



ICAO

UNITING AVIATION

NO COUNTRY LEFT BEHIND



ICAO APAC GADSS Workshop

Agenda Item 2

Global Aeronautical Distress and Safety System (GADSS) Overview

Dave Edwards Chair ICAO/IMO Joint Working Group on SAR





ICAO

UNITING AVIATION

NO COUNTRY LEFT BEHIND



Many stakeholders!
**GADSS can greatly assist SAR in the
oceanic regions and remote land
regions (limited ATC surveillance)**



ICAO

UNITING AVIATION

NO COUNTRY LEFT BEHIND



Documents applicable for GADSS implementation

- ICAO Annex 6
- IAMSAR Manual 2022 edition:
 - Volume I Appendix G and Volume II Chapter 1
- Manual on the Global Aeronautical Distress and Safety System Doc 10165 (2022)



ICAO

UNITING AVIATION

NO COUNTRY LEFT BEHIND



ICAO Annex 6 – Operation of Aircraft, Part 1

- Requirements – outlined later
 - On large commercial aircraft; and, recommended on some other aircraft
- Provides the requirement but not how to implement (ATS Units and RCCs need procedures, not a copy of Annex 6)



ICAO

UNITING AVIATION

NO COUNTRY LEFT BEHIND



IAMSAR Manual 2022 edition

- Amendments become applicable 1 June 2022.
Adobe pdf file available
- GADSS explained in Volume I, Appendix G and Volume II
- Autonomous Distress Tracking (ADT),
Volume II, Appendix V





ICAO

UNITING AVIATION

NO COUNTRY LEFT BEHIND



Three primary GADSS functions for ATS and SAR

1. Aeroplane tracking – aircraft operator requirement since 2018, ICAO Circular 347
2. Autonomous Distress Tracking (ADT) – new-built aircraft equipage 1 January 2023
3. Post flight localization (ADT device not required to operate after an accident and possible 121.5 MHz homing issue)



ICAO

UNITING AVIATION

NO COUNTRY LEFT BEHIND



Location of an Aircraft in Distress Repository

1. Annex 6 “The operator shall make position information of a flight in distress available to the appropriate organizations.”
2. ICAO established the LADR to store ADT info
3. LADR notifies subscribers (operator, ATS unit and RCC) it has ADT message. Subscribers can then view or download the ADT information.



ICAO

UNITING AVIATION

NO COUNTRY LEFT BEHIND



Location of an Aircraft in Distress Repository

1. Notification from LADR can be email, SMS, or ATS message over AFTN/AMHS, for initial position report.
2. Mandatory ADT information:
 - (1) last known position, (2) date and time of transmission, (3) aircraft operator (3-letter designator), (4) aircraft identification, and (5) contributor/source



ICAO

UNITING AVIATION

NO COUNTRY LEFT BEHIND



The Way Forward

- You now have a general understanding of GADSS and sources of information.
- Upcoming presentations will focus on operational procedures.
- Your questions are important for all of us.
- Next presentation...

