



**BRAZILIAN AIR FORCE**



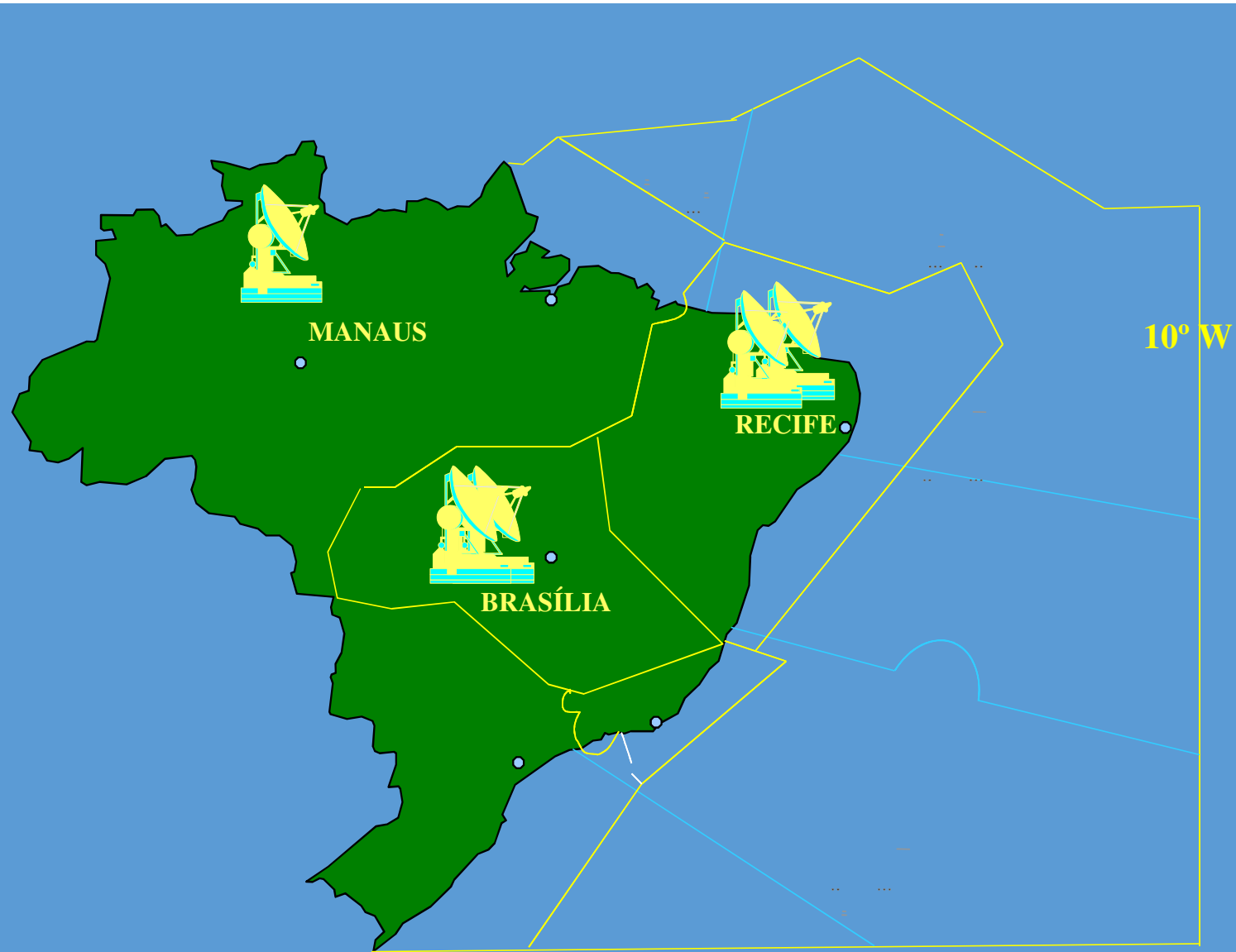
# COSPAS-SARSAT IN BRAZIL



**Gustavo Rossi**

**Captain Aviator / SMC**

**Search and Rescue – Department of Airspace Control**



3 LEOLUT

- BRASÍLIA
- RECIFE
- MANAUS

2 GEOLUT

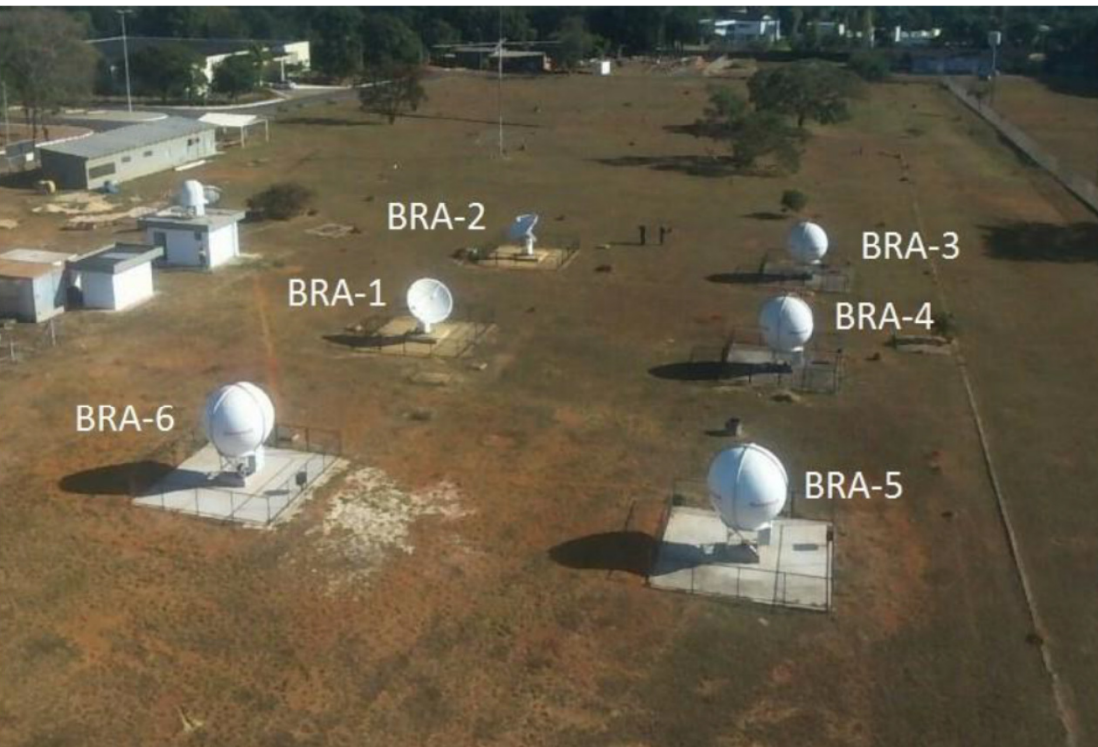
- BRASÍLIA
- RECIFE

2 MEOLUT

- BRASÍLIA
- RECIFE



# NEW MEOLUT'S IN BRAZIL



**Figure 1: MEOLUT Brasília (7106)**



**Figure 2: MEOLUT Recife (7107)**



# ANNEX 6

## 6.17 Emergency locator transmitter (ELT)

...  
6.17.3 All aeroplanes authorized to carry more than 19 passengers for which the individual certificate of airworthiness is first issued after 1 July 2008 shall be equipped with at least two ELTs, one of which shall be automatic, unless the aeroplane meets the requirements of 6.18.  
...

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*Editorial note.— Insert new paragraph 6.18 as follows:*

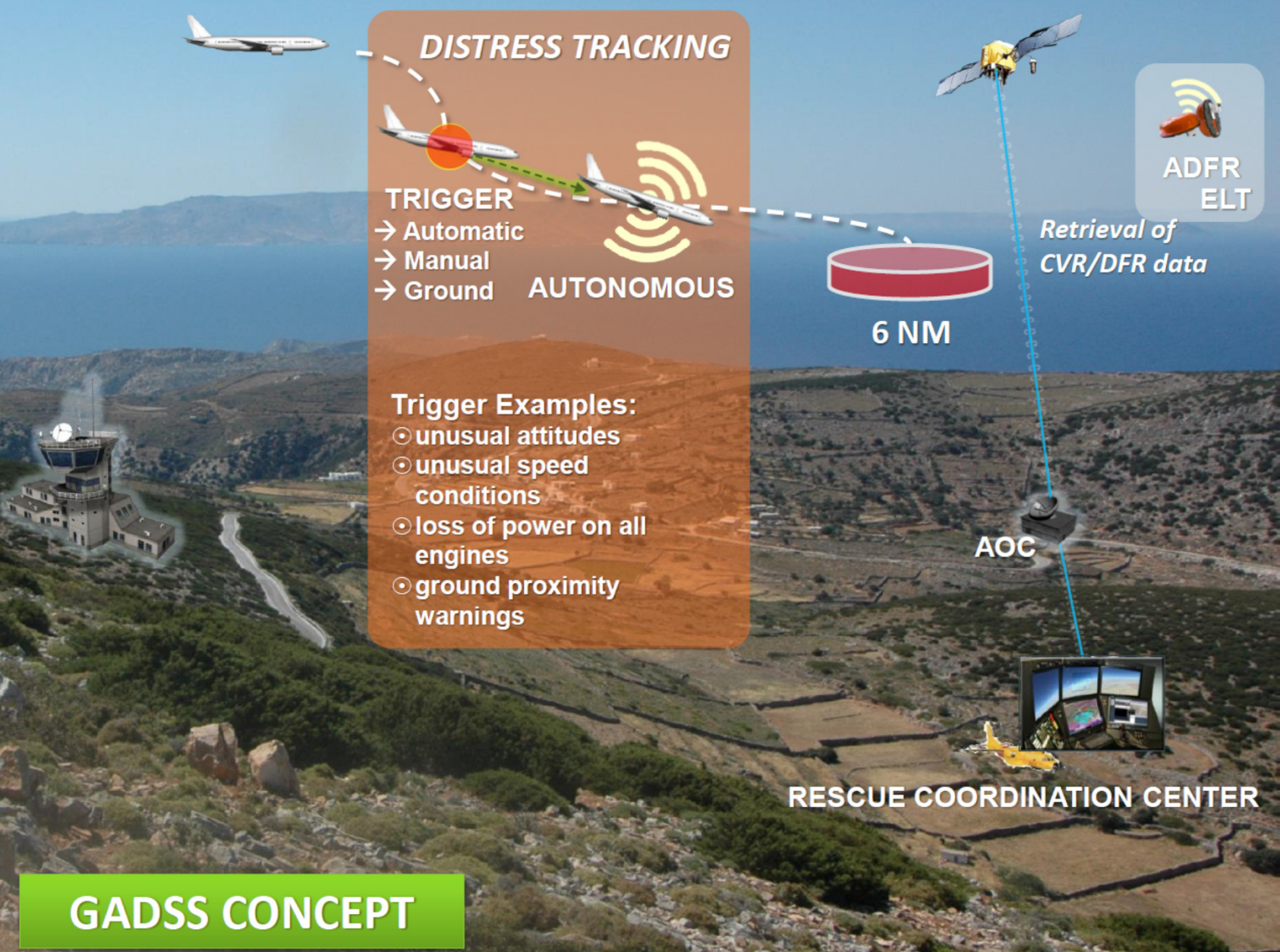
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## 6.18 Location of an aeroplane in distress

6.18.1 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 2021, 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 XX.

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 2021, should autonomously transmit information from which a position can be determined at least once every minute, when in distress, in accordance with Appendix XX.*

Produced by:  
Ad-hoc Working Group  
on Aircraft Tracking



**DISTRESS TRACKING**

**TRIGGER**  
→ Automatic  
→ Manual  
→ Ground

**AUTONOMOUS**

**Trigger Examples:**

- unusual attitudes
- unusual speed conditions
- loss of power on all engines
- ground proximity warnings

**ADFR  
ELT**

*Retrieval of  
CVR/DFR data*



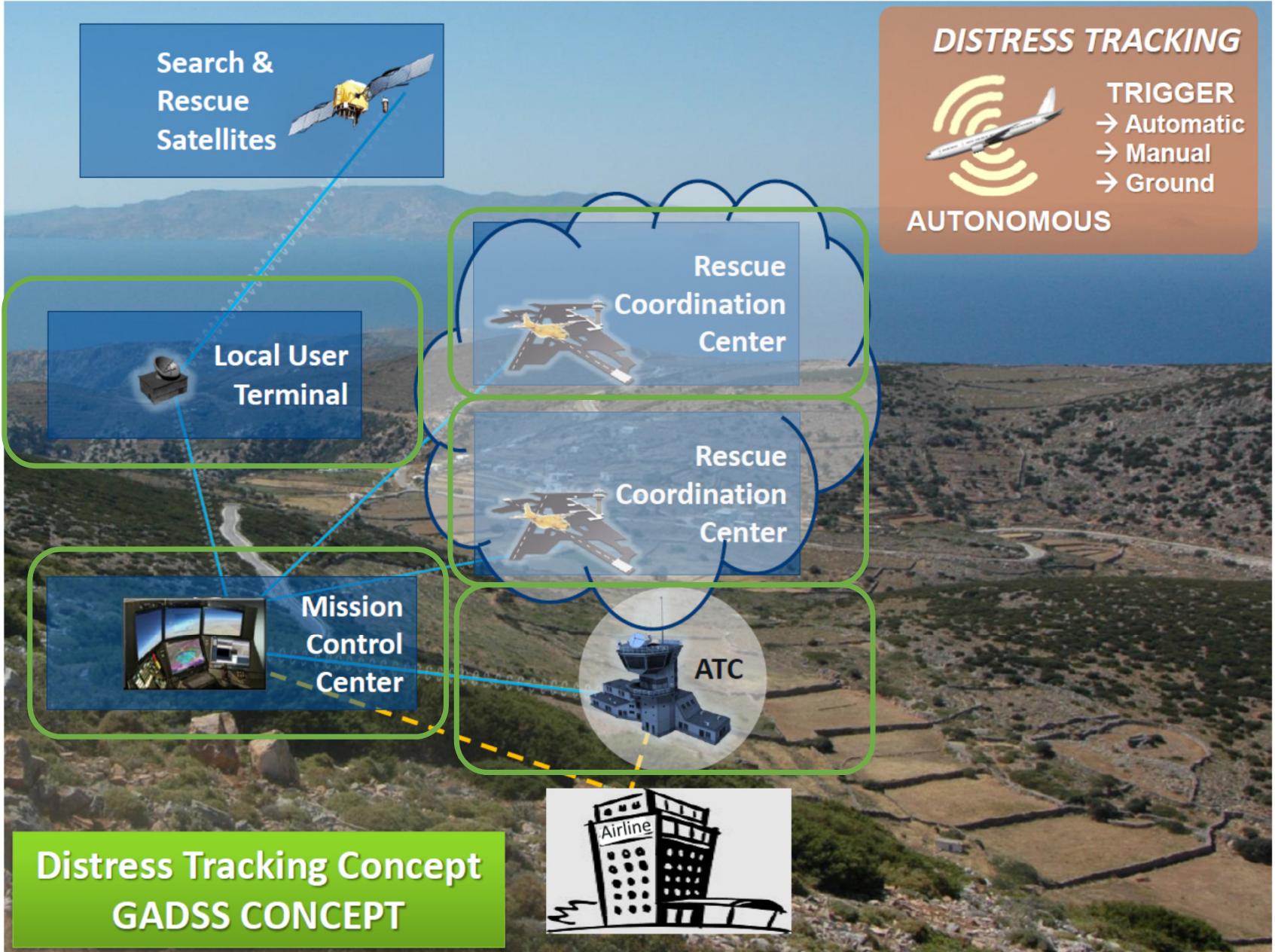
**6 NM**

**AOC**



**RESCUE COORDINATION CENTER**

**GADSS CONCEPT**



# In-Flight Test 2

GPS 1

Todos os itens

GPS 2

Todos os itens

MEO 2

Todos os itens

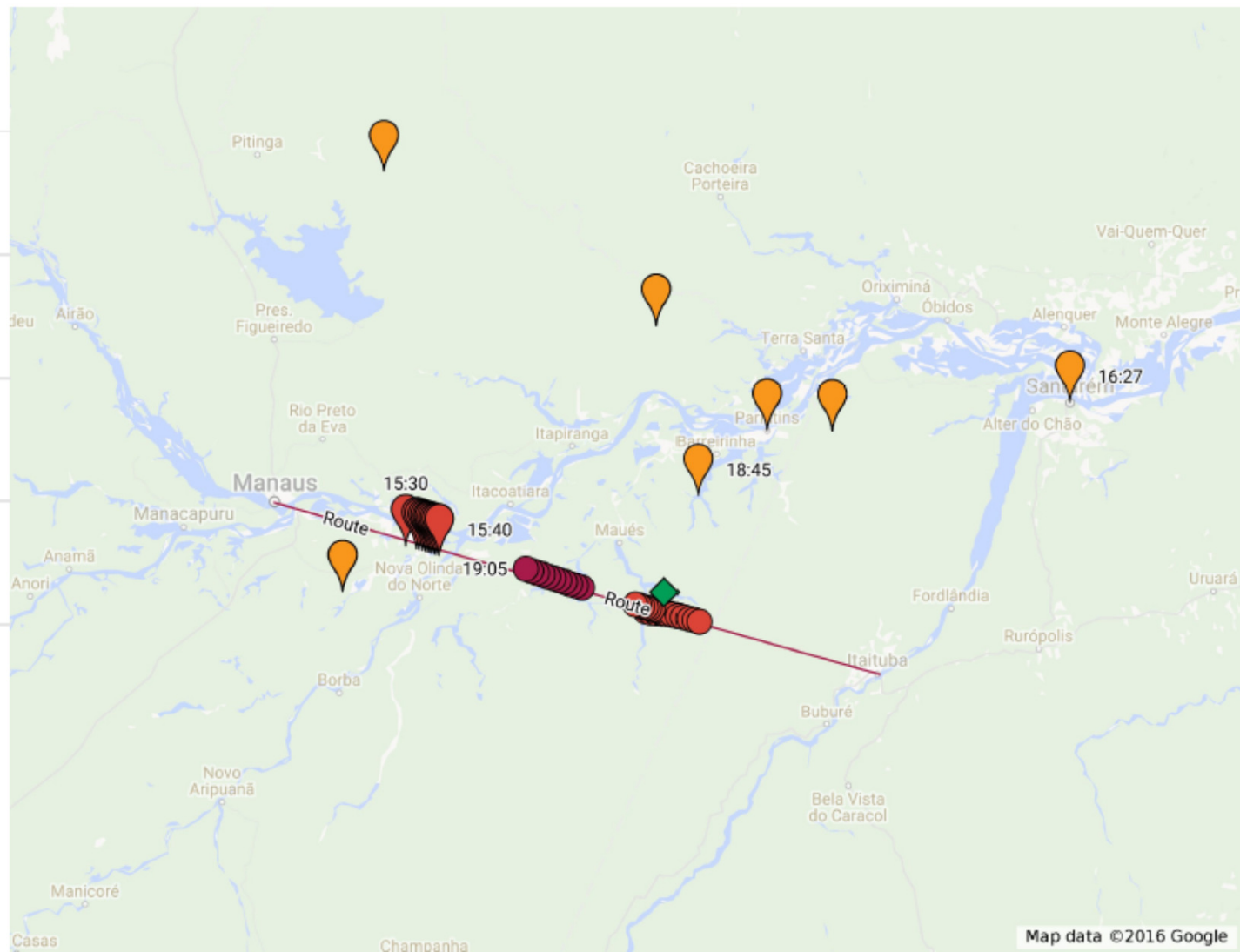
GPS 3

Todos os itens

LEO 3

Todos os itens

Teste de acionamento de ELT em voo realizado no dia 08/07/15, H-60 de Manaus para Itaituba



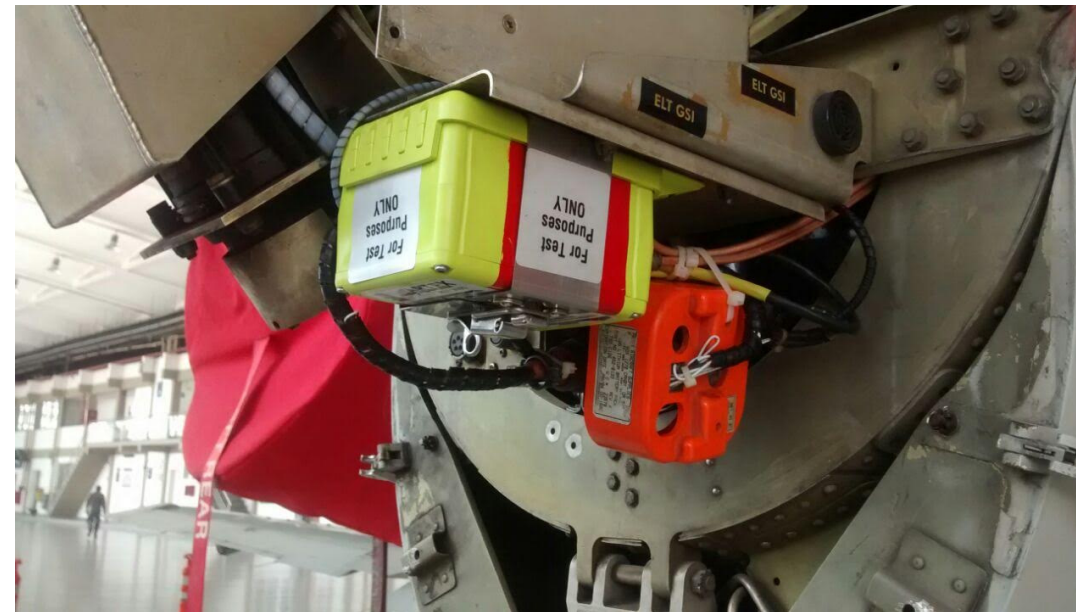


# ELT-DT Trials in Brazil – September 2016



- Brazil, France, Russian
- Hawker 800 - Special Flight Inspection Group (GEIV) – Brazilian Air Force
- ACR Artex - ELT
  - First burst – 5 sec ; after burst every 50 sec +/-2,5 sec (JC-30 decided 28,5sec);
  - Battery life - 24h
- TRIALS:
  - A - 15 minutes ON;
  - B – 5 minutes ON / 5 minutes OFF (total 20 minutes);
  - C – 30 seconds ON / 3,5 minutes OFF (total 20 minutes).

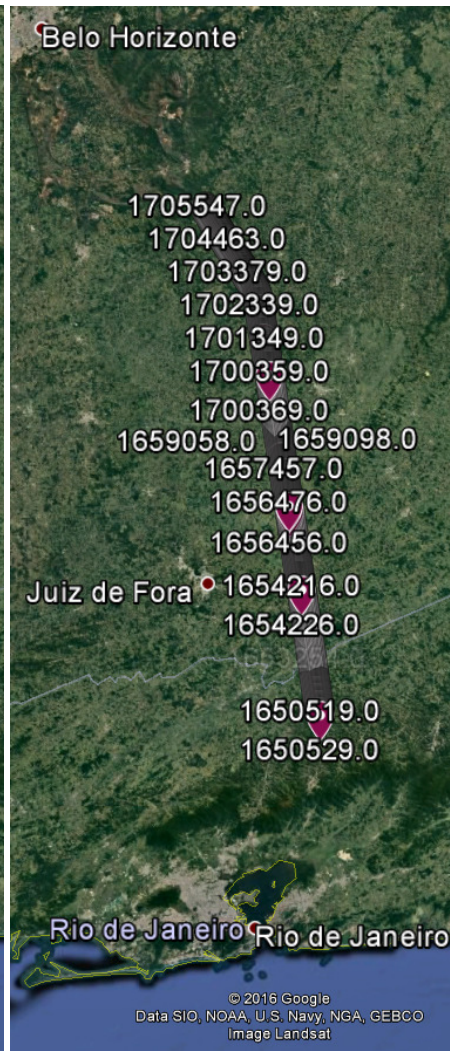
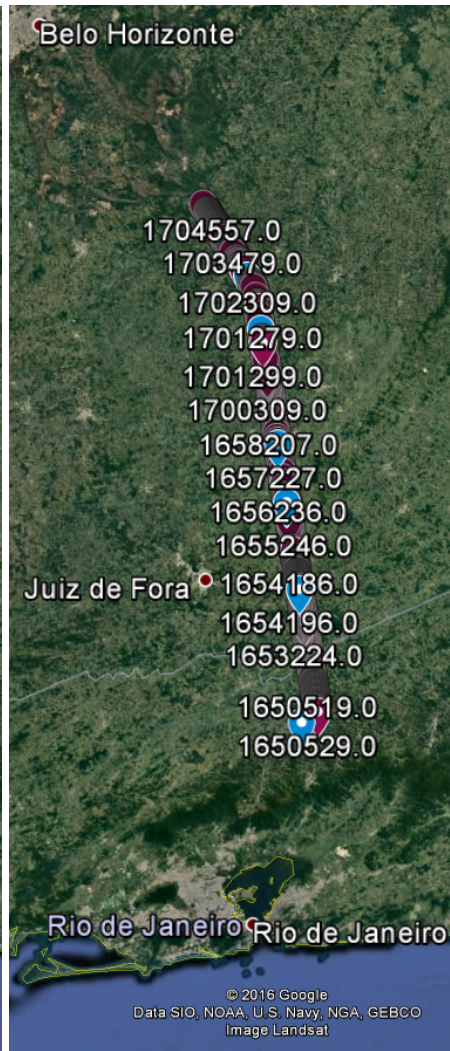
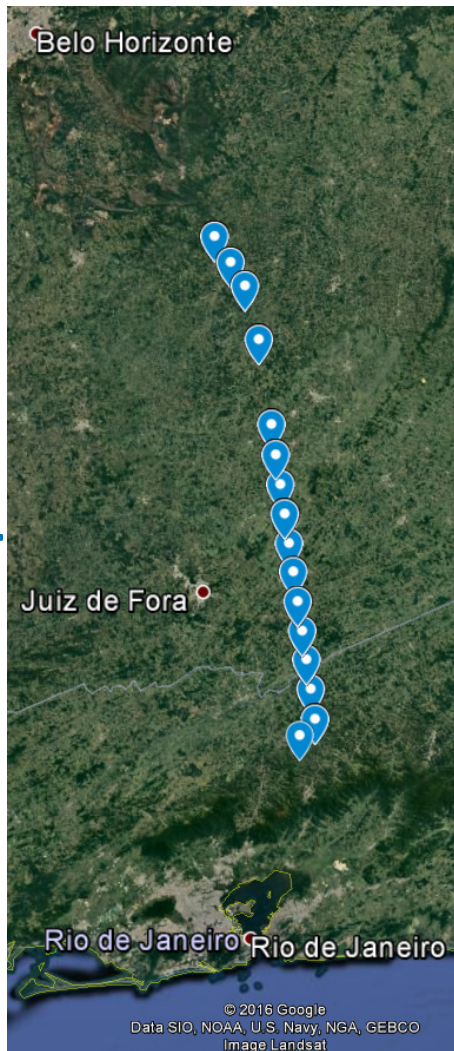




# ELT-DT Trials in Brazil – Initial Results



Distress Alerts  
received from  
COSPAS-SARSAT



Route of Flight



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