



**Agenda Item 5: Air Navigation Matters**  
**5.1 PIARCO FIR Air Traffic Services (ATS) Agreement**

**E/CAR AVIATION CONTINGENCY PLAN**

(Presented by Rapporteur SAR Committee)

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| <b>SUMMARY</b>   |   |
| This information paper presents the progress made by the E/CAR/CATG SAR Committee related to conclusion 24/11 of the Twenty-fourth Eastern Caribbean Directors of Civil Aviation Meeting (E/CAR/DCA/24) regarding development of an E/CAR Aviation Contingency Plan. |   |
| <b>Reference:</b>  |   |
| • Report of the Twenty-fourth Meeting of Directors of Civil Aviation of the Eastern Caribbean (E/CAR/DCA/24), Martinique, France, 2 – 5 October 2012   |   |
| <b>Strategic Objective</b>   | <i>This information paper is related to Strategic Objective:<br/>A. Safety – Enhance Global Civil Aviation Safety</i> |

**1. Introduction**

1.1 The E/CAR/DCA/24 Meeting recalled the previous Mass Casualty Incident Response Plan initiative, the existing Air Traffic Services (ATS) Contingency and Aerodrome Emergency Plans, and PIARCO/FIR/PG/4 Meeting Conclusion 4/4, which intended to cover an all-hazards approach for a State's aviation system in case of an emergency, such as those caused by natural disasters such as hurricanes, earthquakes, flooding, etc., to ensure the continuity of operations and services.

*Conclusion PIARCO/FIR/PG/4/4 - E/CAR AVIATION CONTINGENCY PLAN*

*That:*

- a) *Trinidad and Tobago nominate a member to the international task force led by United States to develop hazard guidance material on aviation preparedness and response to emergencies;*
- b) *Barbados, with the assistance of ICAO, convene a meeting between E/CAR States, ECCAA, CASSOS, CDEMA, PAHO, OCHA, ICAO and any other related agency to agree on an action plan to develop an E/CAR Aviation Contingency Plan; and*

- c) *the E/CAR Aviation Contingency Plan be presented to the E/CAR/DCA/24 Meeting in 2012 for approval and implementation by States.*

1.2 The Meeting considered the subject merited further study and that a proposal be presented at the next meeting; therefore, the following conclusion was adopted:

*CONCLUSION 24/11 - E/CAR AVIATION CONTINGENCY PLAN*

*That the E/CAR SAR Committee, coordinated by Trinidad and Tobago:*

- a) *review information available on aviation preparedness, response to and recovery from emergencies;*
- b) *consult with ICAO, CDEMA, PAHO, OCHA and any other related agencies;*
- c) *develop a proposal and action plan to develop an E/CAR Aviation Contingency Plan; and*
- d) *present this to the E/CAR/DCA/25 Meeting in 2013 for consideration by the States.*

**2. Discussion**

2.1 In fulfilment of its action plan, the E/CAR/SAR Committee has placed the development of the E/CAR Aviation Contingency Plan as one of the top priorities. Trinidad and Tobago, as the coordinator, has taken the lead in creating a platform for the development of an E/CAR Aviation Contingency Plan.

2.2 Trinidad and Tobago has dedicated human resources to develop a Search and Rescue Unit (SRU), within the Air Navigation Services Division of the Civil Aviation Authority, with a mandate to establish an Aeronautical Rescue Coordination Centre (ARCC). The SRU has responsibility for Search and Rescue (SAR), ANS safety, and regional disaster response.

2.3 The SRU is developing an action plan to meet national (Trinidad and Tobago) and regional (Piarco Flight Information Region) SAR objectives and disaster response. The Action Plan involves completion of a national SAR Plan and the acquisition of the other national SAR Plans from other concerned States to be used in the regional plan.

2.4 The SRU has established a working relationship with the Office of Disaster Preparedness and Management (ODPM). The ODPM is the organization that has oversight responsibility through the Caribbean Disaster Emergency Management Agency (CDEMA) for disaster management for Grenada, Guyana, Suriname, and Trinidad and Tobago.

2.5 Trinidad and Tobago has nominated four persons to be assigned to Emergency Support Function (ESF) at the National Emergency Operating Centre (NEOC) of Trinidad and Tobago.

2.6 The ODPM has delivered disaster risk management training to five persons in the Air Navigation Services Division of the Trinidad and Tobago Civil Aviation Authority.

2.7 The SRU will next establish working relationships with the National Office of Disaster Services (NODS) in Antigua and Barbuda, which has responsibility for Anguilla, British Virgin Islands, Montserrat, and Saint Kitts and Nevis; and the Department of Emergency Management in Barbados, which has responsibility for Dominica, Saint Lucia, and Saint Vincent and the Grenadines.

2.8 Trinidad and Tobago has also established ties with the International Federation of Red Cross and Red Crescent Societies (IFRC), United Nations Office of the Coordination of Humanitarian Affairs (OCHA), and Inter-Parliamentary Union (IPU) for national capacity development for the disaster Risk Management Project.

2.9 Trinidad and Tobago is supporting a Model Act for the Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance to facilitate any international humanitarian flights responding to a disaster in airspaces that fall under the responsibility of Trinidad and Tobago.

2.10 Trinidad and Tobago is reviewing possible contingencies to facilitate Communications, Navigation and Surveillance in the event of a disaster. These include acquisition of a mobile tower; establishing a dedicated communication line through the Multiprotocol Label Switching (MPLS) system; and acquiring satellite communications equipment to be strategically placed throughout the Eastern Caribbean.

2.11 Through work on CAPSCA, Trinidad and Tobago has established ties with the Pan American Health Organization (PAHO). As all Eastern Caribbean States are participating members of PAHO, the SAR Committee will seek to gather the necessary data with regard to the medical capacity to respond to disasters through this relationship.

2.12 The E/CAR SAR Committee's review of information available on aviation preparedness, response to and recovery from emergencies has not advanced to the stage where a comprehensive proposal and action plan can be prepared to develop the E/CAR Aviation Contingency Plan. However, significant ground work has been completed allowing for the preparation of a draft framework, which is provided in the **Appendix**.

### **3. Conclusion**

3.1 The E/CAR SAR Committee, through coordination by Trinidad and Tobago, has completed a significant amount of the work required for development of the E/CAR Aviation Contingency Plan. It is expected that a draft plan will be ready for presentation at the E/CAR/DCA/26 Meeting.

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# PIARCO AVIATION CONTINGENCY FRAMEWORK

DRAFT PIARCO AVIATION CONTINGENCY FRAMEWORK

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## DRAFT PIARCO AVIATION CONTINGENCY FRAMEWORK

### INTRODUCTION

The Piarco Aviation Contingency Framework (PACF) for the Eastern Caribbean provides a platform that supports the aviation industry and the continuity of its services during periods that are not conducive with Aeronautical Standards and Recommended Practices (SARPs) which enable a safe, orderly and expeditious flow of air traffic.

The PACF is a system which identifies hazards and scales what mitigation procedures can be applied to encourage continuous operations based on informed decisions. The Framework is developed to support Aviation needs before, during and post a Disaster.

The PACF takes into consideration the political, economic, cultural, environmental and technological factors that generate, proliferate, stretch, and intensify social interdependencies globally which propels Globalization. Globalization is the term used in support of the worldwide movement toward economic, trade, and communications integration which enables free transfer of goods, services and capital. Advances in transportation have supported this initiative and the Aviation industry has perpetuated the intent of globalization immensely.

The PACF highlights the systems noted under the Global Air Navigation Plan (GANP); Global Aviation Safety System (GASS) and Global Air Navigation System (GANS) and analyzes the working methodology of these systems to meet the criteria of the GASS and the GANS; and documents it to assist with the practical coordination, review and the enhancement of the initiatives of both systems to provide a failsafe guide to restore Operations in the event of any Disaster.

The GANS weighs heavily on the provision of Air Navigation Services (ANS) to Aviation Stakeholders and drives deliverables of those services; through system upgrades, redundancies, reporting, information sharing, etc.; to continue its Operations. The ANS include but are not limited to: Air Traffic Management; Aeronautical Information Management; Communication, Navigation and Surveillance; Aeronautical Meteorology; and Aeronautical Search and Rescue. However because of the identified needs of the Trinidad and Tobago Civil Aviation Authority

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(TTCAA) and the Piarco Flight Information Region (FIR) the Aeronautical Search and Rescue Services have evolved to encompass Regional Disaster Response and ANS Security. In order to facilitate this transition the TTCAA has updated its Organizational Structure and renamed the Piarco Search and Rescue Unit, the Piarco Aeronautical Search and Rescue; Regional Disaster Response; and ANS Security (ASAR/RDR/AS) Unit. The ASAR/RDR/AS Unit will ensure that the GASS initiatives, in the provision of Safety Oversight of International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs), are systematically upheld.

The aim of the Air Navigation Services Provider is to maintain an uninterrupted ANS to the flying public that conforms to the ICAO SARPs. The PACF, through the ASAR/RDR/AS Unit, will create a bridge between the ICAO's GANP initiatives and External Organizations or contributors to Search and Rescue Units, various Regional Disaster Response and Aviation Security.

Some factors which may disrupt ANS are:

- Aircraft Accident/Incident;
- Communication, Navigation, Surveillance or other technical failures;
- Terrorism; (State Terrorism, Bioterrorism, Cyberterrorism, Ecoterrorism and Narcoterrorism)
- Diseases outbreak;
- War & Civil disorder;
- Natural & man-made disasters;
- Financial crisis's;
- Pollution, etc.

The Piarco Disaster Response Framework will include:

1. Operational Plans
2. A Piarco Disaster Response Communications Flow Chart;
3. The appropriate measures to be implemented to mitigate Aviation Threat and the procedures to be adhered in any Disaster;



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4. The capabilities, roles and functions of all related Organizations as it relates to a Disaster;
5. A system that will assess and prioritize the various levels of threats to Aviation;
6. The development of a shared facility of knowledge and capacities needed to avoid certain Disasters or reduce the risk associated with Aviation Threats; and
7. Systems to conduct and review Recovery and do an Economic Impact Analysis.

## OBJECTIVES

- a) To Strategically Plan for any Disaster which may interrupt Aeronautical Operations within the Piarco FIR, with an intent to continuously update measures which can mitigate or appropriately respond to a Disaster;
- b) To identify vulnerability and ensure that relevant provisions are implemented;
- c) To create a network of information that can share lessons learnt and good practices that will assist disaster reduction;
- d) To promote the importance of disaster reduction policies.

## STRATEGIC GOALS

- a) To implement a framework that supports positive Globalization needs and will enable the Air Navigation Service Providers within the Eastern Caribbean Region to mitigate the risk associated with a reduction or loss in their Services;
- b) To create a system that supports the Piarco FIR and its' encompassing States National Emergency Plans, in order to maintain or restore social, economic, environmental, political and technological welfare.

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**FIVE FOCAL POINTS OF THE E/CAR AVIATION CONTINGENCY FRAMEWORK****1. Identify**

The processes through which hazards and related disasters which can affect ANS Operations are recognized and evaluated.

**2. Prevent or Mitigate**

An ongoing system of processes that can aid in the elimination or limit the adverse impacts of hazards and other related disasters as it relates to ANS Operations.

**3. Prepare**

The calculated capacity to respond and restore against the adverse impacts of hazards and other related disasters as it relates to ANS Operations.

**4. Respond**

Contingency measures that can be applied, to ensure that ANS Operations continue during or immediately after a disaster or incident.

**5. Correct**

Restore, improve where appropriate and educate to reduce the risk associated with the adverse impacts of hazards and other related disasters as it relates to ANS Operations.

**OPERATIONAL PLANS**

- Search and Rescue Plan
- Anti-Terrorist Plan
- Communication, Navigation and Surveillance Contingency Plan
- Natural and Man-made Disaster Contingency Plan
- War and Civil Disorder Contingency Plan

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- Financial Crisis Contingency Plan
- ANS Contingency Plan

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SEARCH AND RESCUE PLANPiarco Aeronautical Search and Rescue Coordination and Aeronautical  
Regional Disaster Response Operational Plan*Purpose.*

This Aeronautical Search and Rescue, and Aeronautical Regional Disaster Plan, hereafter referred to as “The Plan”, was developed under the direction of the Trinidad and Tobago Civil Aviation Authority (TTCAA), Air Navigation Services Division, Aeronautical Search and Rescue Coordination and Aeronautical Regional Disaster Response Unit. The Plan aims to provide guidance through Coordination and Information Sharing, to Government and Private Organizations to achieve optimum Readiness and Response, when concerned with any Aeronautical Search and Rescue initiative within the Piarco Flight Information Region (FIR); which mirrors the Piarco Aeronautical Search and Rescue Region (SRR) and is delineated by lines joining:

Area bounded by lines joining points

150000N/0650000W; 150000N/0631500W;

152000N/0630000W; 172200N/0630000W;

180000N/0620000W; 180000N/0450000W;

221800N/0400000W; 170000N/0373000W;

133000N/0373000W; 100000N/0480000W;

092000N/0540000W; 085500N/0570000W;

085500N/0595700W; 095923N/0612757W;

095923N/0615540W; 100506N/0620328W;

104400N/0614660W; 110000N/0623000W

to point of origin.

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The Plan intends to build upon the already established Regional Structure to conform to the requirements of the International Civil Aviation Organization (ICAO) Annex 12, "Search and Rescue" to which all States within the Eastern Caribbean are signatories of.

The Eastern Caribbean comprises of the following States:

- Antigua and Bermuda
- Barbados
- Dominica
- Grenada
- Guadeloupe
- Martinique
- Saint Lucia
- Saint Vincent and the Grenadines
- Trinidad and Tobago

The Plan will also provide detailed Standards and Recommended Practices (SARPs) that supports the administration of a framework that can effectively support the Regional and National community with providing relief alongside similar efforts, as suggested by the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual. The IAMSAR Manual is a three-volume set published jointly by both the ICAO and the International Maritime Organization (IMO) for use by all States.

The Plan implements provisions of relevant Conventions and SARPs of ICAO, IMO and other international organizations. International law requires that States establish a National Civil SAR system with internationally recognized Aeronautical and Maritime SAR coordination responsibilities. The Plan aims to satisfy national civil SAR requirements and establish the principle that States should use all resources available to respond to persons and property in distress.

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***Background.***

Trinidad and Tobago having accepted the overall responsibility for aircraft operating within the Piarco FIR has the charge to provide SAR Services through the TTCAA. The TTCAA has established the Aeronautical Search and Rescue Coordination and Aeronautical Regional Disaster Response Unit to facilitate all Aeronautical SAR needs. The Unit will house the Piarco Aeronautical Rescue Coordination Center (ARCC) to undertake Operational Coordination. The Piarco ARCC is a sub-unit within the Unit and will comprise of technological advances needed for Communication and Surveillance. The Piarco ARCC will be responsible for promoting an efficient organization of SAR services and for coordinating the conduct of SAR operations within the Piarco SRR.

The Piarco ARCC will have the following in concordance with the requirements outlined in the ICAO Regional Air Navigation Plan or the IMO Global SAR Plan:

- 24-hour availability
- Trained personnel
- Persons with a working knowledge of the English language
- Charts which apply to the Piarco SRR (aeronautical, nautical, topographic and hydrographic)
- Means of plotting
- Ability to receive distress alerts, e.g., from Mission Control Centers, Coast Earth Stations, etc.
- Immediate communications with: associated Air Traffic Service units, associated Rescue Sub-Centers, direction finding and position-fixing stations and associated Coastal Radio Stations
- Rapid and reliable communications with: Parent agencies of Search and Rescue Units (SRUs), adjacent RCCs, designated meteorological offices, employed SRUs and Alerting posts
- Plans of operation
- Ability to co-ordinate provision of medical advice
- Ability to co-ordinate provision of medical assistance or evacuation

Additionally, improved capabilities may be added as ability and resources permit.

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### *Scope.*

The main purpose of The Plan is to present the guiding principles needed for operational efficiency and to facilitate training for Aeronautical SAR operations. The plan's focal point is centered on creating Regional Harmonization by adopting a system that encourages interoperability amongst all Stakeholders.

The Plan includes but is not limited to locating missing, overdue or downed aircraft; extricating and providing onsite initial medical treatment to persons involved in an aircraft incident or accident.

The overall intent would be to establish a centralized hub that can receive and distribute necessary information. This information would be archived and transformed into an educational format that would be promulgated to all Stakeholders to better equip them for SAR situations.

**Aim:** To aid in the seamless transition to a system that will enhance the Search and Rescue Services and align itself with Global Air Navigation Plans.

**Mission:** To improve standardization and interoperability throughout the Eastern Caribbean Region to ensure efficiency is achieved during the search for and /or provision of aid to people who are in distress or imminent danger.

### *Piarco's Aviation Rescue Coordination Center (ARCC) Development Plan*

The ARCC is a unit developed for the coordination efforts aimed at relieving any aviation related distress. International Civil Aviation Organization (ICAO) International Standards and Recommended Practices, Annex 12 states that all contracting States shall, individually or in cooperation with other States, arrange for the establishment and prompt provision of search and rescue services within their territories to ensure that assistance is rendered to persons in distress. Such services shall be provided on a 24-hour basis.

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Contracting States having accepted the responsibility to provide search and rescue services in such areas shall thereafter, individually or in cooperation with other States, arrange for the service to be established and provided in accordance with the provisions of this Annex. It is with keeping these guiding principles that an ARCC be developed. The following points are integral in this process.

(1) Meetings- Both internally and externally to cover the broad spectrum of individuals and coordination required.

(2) Training- It is recommended that this service be equipped with qualified individuals, who are certified in the skill performed. Courses and training should be continuous and are available internationally but with the right infrastructure can be facilitated by the Trinidad and Tobago Civil Aviation Training College.

(3) Research and Information- This can be achieved through weekly, monthly and bi-annual assessments. The data collected can aid in development of strategies to identify strengths and reduce weaknesses. The data can also be used to specify training emphasis and archiving such data enables future endeavors with limited risks.

(4) Equipment- The main functions of the ARCC would be to coordinate through observation and information. To compliment such a task a communications network capable of relieving an aeronautical related distress needs to be implemented.

(5) Exercises- The purpose of which is to evaluate and recommend. There are three levels exercises would be performed:- (i) Communication exercises- This is very cost effective as it relates to simulated training via the necessary communication links needed to perform a search and rescue operation.

(ii) Coordination exercises- This would be executed by individual SRUs. The aim of this from an ARCC's standpoint would be to have factual data of a unit's capabilities and recommend practices for improvement.



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(iii) Full Scale exercises- This exercise is an opportunity for SRUs to operate as a combined effort. The exercise should be dynamic and test the capabilities and also innovativeness of the Search and Rescue Mission Coordinators (SMC's). Based on this exercise the need for additional training may be recommended, capabilities stipulated and weaknesses identified.

### *Managing Resources to Meet Requirements*

There are two basic types of management for the SAR system: administration and operations. Administration includes planning, organizing, coordinating, control, motivating, delegating, staffing, funding and assessing the SAR system to be managed by a Search and Rescue Coordinator (SC). SC's normally:

- Develop, co-ordinate, administer, review and evaluate plans, policies, procedures, standards and training requirements for SAR co-operation and co-ordination;
- Establish and support the ARCC and Rescue Sub-center (RSC) facilities;
- Support, assist and possibly chair the Search and Rescue Coordinating Committee (SARC);
- Promote SAR system effectiveness and commitment to SAR objectives;
- Work nationally and internationally to establish recognized SAR regions, close and effective working relationships, use of common procedures and expedient exchanges of SAR information;
- Coordinate plans and procedures with other organizational managers that support, participate in, or provide resources for SAR operations;
- Maintain SAR plans, manuals and other SAR directives;
- Establish and maintain liaison with appropriate SAR contacts, nationally, regionally and internationally;
- Develop the SAR budget and administer appropriated funds;
- Maintain SAR data, a SAR library and SAR case files;
- Compile SAR statistics and conduct and review SAR case studies;

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- Develop SAR agreements and improved international SAR capabilities and procedures;
- Promote efficient and effective use of all available SAR resources;
- Improve SAR communications;
- Provide information to facility managers for operational performance standards and resource acquisition, geographic distribution and readiness status;
- Encourage joint training and exercises leading to development of improved SAR procedures and technology;
- Initiate, review, and evaluate SAR research and development efforts;
- Participate in SAR seminars and workshops;
- Promote safety programs to decrease distress incidents;
- Develop contingency plans for SAR resources to respond to natural and man-made disasters;
- Supervise SAR program training;
- Provide support services such as emergency fuelling or medical assistance;
- Develop procedures to provide critical incident stress counseling to SAR personnel; and
- Promote visits between SAR program personnel and among ARCC and RSC personnel and others with special expertise related to SAR or SAR support.

*The Search and Rescue Committee (SARC)*

The SARC would be tasked with ensuring that the SAR capabilities are identified and met. The committee will compose of TCAA employees from the department of:-

- The office of the Director General
- The office of the Executive Manager
- Economic Regulations
- Corporate Secretary\ Legal Officer
- The department of Safety Regulations
- Air Traffic Services; Tower and Area Control Center

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### *Operational Management*

Operations management includes routine and emergency activities supporting SAR response operations. From an overall management perspective, a SAR system consists of an area within which SAR services are to be provided as shown in Figure 1.1; and a process to transform operational requirements and national commitments into the provision of SAR services.

Operations include:

- RCC or RSC
- Alerting posts
- SMCs
- SRUs
- On-site Coordinators (OSCs) and Aircraft Coordinators (ACOs)

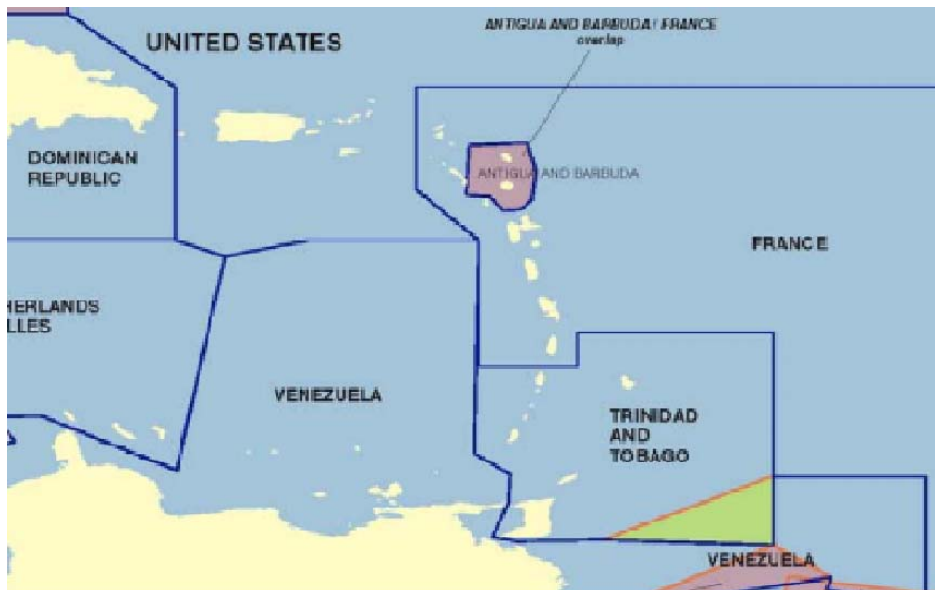


Figure 1.1

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## RCC

In Trinidad and Tobago there are two established RCCs: a Maritime Rescue Coordination Center (MRCC) which falls under the purview of the Trinidad and Tobago Coast Guard (TTCG); and a Landside Rescue Coordination Center (LRCC) which subjects to the Trinidad and Tobago Fire Service (TTFS). The only other integral component needed for a elite SAR Plan would be the development of an ARCC supported by the proper legislation and procedures for SAR that facilitates the Piarco SSR. Joint Rescue Coordination Centers (JRCCs) can be established at minimal cost by combining aeronautical, maritime and landside RCCs. Staffing would be determined by the responsible agencies and could include joint staffing by more than one agency. This cooperation could help in developing better capabilities and plans to assist both aircraft and ships in distress. Benefits include:

- fewer facilities to establish or maintain;
- reduced cost;
- less complexity for alerting posts in forwarding distress alerts; and
- better coordination and sharing of SAR expertise.

*Alerting Posts*

Alerting Posts are any facility intended to serve as an intermediary between an individual reporting an emergency and a RCC or RSC. Established Alerting Posts in Trinidad and Tobago include:

- Piarco Air Traffic Service (ATS); which has three (3) Aeronautical Earth Stations
- Office of the Disaster Preparedness and Management (ODPM)
- TTCG which has five (5) Coastal Radio Stations
- Trinidad and Tobago Air Guard (TTAG)
- Trinidad and Tobago Police Service (TTPS); which has a Land Earth Stations (LESS)
- Trinidad and Tobago Fire Service (TTFS); which has a LESS

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### Search and Rescue Mission Coordinators (SMCs)

The official temporarily assigned to coordinate response to an actual or apparent distress situation. In the Piarco Flight Information Region (FIR) Operation Matrix the SMC will be an individual who is trained to deal with the INCIDENT. It is recommended that each shift within the Piarco Operational Structure have an SMC which can become a criterion for the Shift Supervisor and Tower Officer in Charge (OC). Once an incident has occurred, whether it is unconfirmed or confirmed, the highly skilled SMC will be required to perform that various tasks as stipulated in the SMC guide until properly relieved. The SMC is at no times required to neglect his duties until;

- Relief and Recovery is achieved or understood, with the intent to save lives and recover assets.
- Until properly relieved by another SMC which can occur via a hand-over take-over process or in the case where the incident was initiated by the ARCC but is subject to a Maritime or Landside response. The ARCC properly hands-over the INCIDENT to the MRCC or the LRCC.

**Albeit the incident is no longer under the control of the ARCC, the ARCC remains open to offer support to other RCC's.**

### Search and Rescue Units (SRUs)

These are units composed of trained personnel and provided with equipment suitable for the expeditious conduct of SAR operations. Most SRUs in Trinidad and Tobago are complimented with alerting posts and are situated throughout the island in the form of police stations, fire stations, coast guard stations and emergency response units. In the event of an INCIDENT the SRUs would be a significant asset to provide relief but what makes this relief effective weighs heavily on the expertise and efficiency of the SMC. Facilities selected as SRUs should be able to reach the scene of distress quickly and, in particular, be suitable for one or more of the following operations:

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- providing assistance to prevent or reduce the severity of accidents and the hardship of survivors, e.g. escorting an aircraft, standing by a sinking vessel;
- conducting a search;
- delivering supplies and survival equipment to the scene;
- rescuing survivors;
- providing food, medical or other initial needs of survivors; and
- delivering the survivors to a place of safety.

#### On-site Coordinators (OSCs) and Aircraft Coordinators (ACOs)

The OSC is the person designated to coordinate (from the scene of an Incident) Aeronautical SAR operations throughout the Piarco FIR. The OSC works in close communication with the SMC and filters information within a timely manner. It is the OSC who is the eyes and ears on the ground for the SMC. The OSC must be trained in disaster management, quality control, asset management etc.

The ACO is a person or team who coordinates the involvement of multiple aircraft in SAR operations in support of the SMC and OSC. It has been identified that the best person to coordinate such activity would generate from the ATS. The ACO would work with the SMC of an ARCC directly and offer support to all SAR Operations as needed, whether maritime or landside.

When two or more SAR facilities are working together on the same mission, it is usually advantageous if one person is assigned to co-ordinate the activities of all participating facilities. The SMC designates this OSC, who may be the person in charge of an SRU, ship, or aircraft participating in a search, or someone at another nearby facility able to handle OSC duties. The person in charge of the first SAR resource to arrive at the scene will normally assume the function of OSC until the SMC directs that the OSC function be transferred. Conceivably, the OSC may have to assume SMC duties and actually plan the search if the OSC becomes aware of a distress situation directly and communications cannot be established with the ARCC. The OSC

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should be the most capable person available, taking into consideration SAR training, communications capabilities and the length of time that the facility on which the OSC is aboard can stay in the search area. Frequent changes in the OSC should be avoided. When appropriate, an ACO may also be designated to assist with on-scene co-ordination from a SAR aircraft.

Responsible authorities should find ways for information, training and exercising the ACO function, both for those who act as ACOs and for those who co-operate closely with ACOs.

### ACO Joint Training

The SAR management should provide ACO training between SRU crews from different organizations that might act as ACOs e.g. GALEOTA. The ACO training should improve understanding of the ACO role and increase confidence amongst the participating SRUs. ACO training can consist of:

- Lessons from real life SAR missions;
- Legal documents;
- Duties of co-operating organizations;
- Performance characteristics of SRUs;
- Typical cases and methods;
- SMC - ACO communication exercises; and
- Paper exercises.

During search and rescue missions and exercises it is recommended that the following prefix call signs be used before the ordinary radio call sign or as a specific mission call sign.

- “RESCUE” for all airborne units involved in a rescue mission
- “AIR CO-ORDINATOR” for the aircraft coordinator (ACO)
- “SAREX” for all airborne units involved in international/national exercises

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SPECIFIC PLANS TO BE DEVELOPED

ANS CONTINGENCY PLAN

TERRORISM CONTINGENCY PLAN

NATURAL DISASTER CONTINGENCY PLAN

MAN-MADE DISASTER CONTINGENCY PLAN



DRAFT PIARCO AVIATION CONTINGENCY FRAMEWORK

**APPENDIX**

**FIVE FOCAL POINTS OF THE E/CAR AVIATION CONTINGENCY FRAMEWORK**

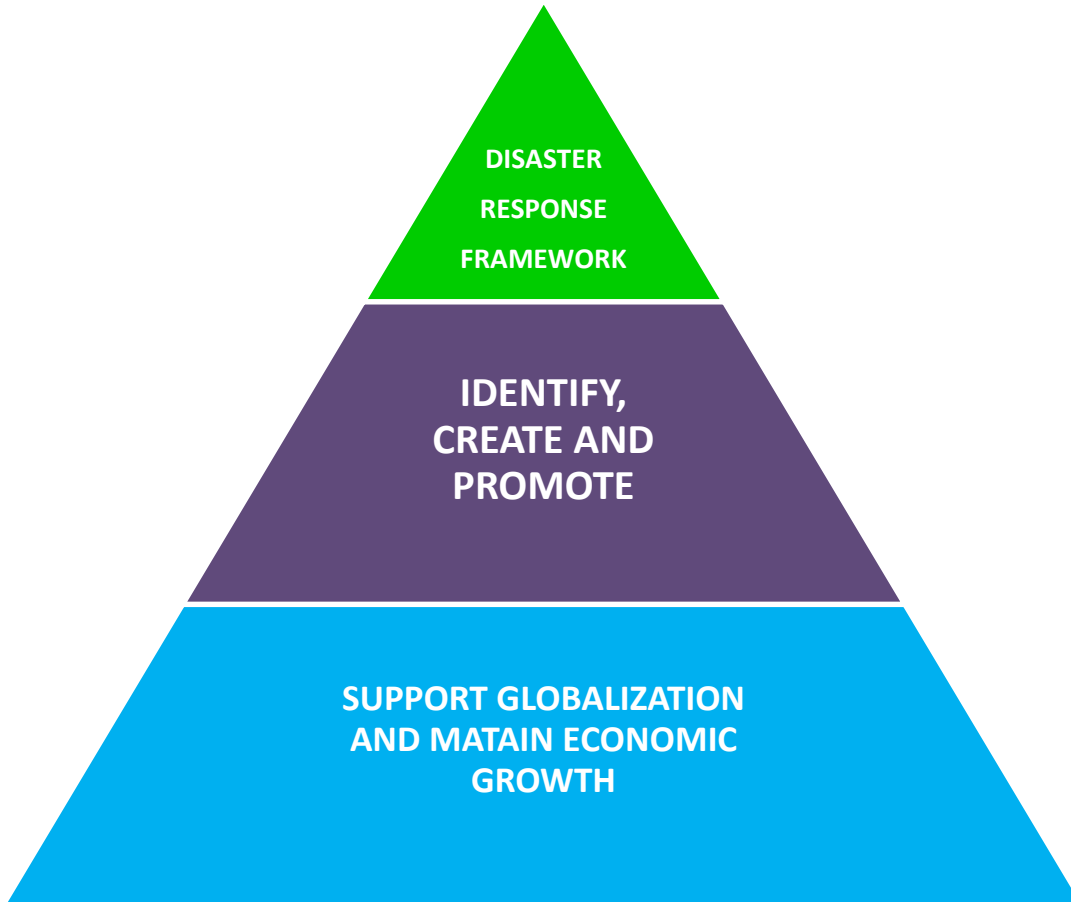


**COLOR CODES OF VARIOUS TREATS AGAINST THE ANSPs**

| CODE   | DESCRIPTION | EFFECTS ON SERVICE             |
|--------|-------------|--------------------------------|
| BLUE   |             | <b>&lt; 3Hrs interruption</b>  |
| YELLOW |             | <b>&gt;3Hrs but &lt;24Hrs</b>  |
| ORANGE |             | <b>&gt;24Hrs but &lt;3Days</b> |
| RED    |             | <b>Undetermined</b>            |

DRAFT PIARCO AVIATION CONTINGENCY FRAMEWORK

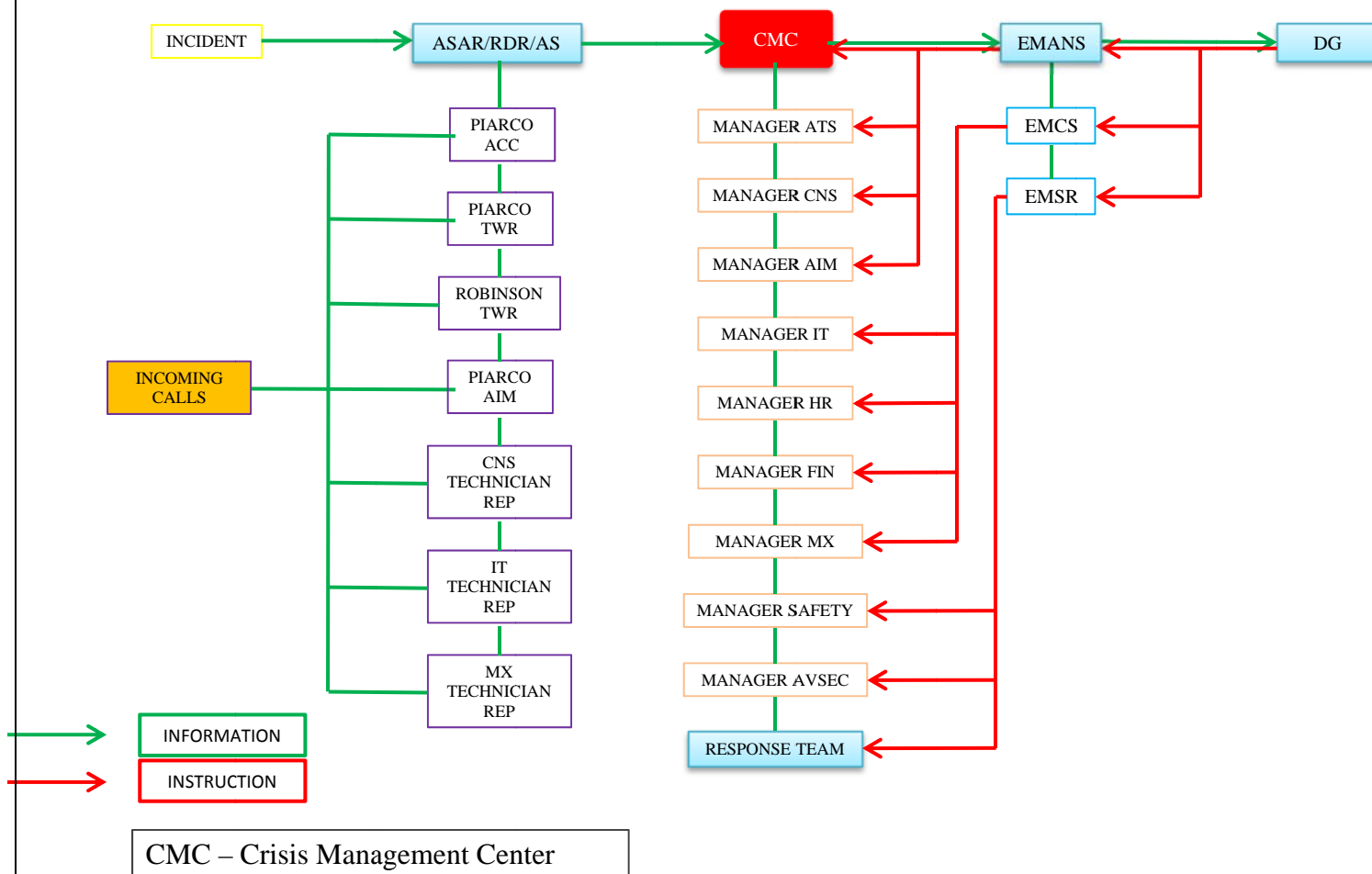
**STRATEGIC PLAN**



DRAFT PIARCO AVIATION CONTINGENCY FRAMEWORK

# PIARCO DISASTER RESPONSE COMMUNICATIONS FLOW CHART

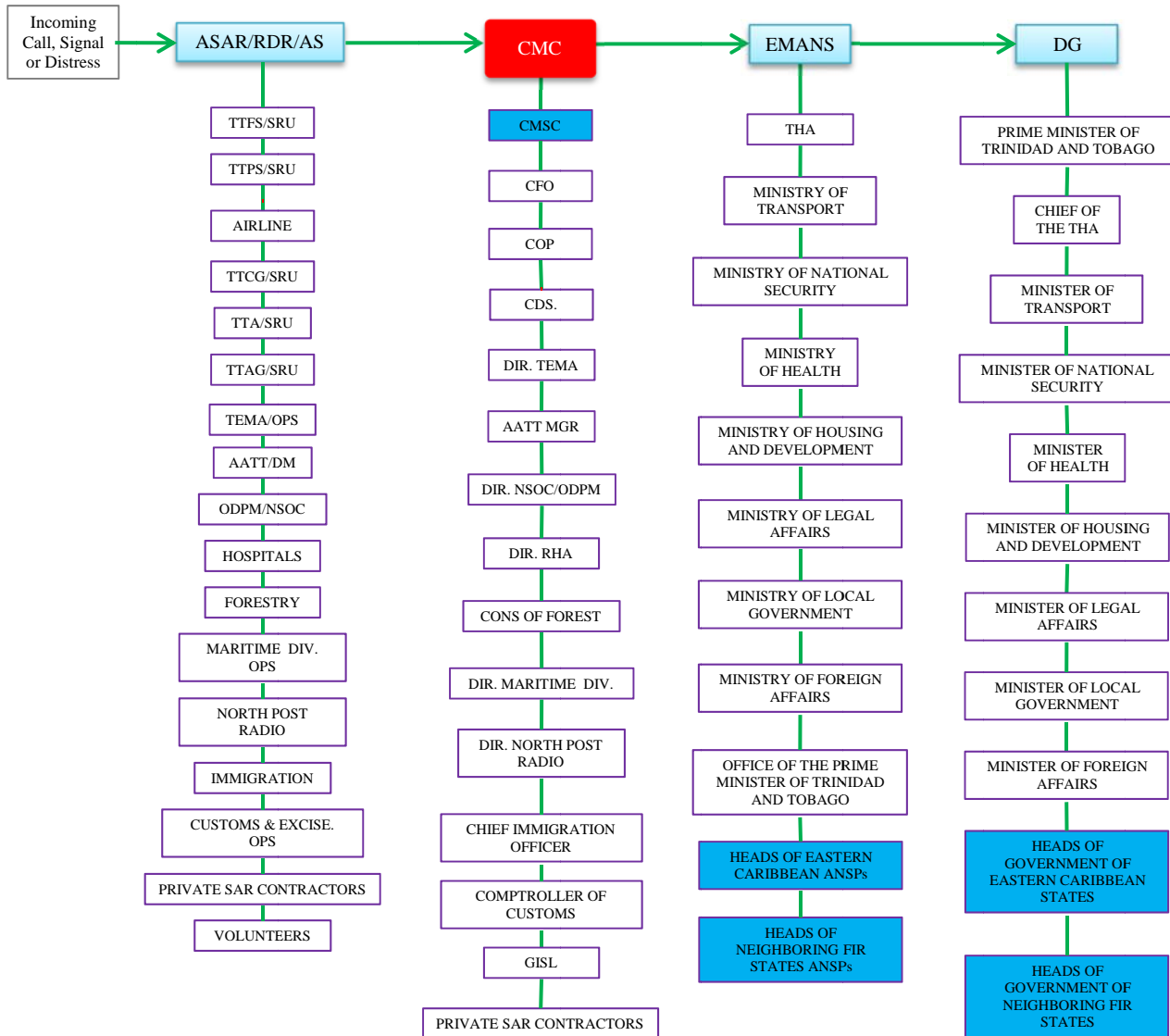
Disaster Response Plan: Internal



DRAFT PIARCO AVIATION CONTINGENCY FRAMEWORK

# PIARCO DISASTER RESPONSE COMMUNICATIONS FLOW CHART

## Aeronautical Disaster Contingency Plan



→ INFORMATION

CMC – Crisis Management Center  
CMSC – Crisis Management Sub-center

DRAFT PIARCO AVIATION CONTINGENCY FRAMEWORK

# PIARCO DISASTER RESPONSE COMMUNICATIONS FLOW CHART

**Disaster Response Gap Analysis: Internal**

| ITEM        | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|
| CMC         |     |     |     |     |     |     |     |     |     |      |       |       |
| ASAR/RDR/AS |     |     |     |     |     |     |     |     |     |      |       |       |
| RT          |     |     |     |     |     |     |     |     |     |      |       |       |

CMC – Crisis Management Center  
 RT – Response Team