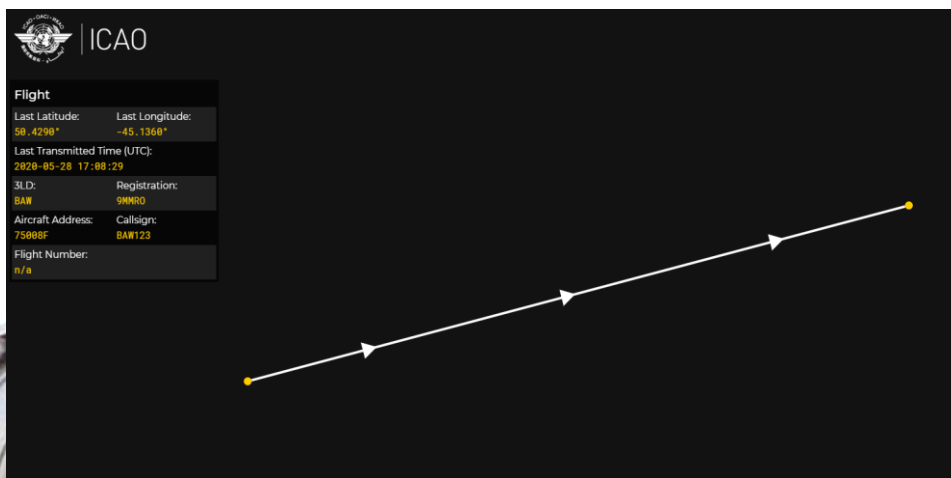# 6.18 LOCATION OF AN AIRCRAFT IN DISTRESS

Oceanic Airways

ATSU

LADR

RCC

Other

➢ The LADR can be accessed as data files, or using the viewer shown here.

➢ As a single source, there is reduced risk of transcription errors in passing position information and updates via voice.

➢ The LADR helps operators fulfil their responsibility under Annex 6, 6.18.3, to "make position information of a flight in distress available to the appropriate organizations".
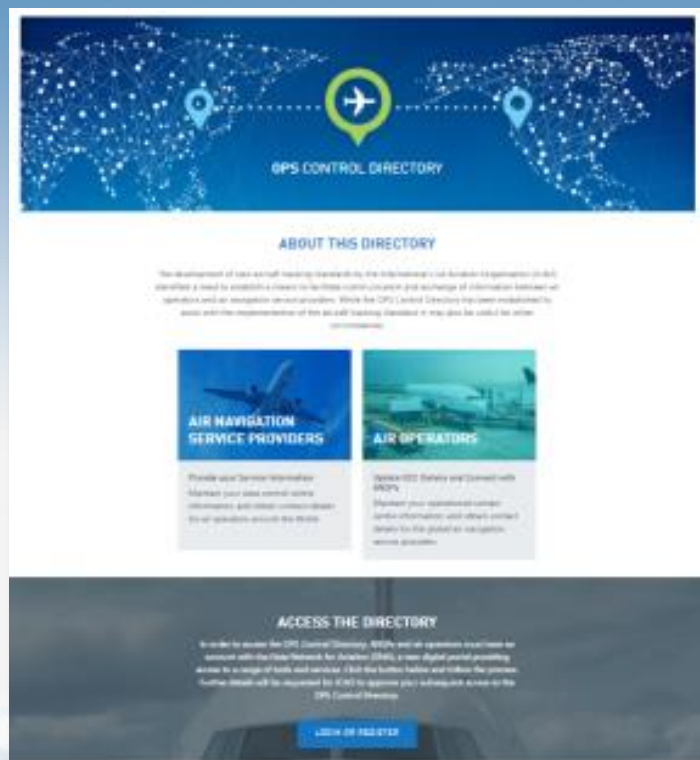
So, how to subscribe?

3.5 AIRCRAFT TRACKING

All contacts   Only ANSPs

ICAO OPS CTRL

CONTACTS DIRECTORY

Edit your information

Flight Information Region (FIR)	Air Operator

Select an FIR (by location indicator or name) to check the contact information:

Please search for an FIR above.

VIEW THE MAP

OPS CONTROL DIRECTORY

ICAO OPS CTRL

CONTACTS DIRECTORY

Edit your information

Flight Information Region (FIR)	Air Operator

Select an FIR (by location indicator or name) to check the contact information:

Shan

EGGX - SHANWICK OCEANIC

EISN - SHANNON

UTDD - DUSHANBE

ZSHA - SHANGHAI

OPS CONTROL DIRECTORY

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EGGX – SHANWICK OCEANIC

Name/Position: Operations Supervisor Shanwick

Telephone: +44

Email: shanwick.

AFTN:

24/7

Select an FIR (by l

EGGX

Name/Pos

Telephone

Email:

AFTN:

24/7

EDIT CONTACT INFORMATION

🗺 Flight Information Regions	('A') Area Control Centres	🔖 Contacts	👥 Authorized Users

('A') My FIRs

LONDON
EGTT

SCOTTISH
EGPX

SHANWICK OCEANIC
EGGX

Step 1
In Contacts tab, add contact details.

Step 2
In Area Control Centres tab, select ACC and assign contacts to ACC.

Step 3
In FIR tab, select FIR, assign contacts to FIR, and validate / Publish.

Step 4
In Authorized Users tab, add additional users if required.

EDIT CONTACT INFORMATION

← Back to directory

🗺 Flight Information Regions ('A') Area Control Centres 📖 Contacts 👤 Authorized Users

📖 My Contacts ➕

Operations Supervisor Shanwick

Duty Manager

Operations Supervisor - Scottish

Operations Supervisor - London

ling

Contact Information

Name / Position

Operations Supervisor Shanwick

Telephone

+441

AFTN

Email

shanwick.

Cell Phone

+44

Fax

Availability

☑ Available 24/7

Step 1

In Contacts tab, add contact details.

Step 2

In Area Control Centres tab, select ACC and assign contacts to ACC.

Step 3

In FIR tab, select FIR, assign contacts to FIR, and validate / Publish.

Step 4

EDIT CONTACT INFORMATION

← Back to directory

🗺 **Flight Information Regions**   📶 **Area Control Centres**   📇 **Contacts**   👥🔒 **Authorized Users**

👥🔒 Authorized Email(s) **+**

test@email.com

Authorized User Email

Flight Information Regions

| TEST 1 ▾ |

Email Address

| |

Please note that by extending the "Authorized User" status to this individual, you are permitting them to directly access and conduct searches in the directory. Authorized users are unable to make any edits or changes to any of the data featured in the directory.

All users will need to have a DNA account. You may add the email account associated to the user before a DNA account has been set up.This will pre-authorize that user. Please direct users without a DNA account to https://www4.icao.int/dna so that they can create an account.

Save

Step 1

In Contacts tab, add contact details.

Step 2

In Area Control Centres tab, select ACC and assign contacts to ACC.

Step 3

In FIR tab, select FIR, assign contacts to FIR, and validate / Publish.

Step 4

In Authorized Users tab, add additional users if required.

OPS CTRL Summary

- Single global database of contact details for all ACCs and Operators

- Access to OPS CTRL will lead to access to LADR

- Contact your State Focal Point to provide your details and gain access

- More details through SkyTalks: A40 SkyTalks: Global Aeronautical Distress and Safety System (GADSS) Implementation support tools – YouTube

Considerations

- Local procedures

- Two messages to RCC

- ADT active in-flight

- False activation in-flight

- ELT(DT) is not ELT

Questions