



ICAO

International Civil Aviation Organization
North American, Central American and Caribbean Office

WORKING PAPER

NACCWGSARTF5 — WP/04
04/09/24

Fifth North American, Central American and Caribbean Working Group (NACC/WG) Search and Rescue (SAR) Implementation Task Force Meeting (NACC/WG/SAR/TF/5)
Mexico City, Mexico, 23 to 27 September 2024

- Agenda Item 3: SAR Coordination Affairs**
- 3.1 Follow up on valid SAR Agreements of the CAR Region**
 - 3.2 SAR Exercises in the CAR Region**
 - 3.3 Maritime and Aeronautical SAR coordination**

SAREX 2025

(Presented by France)

EXECUTIVE SUMMARY	
<p>Since the LADR for tracking ADT (Autonomous Distress Tracking) alerts went into service in May 2024, the States have been asked to register the entities in charge of aeronautical SRRs.</p> <p>One exercise will be organised by France in 2025 to check that LADR data is disseminated without delay between airlines, ANSPs and aeronautical RCCs in the Piarco FIR.</p>	
Action:	<ul style="list-style-type: none">• States within the Piarco FIR are requested to clarify the status of their aeronautical & maritime RCCs and the SRRs declared to ICAO in the CAR/SAM Regional Air Navigation Plan, and to IMO.• States within the Piarco FIR are requested to register their aeronautical RCCs in the LADR and populate the contact information field.
Strategic Objectives:	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency
References:	<ul style="list-style-type: none">• Conops GADSS (Global Aeronautical Distress & Safety System)• Doc 10054 Manual on Location of Aircraft in Distress and Flight Recorder Data Recovery First Edition, 2019• ICAO State letter 2024/16: Notification on the operational availability of the Location of an Aircraft in Distress Repository (LADR)

1. Introduction

1.1 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.

1.2 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.

1.3 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:

- a) operators of aircraft.
- b) air traffic services (ATS) units responsible for the management of a flight information region (FIR), or portion thereof.
- c) rescue coordination centres (RCCs) responsible for the coordination of search and rescue services; and
- d) State representatives, in accordance with Annex 6, Part I, 6.18 who intend to provide access to authorized individuals not meeting any of the above descriptions.

1.4 The OPS Control Directory itself provides a means to establish contact, primarily between aircraft operators and ATS units, in the event of any uncertainty regarding the safety of an aircraft. It was also established in response to the aircraft tracking Standards of Annex 6, Part I, 3.5 as a place to obtain operational contact information which would be needed in such situations. The transfer of the OPS Control Directory to EUROCONTROL has permitted the inclusion of functionality to allow RCCs to register in the system. With the functionality enabled, it is recommended that RCCs register in the system.

1.5 In the CAR region, characterized by a very high level of intricacies among the various stakeholders, special attention should be placed to deploying the new functionalities enabled by the LADR and other location determination technologies. A set of exercises is therefore proposed to trial the new functionalities in varying circumstances.

2. SAREX Martinique

2.1 This exercise is anticipated to be a tabletop exercise: while deploying real resource is not compulsory, it could be added upon availability, with a view to add new objectives to the exercise. The prime purpose, however, of the exercise is to test LADR related functionalities and to experience its impact during real life operations.

2.2 Scenario (Full Scale)(**Appendix**):

- S-AREX Top of Descent and bound for FDF is declaring a PAN PAN PAN, no more radio contact.
- Handover was completed between Piarco and Fort de France.
- TTZP ACC/ARCC and TFFF/ARSC receive a notification from the LADR.
- MAYDAY received abeam Martinique coastline at 5000ft.
- Crash confirmed by LADR and Aireon Locate
- Multiple SRU could be engaged (Sea, Air, Land) including one RPAS.

2.3 Objectives:

- Dissemination of the LADR information (CCO – ANSPs – RCCs)
- Coordination between the different stakeholders
- Mass Rescue Operation (3D deconfliction)
- Assessment of the JRCC model
- Live test maritime and aeronautical SAR coordination
- Additional benefits as identified by the meeting or during the exercise.

3. Retex

3.1 The feedback from the exercise should be shared with CAR/SAM member states as an experiment on the functionalities enabled by the LADR used in conjunction with a service such as Aireon locate.

3.2 Additional benefits may be the identification of elements to take into consideration when drafting an operational agreement between the various rescue coordination centres operating in the PIARCO FIR.

**APPENDIX/APÉNDICE
SAREX GADSS ADT 2025**

ARCC Piarco - ARSC Martinique/Martinica – MRCC Fort de France



S-AREX bound for FDF, handover completed between Piarco and Fort de France. PAN PAN PAN and no more radio contact / El S-AREX en la cima del descenso y con destino a la FDF está declarando un PAN PAN PAN, no hay más contacto por radio.

LADR [Events map](#) [Events History](#) [Account Management](#) [Organisation Management](#) [Find Contacts](#) [Privacy](#) [Help](#) FD Frederic Danloux [Sign Out](#)

Organisation Management

Organisations Home > Sub-Organisation

< Back status: Enabled

RCC ARSC MARTINIQUE

Identification

Name: ARSC MARTINIQUE

Part of Organization: TTZP MARTINIQUE

Oceanic Flag: Yes

[Update identification info](#)

Contacts [Create new contact](#)

Duty Officer [Update contact](#)

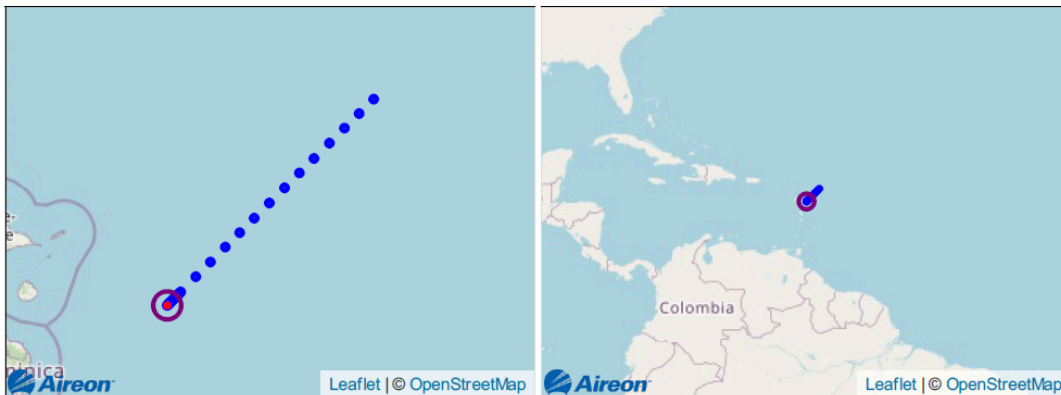
<p>Contact Details</p> <p>E-mail: sna-ag-bria-antilles-guyane-bf@aviation-civile.gouv.fr</p> <p>Phone: +596 696 93 60 75</p>	<p>Contact availability</p> <p>24/7</p>	<p>Validation Status</p> <p>Validated since: 2024-08-07</p> <p>Set invalid</p>
<p>Notification Status</p> <p>On turn off</p>		

Autonomous Distress Tracking (ADT) alert received via the LADR (Event map / History) / Alerta de seguimiento autónomo de socorro (ADT) recibida a través del LADR (mapa de eventos/historial)

Aireon Locate request./ Solicitud de Ubicación de Aireon

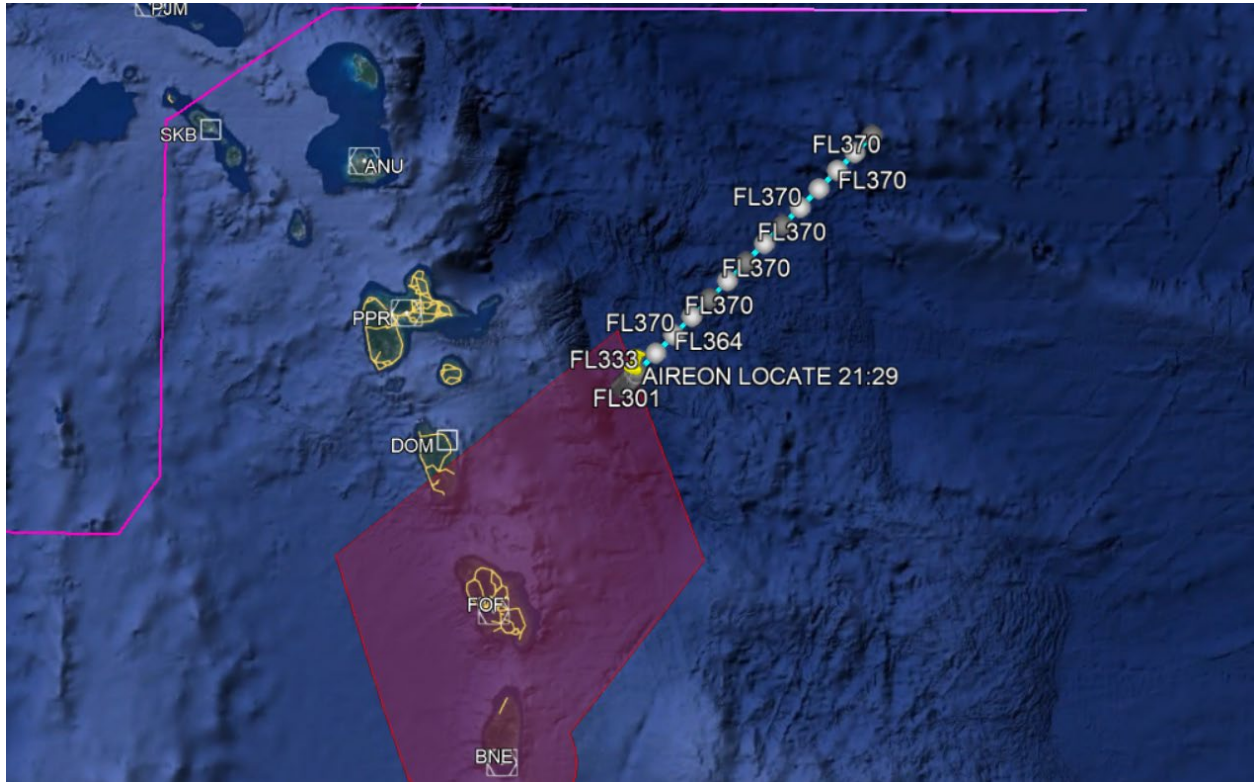


Search Criteria: ICAO 394A12

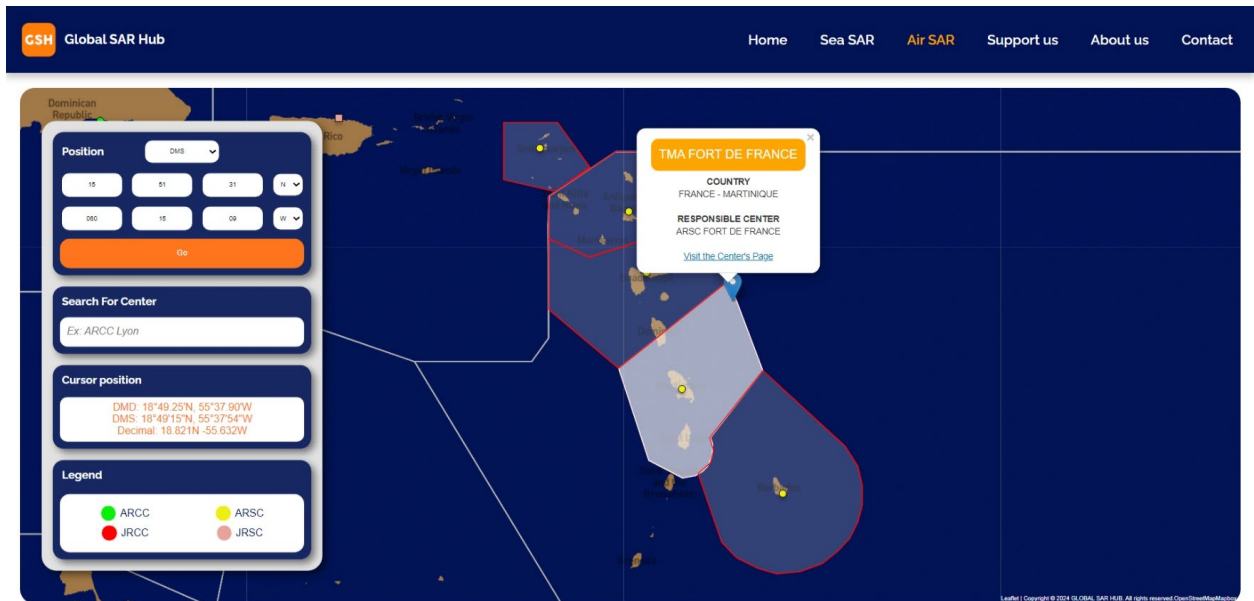


Timestamp	ACID	Mode 3/A	Latitude	Longitude	FL	Ground Speed	Track Angle
2024-08-18 21:29:23 UTC	S-AREX	7242	15° 50' 16" N	060° 16' 27" W	FL281	482.7	225
2024-08-18 21:29:19 UTC		7242	15° 50' 40" N	060° 16' 02" W	FL282	484.3	225
2024-08-18 21:29:14 UTC		7242	15° 51' 08" N	060° 15' 33" W	FL284	485.6	225
2024-08-18 21:29:14 UTC		7242	15° 51' 08" N	060° 15' 33" W	FL284	485.6	225
2024-08-18 21:29:10 UTC		7242	15° 51' 31" N	060° 15' 09" W	FL286	485.6	225

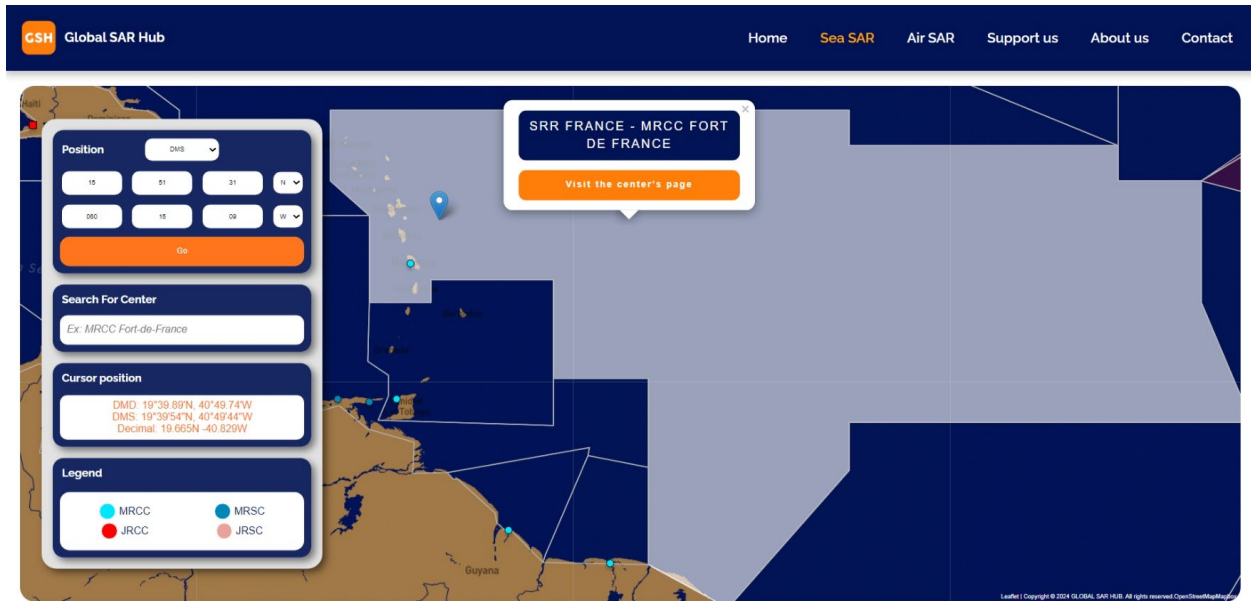
Aireon Locate report / Reporte de ubicación de Aireon



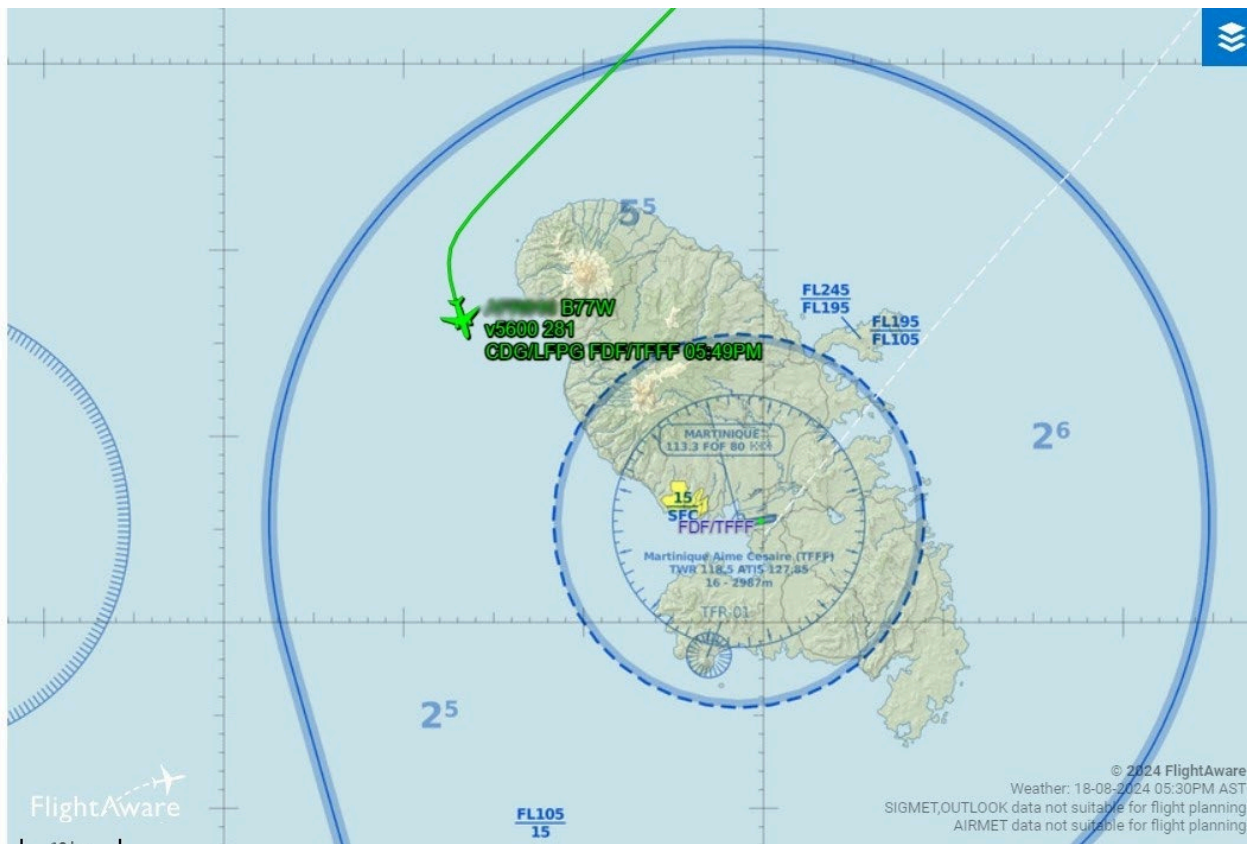
Aireon Locate (*.kml) / Ubicación Aireon (*.kml)



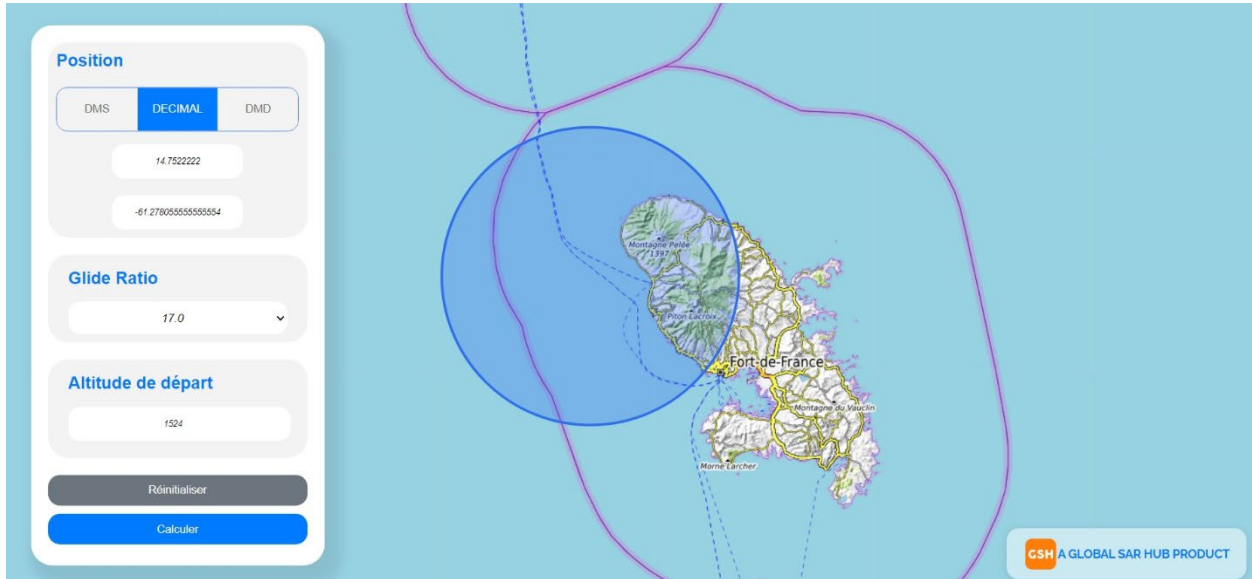
ARSC Martinique (SRR) / ARSC Martinica (SRR)



MRCC Fort de France (SRR)



S-AREX MAYDAY (Both engines failure/ambos motores fallan)



Most probable accident area / Full scale Mass Rescue Operation
Zona más probable de accidente / Operación de rescate masivo a gran escala