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Third Meeting of Rapporteurs of the North American, Central American and Caribbean Working Group

Tercera reunión de relatores/as del Grupo de Trabajo de Norteamérica, Centroamérica y Caribe

NACC/WG/RAP/03

Global Aeronautical Distress and Safety System *GADSS*

Presentation/04

Presented by the Secretariat

Agenda Item 3: Update NAM/CAR regional needs
and NACC/WG objectives, its structure and the
review and reporting mechanisms (Dashboard)

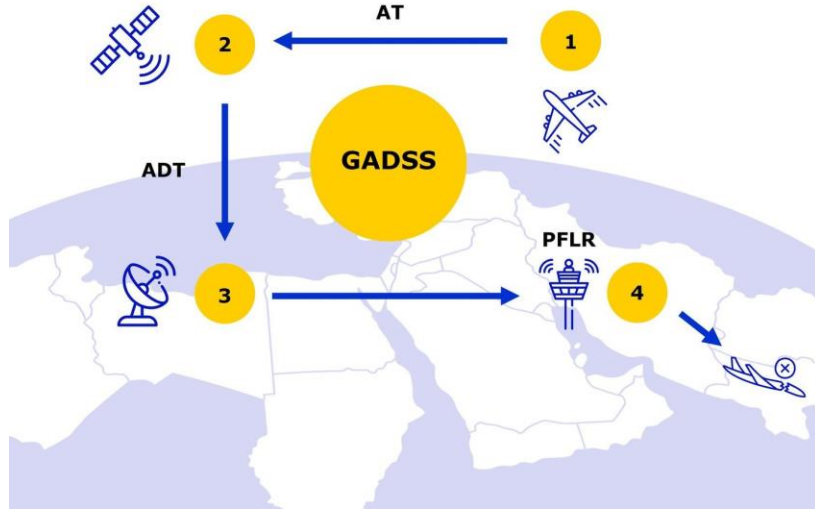
Global Aeronautical Distress and Safety System (GADSS)



- The Global Aeronautical Distress and Safety System (GADSS) was established to mitigate challenges in the global air navigation system, regarding the timely identification and localization of aircraft in distress, such as those that occurred with the accidents of Air France flight AF447 and Malaysia Airlines flight MH370.
- GADSS provides an effective and globally consistent approach to enhancing the alerting procedures of search and rescue services by addressing a number of key improvement areas.
- **GADSS has three main elements:**
 - aircraft tracking (typically between the ATS unit and the aircraft operator);
 - location of an aircraft in distress (achieved through autonomous distress tracking (ADT) of aircraft in flight); and
 - post-flight localization and recovery.
- For GADSS to function as intended, flight crew and aircraft operators, air traffic controllers and air navigation services providers, ADT service providers and rescue coordination centres (RCCs) need to understand each other's roles, responsibilities and processes to ensure effective communication, robust coordination and harmonized implementation across the globe.

Autonomous Distress Tracking (ADT)

Details



Specific type of device but not technology-specific



Required on new-built long-haul aircraft, cargo and passenger, starting 1 January 2024



Requirement is for the aircraft operator (company) to receive the information ... details later



Intent is to retain ICAO Annex 11 alerting process

Information Management

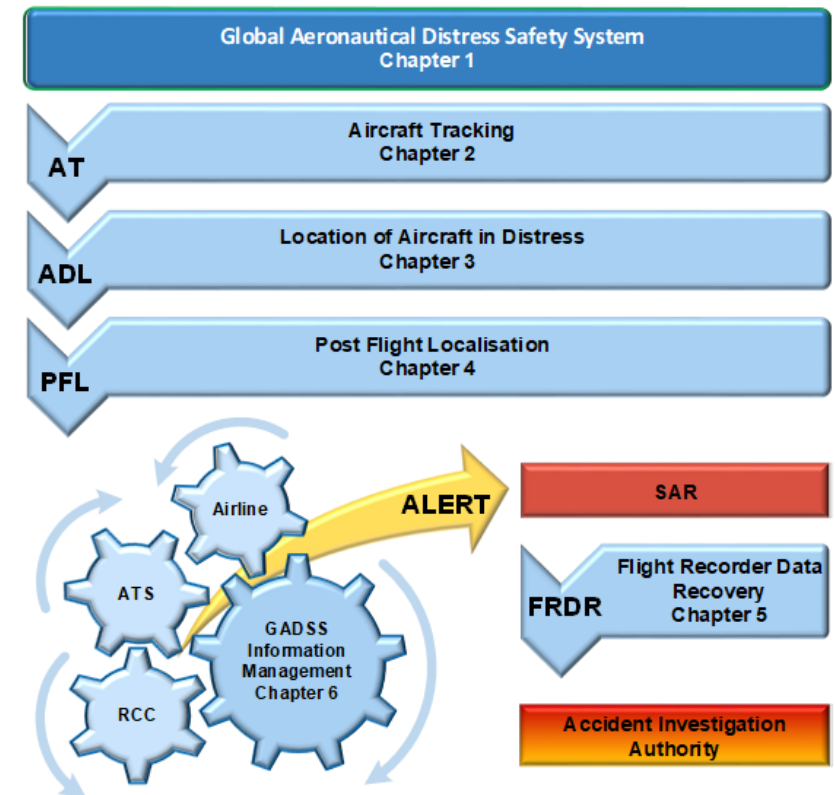
GADSS Information Management is comprised of the following two services:

a) OPS Control Directory

The OPS Control Directory was established to enable timely coordination between an air traffic services unit (ATSU) and an operator, initially in response to the aircraft tracking requirements. The OPS Control Directory provides the ATSU (ACC) and operator OCC operational contact information to facilitate communication. The OPS Control Directory also includes the contact details of RCCs and other users such as other State nominated agencies.

b) Location of an Aircraft in Distress Repository (LADR)

Aircraft position information is available to RCCs, ATSUs and operators by means of the LADR, which can be accessed through an identified point that will be continuously available. The LADR is System Wide Information Management (SWIM) compatible and will serve as the entry point for specific information as detailed in the manual on the Functional Specifications for the Location of an Aircraft in Distress Repository (LADR) (Doc 10150).



Location of Aircraft in Distress Repository

- ICAO established 'location of an aircraft in distress repository (LADR)' to store ADT information
- LADR notifies operator, ATS unit and rescue coordination center (RCC) it has ADT info – it does not send ADT info
- Stakeholders need to log into the LADR for the information
- ELT(DT) is an ADT device, it is NOT an ELT distress beacon
- ELT(DT) message goes to RCC/SPOC and the LADR

Notification on the operational availability of the Location of an Aircraft in Distress Repository (LADR)

Action required: States to request aircraft operators, ATS unit area control centres and rescue coordination centres to register in the LADR

INFORMATION REQUIRED TO BE SUBMITTED WHEN REQUESTING A FOCAL POINT ACCOUNT TO ACCESS THE OPS CONTROL DIRECTORY AND LADR

User Category	Focal Point information	Organizational information
Operator	Full name and Email address	<ul style="list-style-type: none"> 3-letter designator(s) in use by the operator Telephony designator(s) in use by the operator Operator name
Air traffic services unit (ATSU)		<ul style="list-style-type: none"> 4-letter location indicator of FIR(s) Name(s) of FIR(s) managed by the ATSU
Rescue coordination centre (RCC)		RCC name and 4-letter location indicator of the search and rescue region (SRR) (if available)
State representative		State name



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Ref.: AN 11/1.1.29-24/16

25 June 2024

Subject: Notification on the operational availability of the Location of an Aircraft in Distress Repository (LADR)

Action required: States to request aircraft operators, ATS unit area control centres and rescue coordination centres to register in the LADR

Sir/Madam,

1. I have the honour to inform you that the location of an aircraft in distress repository (LADR) is now operational. The LADR is a critical part of the Global Aeronautical Distress and Safety System (GADSS), providing the means to store and make available all information related to the position of an aircraft in distress, as described in Annex 6 — *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes*, 6.18.

2. The LADR has been developed by the European Organisation for the Safety of Air Navigation (EUROCONTROL), in close cooperation with the International Civil Aviation Organization (ICAO) and following the requirements of the *Functional Specifications for the Location of an Aircraft in Distress Repository (LADR)* (Doc 10150). The initial operational phase of the LADR has been delivered to meet the minimum required functions, and further developments are expected throughout 2024 to transition the system to full operational capability. Nevertheless, the current system fulfils the basic requirements to store and display position information and notify registered users when new information becomes available.

3. In developing the system, the OPS Control Directory, formerly hosted by ICAO, was also transferred to EUROCONTROL and will act as the means by which users will be authorized for the use of the LADR. The following categories of users are defined in the Directory:

- operators of aircraft;
- air traffic services (ATS) units responsible for the management of a flight information region (FIR), or portion thereof;



Thank You!