



ICAO

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

# **Fourth NAM/CAR North American, Central American and Caribbean Working Group Search and Rescue Implementation Task Force Meeting**

## **(NACC/WG/SAR/TF/4)**

## **Final Report**

Mexico City, Mexico, and On-line, 7 to 11 August 2023

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## **HISTORICAL**

### **ii.1 Place and Date of the Meeting**

The Fourth NAM/CAR North American, Central American and Caribbean Working Group Search and Rescue Implementation Task Force (NACC/WG/SAR/TF/4) Meeting was held in hybrid mode, at the ICAO NACC Regional Office in Mexico City, Mexico and on-line, from 7 to 11 August 2023. The Meeting included a two-day Workshop on Basic Concepts for SAR Implementation from 7 to 8 August 2023

### **ii.2 Opening Ceremony**

Mr. Christopher Barks, Regional Director of the North American, Central American and Caribbean (NACC) Office of the International Civil Aviation Organization (ICAO) provided opening remarks, welcomed the participants and officially opened the meeting.

### **ii.3 Officers of the Meeting**

The NACC/WG/SAR/TF/4 Meeting was held with the participation of the NACC/WG/SAR/TF Rapporteur, Mr. Calvin Zuniga (COCESNA), who chaired the meeting. Mr. Eddian Méndez, Regional Officer, Air Traffic Management and Search and Rescue of the ICAO NACC Regional Office served as Secretary of the Meeting.

### **ii.4 Working Languages**

The working languages of the Meeting were English and Spanish. The working papers, information papers and presentations of the meeting were available to participants in both languages.

### **ii.5 Schedule and Working Arrangements**

It was agreed that the working hours for the sessions of the meeting would be from 08:00 to 14:00 hours daily with adequate breaks.

## **ii.6            Agenda**

**Agenda Item 1:            Adoption of the Provisional Agenda, Schedule and Review of Pending Conclusions**

**Agenda Item 2:            Search and Rescue (SAR) Global and Regional Affairs**

- 2.1     Follow up on valid SAR Conclusions/Decisions and Deficiencies
- 2.2     Review of the Air Navigation Plan of the CAR/SAM Regions
- 2.3     GREPECAS Project to support SAR implementation in the CAR/SAM Regions

**Agenda Item 3:            SAR Coordination Affairs**

- 3.1     Follow up to the SAR Agreements of the CAR/SAM Regions
- 3.2     Civil-military coordination in the provision of SAR Services
- 3.3     Maritime and Aeronautical SAR coordination

**Agenda Item 4:            Work Programme and Activities of the NACC/WG Search and Rescue (SAR) Implementation Task Force**

- 4.1     Follow up and update to the work programme
- 4.2     Approval of the Work Programme

**Agenda Item 5:            Other Business**

## **ii.7            Attendance**

The Meeting was attended by 24 States/Territories from the NAM, CAR, and SAM Regions, and an International Organization, totalling 50 delegates as indicated in the list of participants.

## **ii.8            Draft Conclusions and Decisions**

The Meeting recorded its activities as Draft Conclusions and Decisions as follows:

### **DRAFT**

**CONCLUSIONS:**            Activities requiring endorsement by the NACC/WG.

**DECISIONS:**                Internal activities of the NACC/WG/SAR/TF.

**List of Draft Conclusions and Decisions**

Number	Title	Page
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C/2	<b><i>UPDATE OF SAR INFORMATION IN THE CAR/SAM ANP VOL. I AND ENHANCE SAR COORDINATION</i></b>	2-2
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**ii.9 List of Working and Information Papers and Presentations**

**WORKING PAPERS**

Number	Agenda Item	Title	Date	Prepared and Presented by
WP/01	1	Provisional Agenda and Schedule	14/06/23	Secretariat
WP/02	1	Review of SAR Conclusions, Decisions and Deficiencies	11/07/23	Secretariat
WP/03	3.3	Smartphones Emergency Satellite Communications and Automatic Crash Detection Function – Impact on SAR and ANS Units	11/07/23	United States
WP/04	4.1	Developments in the Autonomous Distress Tracking (ADT) System	11/07/23	United States
WP/05	5	Eastern Pacific SAR Forum	11/07/23	United States
WP/06	2.1	Review of the SAR Scope and Responsibilities for the CAR Region	19/06/23	Secretariat
WP/07	2.2	Implementation of the GREPECAS Project to Support SAR Implementation in the CAR/SAM Regions	20/07/23	Secretariat
WP/08	3.2, 3.3	Interregional SAREX Project (May 2024)	31/07/23	France

**INFORMATION PAPERS**

Number	Agenda Item	Title	Date	Prepared and Presented by
IP/01	---	List of Working, Information Papers and Presentations	07/08/23	Secretariat
NI/02	3.1	Propuesta Acuerdo Interinstitucional entre el Instituto Dominicano de Aviación Civil (IDAC) y el Instituto Dominicano de las Telecomunicaciones (INDOTEL) <i>(available in Spanish only)</i>	11/07/23	Dominican Republic

INFORMATION PAPERS				
Number	Agenda Item	Title	Date	Prepared and Presented by
NI/03	2.2	Borrador Plan Nacional de Búsqueda y Salvamento (SAR) de República Dominicana ( <i>available in Spanish only</i> )	11/07/23	Dominican Republic
NI/04	3.1	Propuesta Memorandum de Entendimiento (MoU) sobre Cooperación en materia de Búsqueda y Rescate Aeronáutico y Marítimo entre el Ministerio de Defensa (MIDE) de República Dominicana y la Fuerza de Defensa de Jamaica ( <i>available in Spanish only</i> )	11/07/23	Dominican Republic
NI/05	3.2	Ejercicio CENTAM Guardian entre el Comando Sur de los Estados Unidos de América y la República Dominicana ( <i>available in Spanish only</i> )	11/07/23	Dominican Republic
NI/06	3.2	Propuesta Estrategia de Coordinación para la Gestión de la Ayuda Humanitaria Internacional en Situación de Emergencia ( <i>available in Spanish only</i> )	14/07/23	Dominican Republic

PRESENTATIONS			
Number	Agenda Item	Title	Presented by
1	3.2, 3.3	Interregional SAREX Project (May 2024)	France

WORKSHOP DOCUMENTS- PRESENTATIONS			
Number	Agenda Item	Title	Presented by
1		SAR operation stages	United States
2		IAMSAR Manual Volume III as a basic guide	United States
3		Overview of Global SAR System	United States
4		SAR Mission coordinator/On-Scene Coordinator	United States
5		COBUSA COSPAS-SARSAT	COCESNA
6		SAREX 1 Facilitator US Coast Guard	United States
7		SAREX 2 Facilitator COCESNA	COCESNA

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## ii.10 Summary of Discussions - Workshop on Search and Rescue (SAR) Basic Concepts

**Workshop on Search and Rescue (SAR) Basic Concepts**  
ICAO NACC Regional Office, Mexico City, Mexico, 7 to 8 August 2023

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### Summary of Discussions

<b>Date</b>	7 to 8 August 2023
<b>Location</b>	ICAO NACC Regional Office, Mexico City, Mexico
<b>Opening Ceremony</b>	The Workshop was attended by 50 delegates from 24 States/Territories and 1 International Organization of the NAM/CAR/SAM Regions. The list of participants is shown in Section iii-1.

#### 1. References

- 1.1 Doc 7300 – Convention on International Civil Aviation.
- 1.2 Annex 11 – Air Traffic Services.
- 1.3 Annex 12 – Search and Rescue.
- 1.4 Doc 4444 - Procedures for Air Navigation Services – Air Traffic Management (PANS ATM).
- 1.5 International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual, Volume III Mobile Facilities
- 1.6 Cospas-Sarsat RCC Handbook.

#### 2. Objectives

- 2.1 Review the role of the SAR mission coordinator (SMC) and SAR response units/on scene coordinator (OSC).
- 2.2 Review the concepts for the development of the Search and Rescue Action Plan.
- 2.3 Refresh the content of the IAMSAR Manual Volume III regarding the search action message, search patterns and SAR response units/On-scene coordination.
- 2.4 Review of the role of the Cospas-Sarsat SAR Points of contact (PoCs).
- 2.5 Review the preparation for SAR exercises (SAREX).

#### 3. Introduction

3.1 Following up on the recommendations of the NACC/WG SAR Implementation Task Force to review the procedures for SAR response, this workshop was coordinated with the United States Coast Guard and COCESNA, to provide updated information on the planning of search and rescue missions and more guidance on the relay of Cospas-Sarsat alert messages.

3.2 Additionally, as part of the NACC/WG/SAR/TF work activities, the annual completion of a SAREX was considered relevant for the region.

**4. Workshop Schedule and Activities**

4.1 The workshop webpage is located at:

<https://www.icao.int/NACC/Pages/meetings-2023-sartf4.aspx>

**5. Outcomes/Recommendations**

5.1 Raise awareness of top-level SAR Managers (national or State level) regarding the requirements for establishing, staffing, equipping, and managing the SAR System.

5.2 Ensure that the content of the IAMSAR Manual, in particular Volume III, is included in the national SAR operational procedures.

5.3 States/Territories provide refresher training to SAR personnel to review the SAR operation stages and the coordination procedures with air traffic services.

5.4 Ensure that the procedures are in place for receiving and handling the Cospas-Sarsat 406 MHz messages.

5.5 Harmonize aeronautical and maritime SAR operational procedures. For those States in the CAR Region with limited resources, Joint Search and Rescue Coordination Centres (or subcentres) is a viable alternative to make the best use of available resources.

**6. Accomplishments**

6.1 The procedures for the SAR operation phases were tested.

6.2 The procedures for developing the search action plan were tested, as well as the coordination of the search mission.

6.3 Guidance was provided on automated procedures for the retransmission of Cospas-Sarsat alert messages.

6.4 Two SAR response scenarios were tested involving various search and rescue regions of the CAR/SAM Regions.

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**Agenda Item 1                    Adoption of the Provisional Agenda, Schedule and Review of Pending Conclusions**

1.1                    Under this Agenda Item the Secretariat presented WP/01 and invited the Meeting to approve the Provisional Agenda and Schedule. The proposed Schedule was updated to accommodate on-line participants from States where the time zone was different than the Mexico Central Time zone. The Meeting approved the Agenda as presented and the revised Schedule.

1.2                    The Secretariat presented WP/02 with the updated list of valid Conclusions and Decisions of the North America, Central America and the Caribbean Working Group (NACC/WG) Search and Rescue (SAR) Implementation Task Force (NACC/WG/SAR/TF). The valid Conclusions and Decisions were updated, designating them as valid, completed, or superseded, resulting as follows:

- a) The Meeting agreed to combine Decisions ANI/WG/SAR/TF/1/02 *CARIBBEAN REGION SEARCH AND RESCUE (SAR) PLAN UPDATE* and NACC/WG/SAR/TF/03/02 *UPDATE THE CARIBBEAN REGIONAL SAR PLAN TO INCLUDE SEQUENCE OF EVENTS FROM ADT ACTIVATION* and updated with the actions from the WP/04 Developments in the Autonomous Distress Tracking (ADT) System, presented by United States.
- b) The Meeting agreed to combine Conclusions ANI/WG/SAR/TF/02/01 *SUPPORT TO THE UPDATE OF THE CAR/SAM ANP* and NACC/WG/SAR/TF/03/01 *DEFINITION OF THE LIMITS AND RESPONSIBILITIES OF THE SEARCH AND RESCUE REGIONS OF THE CAR REGION* and updated with the actions from the WP/06 Review of the SAR Scope and Responsibilities for the CAR Region, Presented by the Secretariat. The updated conclusion is the following: *SUPPORT THE UPDATE OF THE CAR/SAM ANP TO INCLUDE THE DEFINITION OF THE LIMITS AND RESPONSIBILITIES OF THE SEARCH AND RESCUE REGIONS OF THE CAR REGION.*
- c) The Meeting considered the Decisions ANI/WG/SAR/TF/02/03 *REGIONAL SAR COORDINATION AD HOC GROUP* and NACC/WG/SAR /TF/03/03 *PROPOSAL FOR THE PROJECT TO SUPPORT SAR IMPLEMENTATION IN THE CAR/SAM REGIONS* were completed with the approval of the GREPECAS Project to support SAR Implementation.
- d) The Meeting agreed Decision NACC/WG/SAR/TF/03/04 *APPROVAL OF THE NACC/WG SAR IMPLEMENTATION TASK FORCE REVISED WORK PROGRAMME* was completed.

1.3                    Regarding the valid GREPECAS Air Navigation Deficiencies for the area of Search and Rescue (Mexico and Trinidad and Tobago), the Meeting agreed the following conclusion:

CONCLUSION NACC/WG/SAR/TF/4/1		ACTION PLAN TO ADDRESS SAR DEFICIENCIES
<p><b>What:</b></p> <p>That, in order to provide support for the resolution of the pending SAR GREPECAS Air Navigation Deficiencies in the CAR Region</p> <p>a) The ICAO NACC Regional Office request Mexico and Trinidad and Tobago to work in an action plan, with the support of the NACC/WG SAR Implementation Task Force if necessary, to address the deficiencies that they have pending, by <b>30 October 2023</b>;</p> <p>b) Mexico and Trinidad and Tobago submit to the ICAO NACC Regional Office their action plan to address their current SAR deficiencies, for updating the GANDD no later than <b>30 November 2023</b>; and</p> <p>c) The ICAO NACC Regional Office report to the NACC/WG/SAR/TF/5 Meeting the result of the actions from Mexico and Trinidad and Tobago to address their current pending deficiencies.</p>		<p><b>Expected impact:</b></p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Operational/Technical</p>
<p><b>Why:</b></p> <p>To enhance SAR provision in the CAR Region</p>		
<p><b>When:</b></p> <p>a) By 30 October 2023</p> <p>b) By 30 November 2023</p> <p>c) NACC/WG/TF/SAR/5</p>	<p><b>Status:</b> <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed</p>	
<p><b>Who:</b> <input type="checkbox"/> States <input checked="" type="checkbox"/> ICAO <input checked="" type="checkbox"/> Other:</p>	<p>Mexico, Trinidad and Tobago, NACC/WG/SAR/TF</p>	

1.4 Based on the above, all Conclusions and decisions from the previous NACC/WG/SAR/TF Meetings were completed and superseded.

**Agenda Item 2                      Search and Rescue (SAR) Global and Regional Affairs**

2.1                      Under this Agenda Item the Secretariat presented WP/06 to provide information regarding the work carried out to update the CAR/SAM Air Navigation Plan (ANP) Vol. I with the limits and responsibilities regarding Search and Rescue (SAR) and request support to complete this task.

2.2                      The CAR/SAM ANP Vol. I contains Table SAR I-1 with the list of the Search and Rescue Regions (SRR) the CAR/SAM Regions.

2.3                      Through State Letter ref. E.OSG-NACC96918 "*Update of the CAR/SAM Air Navigation Plan (ANP) to include the lateral and vertical limits of the CAR Flight Information Regions (FIRs)/Superior Flight Information Regions (UIRs) and Search and Rescue Regions (SRRs)*" , dated 14 April 2023, in which the ICAO NACC Regional Office requested CAR States that have been assigned Flight Information Regions (FIR), to designate a Point of Contact (PoC) by 25 April 2023 to represent their State/Territory, with the authority to provide information and make decisions about the lateral and vertical limits of their FIR/Upper Flight Information Region(UIR) and SRR, as well as the knowledge of the necessary aeronautical information to support these activities. The following States with assigned FIR and SRR responsibilities in the CAR Region have not responded to this request: Jamaica and Trinidad and Tobago.

2.4                      The Meeting also discussed the differences between the delimitation of the ICAO Aeronautical Search and Rescue Regions and the International Maritime Organization (IMO) Maritime Search and Rescue Regions and requested the Task Force to promote the regional collaboration with the IMO to enhance coordination and promotion of the joint RCCs.

<b>CONCLUSION</b>	
<b>NACC/WG/SAR/TF/4/2</b>	<b>UPDATE OF SAR INFORMATION IN THE CAR/SAM ANP VOL. I AND ENHANCE SAR COORDINATION</b>
<p><b>What:</b></p> <p>In order to support the process to update the CAR/SAM ANP Vol. I to include the lateral and vertical limits of SAR Regions:</p> <p>a) Request Jamaica and Trinidad and Tobago to designate a Point of Contact to represent their State, with the authority to provide information and make decisions about the lateral and vertical limits of their FIR/UIR and SRR; and</p> <p>b) Request the ICAO NACC Regional Office to contact the International Maritime Organization (IMO) Regional Office in the CAR Region and schedule a joint session to learn more about their activities in the region.</p>	<p><b>Expected impact:</b></p> <p><input checked="" type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Operational/Technical</p>
<b>Why:</b>	
To enhance SAR Coordination in the CAR Region	
<b>When:</b> By <b>30 October 2023</b>	<b>Status:</b> <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed
<b>Who:</b> <input type="checkbox"/> States <input checked="" type="checkbox"/> ICAO <input checked="" type="checkbox"/> Other:	Jamaica and Trinidad and Tobago

2.5 The Secretariat presented WP/07 to provide information regarding the approved GREPECAS project to support SAR implementation in the CAR/SAM Regions and proposed actions to integrate the related activities to the NACC/WG/SAR/TF Work Programme.

2.6 Conclusion GREPECAS/19/04 *REMOTE SUBSCRIPTION OF LETTERS OF AGREEMENT (LOAs) AND EFFECTIVE REGIONAL IMPLEMENTATION OF THE SAR SERVICE* instructed the ICAO NACC and SAM Regional Offices to evaluate the current challenges regarding the provision of SAR services in the CAR/SAM Regions, identify opportunities for improvement in order to promote the joint work of the SAR between the CAR/SAM Regions and develop a Project proposal that supports SAR activities, for consideration by GREPECAS at the GREPECAS/20 Meeting. After consultation with the corresponding SAR coordination groups for both CAR and SAM Regions, the Secretariat presented a proposal for a SAR Implementation Project for the CAR/SAM Regions at the GREPECAS/20 Meeting (Salvador, Brazil, 16 to 18 November 2022), to streamline SAR implementation act and harmonize the support for CAR and SAM activities. Through Decision GREPECAS/20/02 *APPROVAL OF THE PROJECTS ON THE IMPLEMENTATION OF THE SEARCH AND RESCUE SERVICE (SAR) FOR THE CAR AND SAM REGIONS* the SAR Implementation Project for the CAR and SAM Regions was approved to enable greater visibility and support for related activities, communicating to the ICAO Council more objectively the progress of SAR implementation in the CAR/SAM Regions. The approved project is presented as **Appendix A** to this Report.

2.7 The Meeting agreed to incorporate the activities related to this project to the SAR/TF Work Programme. This was addressed under Agenda Item 4.

2.8 The Meeting also discussed the issue of the work of the NACC/WG for the evaluation of the SAR area Basic Building Blocks (BBBs). The Task Force analysed the challenges to complete this task objectively, so that it clearly reflects the support needs for SAR implementation and operation in the Region.

2.9 The Meeting agreed that to complete this task, more information was needed on the BBBs and to gather information on the experience of other regions in this assessment. The Meeting requested ICAO NACC Regional Office to coordinate with other Regional Offices and request enhanced guidance. The meeting also considered that this assessment be carried out based on the evidence presented and SAR/TF experts could support in the evaluation of the evidence. This evaluation should consider in person visit to State's SAR facilities.

<b>DECISION</b>	
<b>NACC/WG/SAR/TF/4/3</b>	<b>EVALUATION OF THE SAR BBBs</b>
<p><b>What:</b></p> <p>That, to comply with the request of the NACC/WG to perform an evaluation of the SAR Basic Building Blocks</p> <p>a) ICAO NACC Regional Office to gather more information regarding BBBs evaluation, including experience from other Regional Offices.</p> <p>b) The SAR/TF Rapporteur report to the NACC/WG the challenges identified to comply with this assignment, and consider making this assessment evidence based, including in person visits to State's SAR facilities.</p>	<p><b>Expected impact:</b></p> <p><input type="checkbox"/> Political / Global</p> <p><input checked="" type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Operational/Technical</p>
<p><b>Why:</b></p> <p>evaluate the SAR BBBs</p>	
<p><b>When:</b> NACC/WG/8 Meeting</p>	<p><b>Status:</b> <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed</p>
<p><b>Who:</b> <input type="checkbox"/> States <input checked="" type="checkbox"/> ICAO <input checked="" type="checkbox"/> Other:</p>	<p>SAR/TF Rapporteur</p>

2.10 Dominican Republic presented IP/03 with information regarding the update of their National SAR Plan.

### Agenda Item 3 SAR Coordination Affairs

3.1 France presented WP/08, supported by P/01, to provide information regarding the SAR Services in French Guiana and French West Indies and describes a scenario for a regional exercise to be conducted in May 2024.

3.2 Cayenne Aeronautical Rescue Co-Ordination Centre (ARCC) is responsible for managing SAR operations for aircraft in distress in the geographic area corresponding to the Cayenne SRR, whose lateral limits include Cayenne and Paramaribo Flight Information Regions (FIRs). By delegation of authority from Cayenne ARCC and with its close collaboration, Zanderij RSC is responsible for managing SAR operations for aircraft in distress in the area corresponding to the limits of its FIR (Paramaribo), in coordination with Cayenne ARCC, it can request assistance from other States.

3.3 By delegation of authority from Piarco ARCC and with its close collaboration, Fort de France and Pointe à Pitre RSCs are responsible for managing SAR operations for aircraft in distress in the area corresponding to the limits of their Terminal Control Areas (TMAs).

3.4 A Maritime SRR under the responsibility of France has been established (red solid lines).



3.5 The Maritime Rescue Coordination Centre (MRCC) is located in Fort de France (Martinique - French West Indies). This centre is staffed with French Navy personnel who ensure permanent continuous surveillance.

3.6 The paper also provides information regarding the France SAR air assets in the Region and SAR agreements and Letters of Agreement (LoAs) for the Caribbean.

3.7 France is planning to conduct an interregional SAR Exercise (SAREX) in May 2024 (between 1 and 15 May 2024). This SAREX will include the CAYENNE FIR (SRR) (Cayenne ARCC), the PARAMARIBO FIR (SRR) (Paramaribo Aeronautical Rescue Sub-Centre (ARSC)), the PIARCO FIR (SRR) (Piarco ARCC) and the TMAs (SRR) Fort de France (Martinique ARSC) and Pointe à Pitre (Guadeloupe ARSC). The purpose of the exercise is to rehearse an accident scenario to assess the SAR services preparation and response.

3.8 The Meeting thanked France for planning this SAREX and recognized its regional leadership on this issue, while motivating to maintain its efforts to improve SAR coordination and response in the Region. The Meeting considered this SAREX will reveal many issues that will have to be addressed at a regional level and encouraged the participation of all related stakeholders. United States and the United Kingdom Territories expressed interest in participating in this SAREX.

3.9 Regarding the SAREX planned by France, the Meeting agreed the following Conclusion:

<b>CONCLUSION</b>	
<b>NACC/WG/SAR/TF/4/4</b>	<b>SUPPORT TO INTERREGIONAL SAR EXERCISE (SAREX) IN THE CAR REGION</b>
<p><b>What:</b></p> <p>That, to support the State and regional participation in the interregional SAR Exercise (SAREX) organized by France:</p> <ul style="list-style-type: none"> <li>a) Trinidad and Tobago and the States and Territories under the Piarco Search and Rescue Region to join this SAREX.</li> <li>b) CAR States and the NACC/WG/SAR/TF to participate in this exercise as observers.</li> <li>c) ICAO NACC Regional Office will coordinate with France and the ICAO SAM RO to ensure adequate dissemination of information and the coordination with the Piarco RCC and the RSCs under Piarco SRR for active participation in this SAREX.</li> <li>d) The Secretariat will Report the outcomes and recommendations of this SAREX to the NACC/WG/SAR/TF/5 Meeting.</li> </ul>	<p><b>Expected impact:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Political / Global</li> <li><input checked="" type="checkbox"/> Inter-regional</li> <li><input type="checkbox"/> Economic</li> <li><input type="checkbox"/> Environmental</li> <li><input checked="" type="checkbox"/> Operational/Technical</li> </ul>
<p><b>Why:</b></p> <p>To enhance SAR readiness in the CAR Region</p>	
<p><b>When:</b> By NACC/WG/SAR/TF/5</p>	<p><b>Status:</b> <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed</p>
<p><b>Who:</b> <input checked="" type="checkbox"/> States <input checked="" type="checkbox"/> ICAO <input type="checkbox"/> Other:</p>	

3.10 United States presented WP/03 to provide an overview of new capabilities on certain smartphones that could impact SAR and Air Navigation Services (ANS) Units.

3.11 In 2022 Apple released a software update to enable its iPhone 14 users to text emergency services when out of cellular and Wi-Fi coverage. A press release in January 2023 announced that Android smartphones would have a similar capability in late 2023. As an example of what commercial companies may provide, more information can be found in the web link to the iPhone application: <https://support.apple.com/en-us/HT213426>.

3.12 The new capabilities in these smartphones and the growing number of commercial satellite systems and devices which could provide the communications network are examples of disruptive communications alerting systems that SAR services will face regarding new devices that are not properly regulated or interfaced with reliable and standardized message distribution systems, but, SAR services must be adaptable and make use of reliable technology used by persons in distress. A good example is that the mobile telephone is often used in coastal waters rather than the internationally established radiotelephone channel 16 VHF-FM.

3.13 France shared its experience and provided additional explanation of their use of similar technology.

3.14 The Meeting recognized the potential benefit of this technology, as well as the possible challenge that it could bring to SAR services, due to the increase in the reception of messages outside the channels established up to now. In this sense, it was suggested to inform the NACC/WG and GREPECAS so that the other areas of the ANS are aware of this technology and ensure that it is implemented in a responsible manner, allowing the telecommunications authorities to take into consideration the SAR services when approving the implementation and use of this new features.

3.15 Dominican Republic presented NI/02 with information regarding a proposal of interinstitutional agreement between Dominican Republic Civil Aviation Authority and the Dominican Republic Telecommunications authority to allow the tracking of the pilots and passengers cell phones to locate missing or downed aircraft.

3.16 Dominican Republic presented NI/04 to provide information of a Memorandum of Understanding (MoU) between the Dominican Republic Defence Ministry and the Defence force of Jamaica for aeronautical and maritime SAR cooperation.

3.17 Dominican Republic presented NI/05 to provide information regarding an exercise between Dominican Republic and the South Command of the United States Defence Force.

3.18 Dominican Republic presented NI/06 to provide information on their national strategy for the coordination of humanitarian assistance in emergency situations.

3.19 Honduras presented P/02 to provide information regarding their SAR System. The presentation detailed the SAR structure of Honduras, the agreements, and resources with the first response institutions and the support institutions, statistics of SAR alerts with 406 radio beacons and message flow.

3.20 Haiti presented P/03 to provide information regarding their Search and Rescue System, and updated situation of their Joint Rescue Coordination Centre (JRCC). Haiti provided details of the work carried out to establish its JRCC, which has been in operation since 2018. Subsequently, Haiti described the coordination activities, personnel training as well as the equipment installation, which has allowed it to be put into effective operation. The meeting recognized Haiti's progress regarding the provision of SAR services and the implementation of its JRCC, being a sign of leadership and proactive management that serve the region very positively.

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**Agenda Item 4                      Work Programme and Activities of the NACC/WG Search and Rescue (SAR) Implementation Task Force**

4.1                      United States presented WP/04 with two updates on the development of the Autonomous Distress Tracking (ADT) system, one regarding an international exercise and the other regarding a task on the NACC/WG/SAR/TF Work Programme.

4.2                      The goal of the North Atlantic Autonomous Distress Tracking Exercise (NAT DISTREX) is to design and execute test operation of the ADT system from end-to-end. That is, from receipt of the ADT notification at the ICAO Location of an Aircraft in Distress Repository (LADR); distribution from the LADR to the three stakeholders (operator, Air Traffic Services unit (ATS unit), and the Rescue Coordination Centre (RCC)); and coordination among the three stakeholders upon receipt of the ADT notification. Findings should indicate if current procedures need to be modified.

4.3                      The NAT DISTREX project team will soon expand participation in developing the exercise and scenarios. The Meeting requested the NACC/WG/SAR/TF member from the United States to monitor and share information with the project team.

4.4                      An ADT device for aircraft has been developed and new-built large aircraft will likely begin equipping with the device around September 2023. General guidance on GADSS is provided in the 2022 edition of the IAMSAR Manual Volumes I and II and the IAMSAR Manual is being updated now for the 2025 edition. The International Maritime Organization (IMO) updated its guidance on implementation of ADT and will publish that as an official circular later in 2023.

4.5                      The Meeting recalled that under the NACC/WG/SAR/TF work programme, there is a task assigned to the United States to: *“Develop Basic Global Aeronautical Distress and Safety System (GADSS) guidelines for the CAR Region including sequence of events from Autonomous Distress Tracking (ADT) activation.”* The guidelines are *“To be incorporated as an Appendix to the CAR Region SAR Plan.”* Assuming that aircraft will be flying with ADT devices in 2023, there is operational urgency to provide basic procedures and guidance to ATS units and RCCs as soon as possible. It is proposed that the ATS units and RCCs staff be familiar with the GADSS guidance in the IAMSAR Manual Volumes I and II, and that Appendix A to this paper be inserted into the CAR Region SAR Plan and brought to the attention of ATS units and RCCs.

4.6                      The Meeting also discussed the possibility of double notification to RCCs because of the ELT Distress Tracking (ELT(DT)). The Cospas-Sarsat is a proven distribution system, and its messages should not be ignored. The guidelines also include a recommendation to develop guidance for Interim RCC Procedures for ELT(DT) Devices.

4.7 The Meeting agreed the update of the CAR Region SAR Plan to include GUIDANCE FOR SEARCH AND RESCUE SERVICES REGARDING IMPLEMENTATION OF AUTONOMOUS DISTRESS TRACKING (ADT) OF AIRCRAFT IN FLIGHT.

<b>CONCLUSION</b>	
<b>SAR/TF/4/5</b>	<b>UPDATE OF THE CAR REGION SEARCH AND RESCUE PLAN</b>
<p><b>What:</b></p> <p>With the objective of providing basic procedures and guidance to ATS units and Rescue Coordination Centres to respond to Autonomous Distress Tracking (ADT) Activation and for the ATS units and RCCs staff be familiar with the GADSS guidance in the IAMSAR Manual Volumes I and II:</p> <p>a) States/ Territories to endorse the amendment of the CAR REGION SEARCH AND RESCUE (SAR) PLAN Appendix D, the GUIDANCE FOR SEARCH AND RESCUE SERVICES REGARDING IMPLEMENTATION OF AUTONOMOUS DISTRESS TRACKING (ADT) OF AIRCRAFT IN FLIGHT (<b>Appendix B</b> to this report)</p> <p>b) the United States SAR/TF Member to present a proposal to revise the Cospas-Sarsat section of the CAR Region SAR Plan and develop proposal to update it.</p>	<p><b>Expected impact:</b></p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Operational/Technical</p>
<p><b>Why:</b></p> <p>To enhance the response to ADT activation</p>	
<p><b>When:</b></p> <p>a) Immediately</p> <p>b) NACC/WG/SAR/TF/5</p>	<p><b>Status:</b> <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed</p>
<p><b>Who:</b> <input type="checkbox"/> States <input checked="" type="checkbox"/> ICAO <input checked="" type="checkbox"/> Other:</p>	United States

4.8 The Meeting reviewed the current NACC/WG/SAR/TF Work Programme and requested the Secretariat to update this programme according to the agreed GREPECAS Project pending decisions and conclusions, formulating the following decision:

<b>DECISION</b>	
<b>SAR/TF/4/6</b>	<b>UPDATE THE NACC/WG/SAR/TF WORK PROGRAMME</b>
<p><b>What:</b></p> <p>That, to address the tasks related to the GREPECAS SAR Implementation project for the CAR Region:</p> <p>a) The Secretariat include the GREPECAS SAR Implementation programme into the NACC/WG/SAR/TF Work Programme and report progress to GREPECAS</p> <p>b) The Rapporteur present an annual progress report to the NACC/WG</p>	<p><b>Expected impact:</b></p> <p><input type="checkbox"/> Political / Global</p> <p><input checked="" type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Operational/Technical</p>
<p><b>Why:</b></p>	

To support harmonized SAR implementation in the CAR Region	
<b>When:</b> a) GREPECAS/21 b) NACC/WG/SAR/TF/5	<b>Status:</b> <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed
<b>Who:</b> <input checked="" type="checkbox"/> States <input checked="" type="checkbox"/> ICAO <input type="checkbox"/> Other:	

**Agenda Item 5**            **Other Business**

5.1            No issues were discussed under this Agenda Item.

**APPENDIX A/APÉNDICE A**

**SAR IMPLEMENTATION PROJECTS FOR CAR AND SAM REGIONS/  
PROYECTOS DE IMPLEMENTACIÓN SAR PARA LAS REGIONES CAR Y SAM**

<i>CAR Region / Región CAR</i>	<b>PROJECT DESCRIPTION / DESCRIPCION DEL PROYECTO (DP)</b>	<b>DP N° XX</b>	
<i>Programme / Programa</i>	<b>Title of the Project / Título del Proyecto</b>	<b>Start / Fecha inicio</b>	<b>End / Fecha término</b>
<i>SAR Implementation/ Implementación SAR</i> (Programme Coordinator / Coordinador del Programa: Eddian Méndez)	<i>SAR Implementation/ Implementación SAR</i>  Project Coordinator / Coordinador del Proyecto: Calvin Zúniga (COCESNA)	2023	2026
<b>Objective / Objetivo</b>	Support the SAR implementation based on the requirements of Annex 12 and the CAR/SAM Regional Air Navigation Plan/ Apoyar la implementación SAR con base en los requisitos del Anexo 12 y el Plan Regional de Navegación Aérea CAR/SAM.		
<b>Scope / Alcance</b>	Implementation of the elements of the search and rescue system that allow to ensure an effective response when the activation of these services is required, promoting continuous improvement towards an efficient use of available resources./ Implementación de los elementos del Sistema de búsqueda y salvamento que permitan asegurar una respuesta eficaz cuando la activación de estos servicios sea requerida, promoviendo la mejora continua hacia un uso eficiente de los recursos disponibles.		
<b>Metrics / Métricas</b>	<ul style="list-style-type: none"> <li>• % of States that have arranged for the establishment and provision of SAR services within its territory and the areas where the State has accepted responsibility to provide SAR on a 24-hour basis in accordance with Annex 12 provisions/ % de Estados que han hecho arreglos para el establecimiento y suministro de servicios SAR dentro de su territorio y las áreas donde el Estado ha aceptado la responsabilidad de proporcionar SAR las 24 horas del día de conformidad con las disposiciones del Anexo 12.</li> <li>• % of States with established RCC or, as applicable, an RSC in each search and rescue region (SRR)/ % de Estados con RCC establecido o, según corresponda, un RSC en cada región de búsqueda y salvamento (SRR).</li> <li>• % of States that have prepared detailed plans of operation for the conduct of SAR operations/% de Estados que han preparado planes de operación detallados para la realización de operaciones SAR.</li> <li>• % of States with operational coordination SAR agreements between their SAR Organization and their neighboring States SAR Organizations/% de Estados con acuerdos SAR de coordinación operativa entre su Organización SAR y las Organizaciones SAR de sus Estados vecinos.</li> </ul>		
<b>Strategy / Estrategia</b>	The implementation activities will be coordinated between Project members, the Project Coordinator and the Programme Coordinator. The Programme Coordinator will coordinate with the Project Coordinator requirements of other projects and NAM/CAR implementation working groups. Experts nominated by States, Territories and International Organizations will be incorporated, as required. / La ejecución de las actividades será coordinada entre miembros del Proyecto, el Coordinador del Proyecto y el Coordinador del Programa. El coordinador del Programa coordinará con el Coordinador del Proyecto los requerimientos de otros proyectos y Grupos de Trabajo de Implementación NAM/CAR. Se incorporarán expertos nominados por los Estados, Territorios y Organizaciones Internacional, según sea requerido.		

<p><b>Targets / Metas</b></p>	<p>80 % of States that have arranged for the establishment and provision of SAR services within its territory and the areas where the State has accepted responsibility to provide SAR on a 24-hour basis in accordance with Annex 12 provisions/ 80 % de Estados que han hecho arreglos para el establecimiento y suministro de servicios SAR dentro de su territorio y las áreas donde el Estado ha aceptado la responsabilidad de proporcionar SAR las 24 horas del día de conformidad con las disposiciones del Anexo 12.</p> <p>80 % of States with established RCC or, as applicable, an RSC in each search and rescue region (SRR)/ 80 % de Estados con RCC establecido o, según corresponda, un RSC en cada región de búsqueda y salvamento (SRR).</p> <p>80 % of States that have prepared detailed plans of operation for the conduct of SAR operations/ 80 % de Estados que han preparado planes de operación detallados para la realización de operaciones SAR.</p> <p>60 % of States with operational coordination SAR agreements between their SAR Organization and their neighboring States SAR Organizations/60 % de Estados con acuerdos SAR de coordinación operativa entre su Organización SAR y las Organizaciones SAR de sus Estados vecinos.</p>
<p><b>Justification / Justificación</b></p>	<p>The CAR/SAM ANP includes the agreed regional requirements considered to be the minimum necessary for effective planning and implementation of search and rescue (SAR) facilities and services in the Caribbean and South American regions and the assignment of responsibilities to States for the provision of SAR facilities and services within the ICAO CAR and SAM Regions in accordance with Article 28 of the Convention on International Civil Aviation (Doc 7300). As such, GREPECAS must provide adequate monitoring and regional support.</p> <p>El ANP CAR/SAM incluye los requisitos regionales acordados que se consideran los mínimos necesarios para la planificación e implementación efectiva de las instalaciones y servicios de búsqueda y salvamento (SAR) en las regiones del Caribe y Sudamérica y la asignación de responsabilidades a los Estados para la provisión de instalaciones y servicios SAR dentro de las regiones CAR/SAM de la OACI de conformidad con el Artículo 28 del Convenio sobre Aviación Civil Internacional (Doc 7300). Como tal, GREPECAS debe brindar un adecuado seguimiento y apoyo regional.</p>
<p><b>Related Projects / Proyectos relacionados</b></p>	<p>No related Project is currently identified.</p> <p><i>Actualmente no se identifica proyectos relacionados.</i></p>

Entregables del Proyecto	Relación con el Plan Mundial de navegación aérea	Responsable	Estado de Implantación*	Fecha entrega	Comentarios
<p>Plan de acción para fortalecer la operación H24 de los servicios SAR así como otras materias consideradas en los Bloques básicos constitutivos (BBB)</p> <p>Action plan to strengthen the H24 operation of SAR services as well as other matters considered as Basic Building Blocks (BBB).</p>	<p>GADS-B1 GADS-B2</p>				
<p>Actividades para actualizar y fortalecer los Planes de operación SAR de los Estados</p> <p>Activities to update and strengthen SAR Operation Plans of States</p>	<p>GADS-B1 GADS-B2</p>				
<p>Actividades para actualizar y /o suscribir acuerdos/procedimientos de coordinación operativa entre organizaciones SAR adyacentes.</p> <p>Activities to update and/or sign operational coordination agreements/procedures between adjacent SAR organizations.</p>	<p>GADS-B1 GADS-B2</p>				

<b>SAM Region / Región SAM</b>	<b>PROJECT DESCRIPTION / DESCRIPCION DEL PROYECTO (DP)</b>	<b>DP N° XX</b>	
<b>Programme / Programa</b>	<b>Title of the Project / Título del Proyecto</b>	<b>Start / Fecha inicio</b>	<b>End / Fecha término</b>
SAR Implementation/ <i>Implementación SAR</i> (Programme Coordinators / <i>Coordinadores del Programa:</i> Fernando Hermoza & Roberto Sosa)	SAR Implementation/ <i>Implementación SAR</i>  Project Coordinator / <i>Coordinador del Proyecto:</i>  <b>SAM region's Delegate (TBD)</b>	2023	2026
<b>Objective / Objetivo</b>	Support the SAR implementation based on the requirements of Annex 12 and the CAR/SAM Regional Air Navigation Plan <i>Apoyar la implementación SAR con base en los requisitos del Anexo 12 y el Plan Regional de Navegación Aérea CAR/SAM.</i>		
<b>Scope / Alcance</b>	Implementation of the elements of the search and rescue system that allow ensuring an effective response when the activation of these services is required, promoting continuous improvement towards an efficient use of available resources.  <i>Implementación de los elementos del Sistema de búsqueda y salvamento que permitan asegurar una respuesta eficaz cuando la activación de estos servicios sea requerida, promoviendo la mejora continua hacia un uso eficiente de los recursos disponibles.</i>		
<b>Metrics / Métricas</b>	<ul style="list-style-type: none"> <li>• % of States that have arranged for the establishment and provision of SAR services within its territory and the areas where the State has accepted responsibility to provide SAR on a 24-hour basis in accordance with Annex 12 provisions</li> <li>• % of States with established RCC or, as applicable, an RSC in each search and rescue region (SRR)</li> <li>• % of States that have prepared detailed plans of operation for the conduct of SAR operations</li> <li>• % of States with operational coordination LOA/MOU between their SAR Organization and their neighboring States SAR Organizations.</li> <li>• <i>% de Estados que han hecho arreglos para el establecimiento y suministro de servicios SAR dentro de su territorio y las áreas donde el Estado ha aceptado la responsabilidad de proporcionar SAR las 24 horas del día de conformidad con las disposiciones del Anexo 12.</i></li> <li>• <i>% de Estados con RCC establecido o, según corresponda, un RSC en cada región de búsqueda y salvamento (SRR).</i></li> <li>• <i>% de Estados que han preparado planes de operación detallados para la realización de operaciones SAR.</i></li> <li>• <i>% de Estados con LOA/MOU de coordinación operativa entre su Organización SAR y las Organizaciones SAR de sus Estados vecinos.</i></li> </ul>		

<p><b>Strategy / Estrategia</b></p>	<p>The implementation activities will be coordinated between Project members, the Project Coordinator and the Programme Coordinator. The Programme Coordinator will coordinate with the Project Coordinator requirements of other projects and NAM/CAR implementation working groups. Experts nominated by States, Territories and International Organizations will be incorporated, as required.</p> <p><i>La ejecución de las actividades será coordinada entre miembros del Proyecto, el Coordinador del Proyecto y el Coordinador del Programa. El coordinador del Programa coordinará con el Coordinador del Proyecto los requerimientos de otros proyectos y Grupos de Trabajo de Implementación NAM/CAR. Se incorporarán expertos nominados por los Estados, Territorios y Organizaciones Internacional, según sea requerido.</i></p>
<p><b>Targets / Metas</b></p>	<p>85% of States that have arranged for the establishment and provision of SAR services within its territory and the areas where the State has accepted responsibility to provide SAR on a 24-hour basis in accordance with Annex 12 provisions.  85 % of States with established RCC or, as applicable, an RSC in each search and rescue region (SRR)  85 % of States that have prepared detailed plans of operation for the conduct of SAR operations  70 % of States with operational coordination SAR agreements between their SAR Organization and their neighboring States SAR Organizations.</p> <p><i>85 % de Estados que han hecho arreglos para el establecimiento y suministro de servicios SAR dentro de su territorio y las áreas donde el Estado ha aceptado la responsabilidad de proporcionar SAR las 24 horas del día de conformidad con las disposiciones del Anexo 12.  85 % de Estados con RCC establecido o, según corresponda, un RSC en cada región de búsqueda y salvamento (SRR).  85 % de Estados que han preparado planes de operación detallados para la realización de operaciones SAR.  70 % de Estados con acuerdos SAR de coordinación operativa entre su Organización SAR y las Organizaciones SAR de sus Estados vecinos.</i></p>
<p><b>Justification / Justificación</b></p>	<p>The CAR/SAM ANP includes the agreed regional requirements considered to be the minimum necessary for effective planning and implementation of search and rescue (SAR) facilities and services in the Caribbean and South American regions and the assignment of responsibilities to States for the provision of SAR facilities and services within the ICAO CAR and SAM Regions in accordance with Article 28 of the Convention on International Civil Aviation (Doc 7300). As such, GREPECAS must provide adequate monitoring and regional support.</p> <p><i>El ANP CAR/SAM incluye los requisitos regionales acordados que se consideran los mínimos necesarios para la planificación e implementación efectiva de las instalaciones y servicios de búsqueda y salvamento (SAR) en las regiones del Caribe y Sudamérica y la asignación de responsabilidades a los Estados para la provisión de instalaciones y servicios SAR dentro de las regiones CAR/SAM de la OACI de conformidad con el Artículo 28 del Convenio sobre Aviación Civil Internacional (Doc 7300). Como tal, GREPECAS debe brindar un adecuado seguimiento y apoyo regional.</i></p>
<p><b>Related Projects / Proyectos relacionados</b></p>	<p>No related Project is currently identified.</p> <p><i>Actualmente no se identifica proyectos relacionados.</i></p>

Entregables del Proyecto	Relación con el Plan Mundial de navegación aérea	Responsable	Estado de Implantación*	Fecha entrega	Comentarios
<p>Plan de acción para fortalecer la operación H24 de los servicios SAR así como otras materias consideradas en los Bloques básicos constitutivos (BBB)</p> <p>Action plan to strengthen the H24 operation of SAR services as well as other matters considered as Basic Building Blocks (BBB).</p>	<p>GADS-B1 GADS-B2</p>				
<p>Actividades para actualizar y fortalecer los Planes de operación SAR de los Estados</p> <p>Activities to update and strengthen SAR Operation Plans of States</p>	<p>GADS-B1 GADS-B2</p>				
<p>Actividades para actualizar y /o suscribir acuerdos/procedimientos de coordinación operativa entre organizaciones SAR adyacentes.</p> <p>Activities to update and/or sign operational coordination agreements/procedures between adjacent SAR organizations.</p>	<p>GADS-B1 GADS-B2</p>				

**APPENDIX**  
**GUIDANCE FOR SEARCH AND RESCUE SERVICES**  
**REGARDING IMPLEMENTATION OF**  
**AUTONOMOUS DISTRESS TRACKING (ADT) OF AIRCRAFT IN FLIGHT**

**Purpose and scope**

- 1 This Guidance is intended to provide basic information on Autonomous Distress Tracking (ADT) of aircraft in flight as part of the International Civil Aviation Organization (ICAO) Global Aeronautical Distress and Safety System (GADSS). Further guidance is available in the IAMSAR Manual Volumes I and II.
- 2 The key stakeholders involved in ADT implementation are:
  1. Air Traffic Services Units (ATS Units);
  2. Aircraft Operators (airline companies, not the crew);
  3. ADT service providers; and
  4. Search and rescue (SAR) services.

**Autonomous Distress Tracking**

- 3 ICAO considers the ADT as a notification that an aircraft is in a "distress condition", initially handled at the alert phase unless additional information indicates otherwise. The ADT capability requires the automatic triggering and transmission of distress data when the aircraft is in a condition which, if left uncorrected, is likely to result in the crash of the aircraft. Aircraft position information will be transmitted automatically at least once every minute when the aircraft is in a distress condition. The initial transmission should commence no later than five seconds after the detection of the activation event. Pilots may also manually activate an ADT.
- 4 It is expected that there will be few ADT-generated notifications when the system commences operating since only newly built commercial aeroplanes with a Maximum Take-Off Mass (MTOM) above 27,000 kg are required to be outfitted, although ICAO recommends smaller aircraft over 5700 kg MTOM be equipped, and operators may decide to retrofit their older aircraft. The ADT device is to activate in flight by automatic triggers that indicate a very high probability of an imminent crash or ditching (in addition to manual activation).<sup>1</sup>
- 5 An ADT device can only be deactivated by the same mechanism that activated it (automatically deactivated if activated by automatic means, or crew deactivated if activated by crew).

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<sup>1</sup> A distress notification can be triggered using criteria that may vary as a result of aircraft position and phase of flight. Further guidance regarding in-flight event detection and triggering criteria may be found in the EUROCAE ED-237, Minimum Aviation System Performance Specification (MASPS) for Criteria to Detect In-Flight Aircraft Distress Events to Trigger Transmission of Flight Information.

6 To provide an incentive for ADT installation and to encourage retrofit by older aircraft, ICAO Annex 6 – *Operation of Aircraft, Part I – International Commercial Air Transport – Aeroplanes* was amended to include a note allowing an ADT device to replace the automatic ELT. The possible unintended consequence is that some aircraft may no longer be equipped with an automatic 121.5 MHz homing transmitter since an ADT device is not required to have a post-crash homing transmitter.

7 There are two high-level functional objectives for an ADT system. These are to:

- 1 receive timely notice of an aeroplane in a “distress condition” to facilitate timely SAR operations; and
- 2 locate an accident site within a 6 NM radius after a crash, based on last known position of the aircraft.

#### **Location of an Aircraft in Distress Repository**

8 The ADT device will provide information to positively identify the aircraft and provide the last known position to the ICAO Location of an Aircraft in Distress Repository, (LADR). This includes:

- 1 latitude and longitude;
- 2 date and time (both transmission and receipt);
- 3 operator 3-letter designator (3LD); and
- 4 aircraft identification (aircraft nationality and registration mark, 24-bit address, etc.).

9 Additional data intended to assist SAR with their recovery efforts can also be optionally retained, including:

- 1 altitude;
- 2 groundspeed;
- 3 heading;
- 4 ELT(DT) Hex ID; and
- 5 activation method (manual, automatic, parameter exceedance triggering).

#### **ADT devices**

10 ICAO intentionally did not specify a technology for the ADT capability, accordingly multiple technical solutions exist, thus SAR Authorities and services should be mindful that they may receive ADT alerts from sources other than Cospas-Sarsat.

11 For activated ADT devices, the current SAR alerting (ICAO Annex 11) procedures used by Air Traffic Services will be applied and verified distress events reported to the appropriate RCC(s). The responsible ATS unit and the aeroplane operator (per ICAO Annexes 11 and 12) should provide the RCC with further

information about the distress event. The contact information for both ATS unit and operator should be available within the ICAO Ops Control Directory and/or be listed in the RCC documentation and plans.

12 Cospas-Sarsat has developed an ELT Distress Tracking (ELT(DT)) device as its ADT solution, which has been selected by major aircraft manufacturers. The Cospas-Sarsat system was declared fully operational for ELT(DT)s that use the current generation beacon technology in January 2023. Cospas-Sarsat will distribute the ADT notifications from the ELT(DT) to the LADR, and also directly to the relevant RCCs under its existing procedures for ELT alerts transmitted at 406 MHz.

**Note:** The triggering at impact with ground or sea of an automatic ELT or the triggering of an ELT-S (survival) will be routed to RCCs according to the established Cospas-Sarsat Data Distribution Plan.

### Interim RCC Procedures for ELT(DT) Devices

13 Until the LADR becomes available, SAR authorities should consider developing interim procedures to appropriately respond to distress ELT(DT) messages emanating from an aircraft still in flight to supplement existing SAR procedures. RCCs should note that the responsibility for coordinating aircraft in-flight emergencies continues to be retained by ATS while the aircraft is airborne. RCC actions to be taken after receipt of a SIT 185 message from an ELT(DT) could include the following:

- 1 Note that the Cospas-Sarsat SIT 185 message reports the detection of a signal from the new beacon type, the ELT(DT); Paragraph 1 of the SIT 185 message contains “DISTRESS TRACKING” and Paragraph 3 clearly identifies the source of the message as “ELT DISTRESS TRACKING”.
- 2 Study the basic event information provided in the ELT(DT) SIT 185 message:
  - 1 Paragraph 3 will provide two identities, that of:
    - the country/region where the aircraft is registered, as included in the 24-bit address, which should be use when communicating with ATS units, and
    - the country/region where the ELT(DT) is registered, as included in the beacon Hex ID, which should be used when communicating with the RCCs/SPOCs.
  - 2 Paragraph 4 will provide the aircraft position.
- 3 Per current RCC/ATS coordination procedures, the responsible aeronautical RCC or JRCC contacts the appropriate ATS unit(s) and the operator per ICAO Annexes 11 and 12 to exchange further information about the possible (or confirmed) distress event. The contact information for both ATS unit and operator should be available within the ICAO Ops Control Directory and/or be listed in the RCC documentation and plans. For ELT(DT) activations over maritime areas, and where there is no JRCC established, the responsible ARCC should notify its partner MRCC.
- 4 If necessary, request that the sending MCC send more of the data stored at the MCC level for the beacon event, to allow tracking of the flight using all (or more) of the information transmitted by the ELT(DT).

- 5 Contact your supporting MCC for any necessary clarifications about the content of a SIT 185 message.
- 6 Pending verification from ATS, prepare for a potential SAR operation per normal SAR procedures, while monitoring incoming messages for a possible cancellation message (in a SIT 185 Cancellation Message, Paragraph 1 contains “DISTRESS TRACKING COSPAS-SARSAT USER CANCELLATION ALERT”).

—END —