



WORKING PAPER

GREPECAS/22 — WP/08

25/08/24

**Fourth GREPECAS—RASG-PA Joint Meeting and
Twenty-second Meeting of the CAR/SAM Regional Planning and Implementation Group
(GREPECAS/22)**

Virtual Phase (Asynchronous, 16 September to 11 October 2024)

In-Person Phase (Lima, Peru, 20 to 22 November 2024)

Agenda Item 5:

CAR/SAM Air Navigation Services (ANS) Implementation

5.1 Air Traffic Management (ATM), Airspace optimization, Air Traffic Flow Management (AFTM) and Search and Rescue (SAR)

**PROGRESS REPORT ON ACTIVITIES TO SUPPORT SEARCH AND RESCUE
IMPLEMENTATION IN THE CAR/SAM REGIONS**

(Presented by the Secretariat)

EXECUTIVE SUMMARY

This Working Paper presents a report on the progress of activities to support the implementation of search and rescue in the CAR/SAM regions and requests support for the organization of SAR Exercises.

Action:	Suggested actions are included in Section 5.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">SafetyAir Navigation Capacity and Efficiency
<i>References:</i>	<ul style="list-style-type: none">Convention on International Civil AviationAnnex 12 – <i>Search and Rescue</i>Doc 9731 - <i>International Aeronautical and Maritime Search and Rescue Manual</i> (IAMSAR),Final report of the Twenty-first Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/21), Santo Domingo, Dominican Republic, 13 to 17 November 2023

1. Introduction

1.1 The adequate provision of Search and Rescue (SAR) services is a fundamental part of the aviation system, which focuses on the protection of passengers' lives. Assistance to aircraft in distress is therefore one of the basic principles of the Chicago Convention.

1.2 An established Search and Rescue (SAR) service is a priority to guarantee lives of traveling public, air transport continuity, and the significant contribution of aviation. Availability of SAR resources

often provide the initial response and relief capabilities critical to saving lives in early stages of natural and man-made disasters. Therefore, an effective SAR service is a vital component to maintain the safe provision of regional air navigation services.

2. Background

2.1 Due to the proximity and direct relationship between the CAR and SAM Regions, the harmonization between the search and rescue services of both regions is a need that is best met within GREPECAS.

2.2 The GREPECAS/20 Meeting (Salvador, Brazil, 15 to 18 de November de 2022) recognized the need to provide greater support to the implementation of the search and rescue service, evaluating current challenges and identifying opportunities for improvement. The CAR and SAM Regions have their implementation mechanisms for air navigation, which address the implementation of search and rescue (SAR) services separately. It was considered that GREPECAS would be the ideal means to promote the harmonization of the CAR/SAM Regions in SAR matters.

2.2 In this sense, 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 project on the implementation of the search and rescue service (SAR) for the CAR (SAR-CAR) and SAM (SAR-SAM) Regions was approved. This project seeks to enable greater visibility and support for related activities, communicating to the ICAO Council in a more objective manner the progress of SAR implementation in the CAR/SAM Regions. The Project description is shown in **Appendix**.

3. Activities to support SAR implementation

3.1 CAR Region

3.1.1 The CAR Region continues to work in the project for the implementation of SAR through the NACC/WG Search and Rescue Task Force (SAR/TF). The Task Force maintains the provision of SAR services in the Eastern Caribbean as the main priority for the CAR Region, specifically in the Search and Rescue Region (SRR) of Piarco. The SAR provision in this SRR is quite complex, as it involves integration between several States and Territories, with several Rescue Coordination Subcentres (RSC) under the Piarco Rescue Coordination Centre (RCC) which are not functioning according to the requirements of Annex 12 – *Search and Rescue*.

3.1.2 The ICAO Universal Safety Oversight Audit Programme (USOAP) results objectively show the status of SAR provision in the CAR Region, with an effective implementation of 54%. The results of the latest audits conducted in the Region are indicative of the static or declining trend in the provision of SAR services. The main challenges identified are the following:

- a) Lack of organization of SAR services according to the requirements of Annex 12.
- b) Lack of trained and experienced SAR personnel.
- c) Lack of SAR operational procedures for RCCs and RSCs.
- d) Lack of SAR agreements.
- e) Lack of SAR Exercises.

3.1.3 A CAR/SAM interregional SAR Exercise (SAREX) hosted by France was conducted from 13 to 16 May 2024. The purpose of this SAREX was to assess SAR operational procedures, Letters of Agreement (LoAs) and SAR response, rehearsing several contingency scenarios involving the Search and Rescue Regions (SRRs) of Cayenne, Paramaribo and Piarco, and the associated RCCs and RSCs of the aforementioned SRRs.

3.1.4 The following results were achieved through this SAREX:

- a) a SAR tabletop exercise was conducted for an event, on the limits of the airspaces of Martinique and Barbados, within the Piarco Search and Rescue Region.
- b) SAR coordination procedures for the Piarco RCC, the Pointe à Pitre Aeronautical RSC, the Fort de France Maritime RCC and the Barbados RSC were assessed.
- c) The status of SAR agreements in the Eastern Caribbean subregion was assessed.

3.2 *SAM Region*

3.2.1 The USOAP results show the status of SAR provision in the SAM Region, with an effective implementation of 70.67%. It is noted that 6 of 13 States are below 70%. The main challenges identified are the following:

- a) Shortage of SAR services availability on a H24 basis.
- b) Weakness on training programs for SAR staff, as well, English language proficiency
- c) Outdated SAR agreements
- d) Shortage of SAR Exercises.

3.2.2 As detailed in paragraphs 3.1.3 and 3.1.4, SAM States participated in the SAREX hosted by France.

3.2.3 A virtual workshop on Global Aeronautical Distress and Safety System (GADSS) & autonomous distress tracking (ADT), hosted by Boeing, was delivered on July 17, 2024. The Time-Limited exemptions (TLE) matters, for Boeing aircraft, were exposed. A second regional GADSS webinar, focused on ICAO standards and GANP threads and implementation is planned by October 2024.

4. Conclusions

4.1 The CAR and SAM Regions continue to work to support SAR implementation through their respective regional implementation mechanisms. See status of activities in Tables of SAR Projects as shown in Appendix A.

4.2 The challenges identified in paragraphs 3.1.2 and 3.2.1 for the adequate delivery of the SAR Service, aligned to ICAO Annex 12, requires the efforts of States, SAR providers, and stakeholders, within a framework of regional and interregional collaboration. Improving effective implementation in SAR should be addressed with high priority by States, as a part of their USOAP commitments.

4.3 Conducting interregional SAR exercises, such as the one organized by France, can be a helpful mechanism to promote collaboration between the CAR/SAM Regions, objectively assess the operational impact of identified deficiencies while discovering additional opportunities for improvement.

5. Suggested actions

5.1 The Meeting is invited to:

- a) note of the information provided in this Working Paper;
 - b) follow-up the activities of the SAR implementation working groups, intended to address or mitigate the challenges listed in paragraphs 3.1.2 and 3.2.1;
 - c) address the importance of promoting the organization of Regional and Interregional SAR Exercises; and
 - d) suggest any additional action as considered necessary.
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APPENDIX A / APÉNDICE A

SAR IMPLEMENTATION PROJECTS / PROYECTOS DE IMPLEMENTACIÓN SAR

1. CAR REGION

CAR Region / Región CAR	PROJECT DESCRIPTION / DESCRIPCION DEL PROYECTO (DP)	DP N° SAR -CAR	
Programme / Programa	Title of the Project / Título del Proyecto	Start / Fecha inicio	End / Fecha término
<i>SAR Implementation/ Implementación SAR (Programme Coordinator / Coordinador del Programa: Eddian Méndez)</i>	<i>SAR Implementation/ Implementación SAR Project Coordinator / Coordinador del Proyecto: Calvin Zúñiga (COCESNA)</i>	2023	2026
Objective / Objetivo	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.		
Scope / Alcance	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.		
Metrics / Métricas	<ul style="list-style-type: none"> • % 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. • % 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). • % 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. • % 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. 		

Strategy / Estrategia	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 Internacionales, según sea requerido.
Targets / Metas	<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>
Justification / Justificación	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. 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.
Related Projects / Proyectos relacionados	<p>No related Project is currently identified.</p> <p><i>Actualmente no se identifica proyectos relacionados.</i></p>

Deliverables of the Project/ Entregables del Proyecto	Relationship to the GANP/ Relación con el GANP	Accountable/ Responsable	Implementation status/ Estado de Implantación*	Delivering date/ Fecha entrega	Comments / 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>	GADS-B1 GADS-B2	States/ Secretariat Estados/ Secretaría		October 2025 Octubre 2025	Detallar las acciones requeridas para asegurar que todas las Regiones de Búsqueda y Salvamento (SRR) de la Región CAR estén siendo apoyadas por un centro coordinador de salvamento (RCC) funcionando tal como lo dispone el Anexo 12. Detail actions required to ensure all Search and Rescue Regions (SRR) of the CAR Region are supported by a functioning Rescue Coordination Centre (RCC) as established by Annex 12.
<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>	GADS-B1 GADS-B2	States/ Secretariat Estados/ Secretaría		October 2026/ Octubre 2026	Revisar y actualizar los planes de operación SAR de todos los centros coordinadores de salvamento (RCC) y subcentros coordinadores de salvamento (RSC) de la Región CAR. Review and update the SAR operation plans of all Rescue Coordination Centres (RCC) and Rescue Subcentres (RSC) of the CAR Region.
<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>	GADS-B1 GADS-B2	States/ Secretariat Estados/ Secretaría		October 2026/ Octubre 2026	Detallar las acciones requeridas para asegurar que todos los centros coordinadores de salvamento (RCC) y subcentros coordinadores de salvamento (RSC) de la Región CAR tengan acuerdos SAR actualizados con las unidades SAR adyacentes. Detail actions required to ensure all Rescue Coordination Centres (RCC) and Rescue Subcentres (RSC) of the CAR Region have SAR agreements with the adjacent SAR units.

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2. SAM REGION

SAM Region / Región SAM	PROJECT DESCRIPTION / DESCRIPCION DEL PROYECTO (DP)	DP N° SAR SAM	
Programme / Programa	Title of the Project / Título del Proyecto	Start / Fecha inicio	End / Fecha término
SAR Implementation/ <i>Implementación SAR</i> (Programme Coordinators / <i>Coordinadores del</i> <i>Programa:</i> Fernando Hermoza & Roberto Sosa)	SAR Implementation/ <i>Implementación SAR</i> Project Coordinator / <i>Coordinador del Proyecto:</i> <i>SAM region's Delegate (TBD)</i>	2023	2026
Objective / Objetivo	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>		
Scope / Alcance	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>		
Metrics / Métricas	<ul style="list-style-type: none"> • % 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 • % of States with established RCC or, as applicable, an RSC in each search and rescue region (SRR) • % of States that have prepared detailed plans of operation for the conduct of SAR operations • % of States with operational coordination LOA/MOU between their SAR Organization and their neighboring States SAR Organizations. <ul style="list-style-type: none"> • <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> • <i>% de Estados con RCC establecido o, según corresponda, un RSC en cada región de búsqueda y salvamento (SRR).</i> • <i>% de Estados que han preparado planes de operación detallados para la realización de operaciones SAR.</i> • <i>% de Estados con LOA/MOU de coordinación operativa entre su Organización SAR y las Organizaciones SAR de sus Estados vecinos.</i> 		

Strategy / Estrategia	<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 Internacionales, según sea requerido.</i></p>
Targets / Metas	<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.</p> <p>85 % of States with established RCC or, as applicable, an RSC in each search and rescue region (SRR)</p> <p>85 % of States that have prepared detailed plans of operation for the conduct of SAR operations</p> <p>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.</i></p> <p><i>85 % de Estados con RCC establecido o, según corresponda, un RSC en cada región de búsqueda y salvamento (SRR).</i></p> <p><i>85 % de Estados que han preparado planes de operación detallados para la realización de operaciones SAR.</i></p> <p><i>70 % de Estados con acuerdos SAR de coordinación operativa entre su Organización SAR y las Organizaciones SAR de sus Estados vecinos.</i></p>
Justification / Justificación	<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>
Related Projects / Proyectos relacionados	<p>No related Project is currently identified.</p> <p><i>Actualmente no se identifica proyectos relacionados.</i></p>

Deliverables of the Project/ Entregables del Proyecto	Relationship to the GANP/ Relación con el GANP	Accountable/ Responsable	Implementation status/ Estado de Implantación*	Delivering date/ Fecha entrega	Comments / Comentarios
Action plan to strengthen the H24 operation of SAR services as well as other matters considered as Basic Building Blocks (BBB). Plan de acción para fortalecer la operación H24 de los servicios SAR así como otras materias consideradas en los Bloques básicos constitutivos (BBB)	GADS-B1 GADS-B2	States Secretariat		October 2025 Octubre 2025	Technical Mision to SAR Venezuela was held in August 2023 Se realizó misión técnica a SAR Venezuela en agosto 2023
Activities to update and strengthen SAR Operation Plans of States Actividades para actualizar y fortalecer los Planes de operación SAR de los Estados	GADS-B1 GADS-B2	States Secretariat		October 2025 Octubre 2025	Technical Mision to SAR Venezuela was held in August 2023 Se realizó misión técnica a SAR Venezuela en agosto 2023
Activities to update and/or sign operational coordination agreements/procedures between adjacent SAR organizations. Actividades para actualizar y/o suscribir acuerdos/procedimientos de coordinación operativa entre organizaciones SAR adyacentes.	GADS-B1 GADS-B2	States Secretariat		October 2025 Octubre 2025	Agreements submitted/ Acuerdos suscritos: Peru-Colombia Venezuela- Colombia SAR agreements in progress/Acuerdos SAR en progreso: Colombia – Jamaica Colombia - Panama Suriname – French Guiana (France) Venezuela – Brazil Venezuela- Curacao Venezuela-Guyana Venezuela-Puerto Rico Venezuela – Trinidad and Tobago