



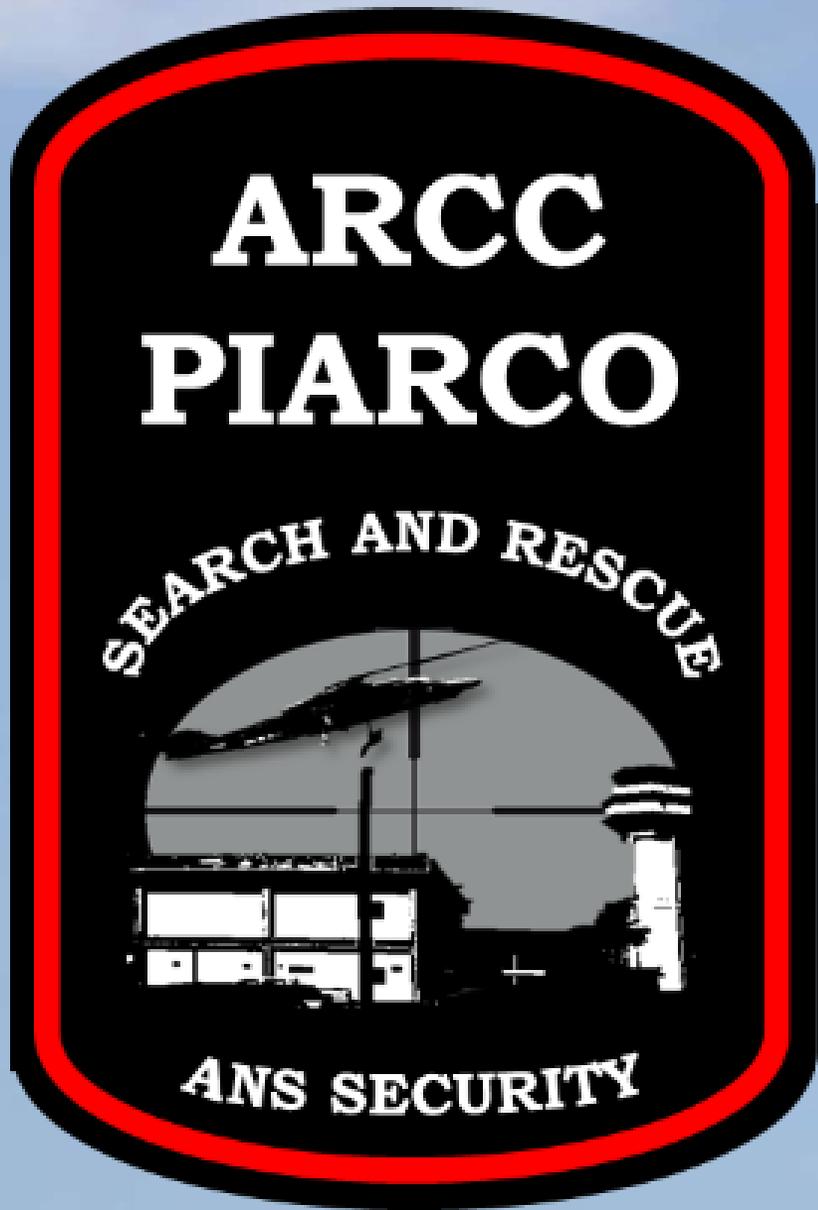
TRINIDAD AND TOBAGO

AERONAUTICAL SEARCH AND RESCUE UPDATE

click to snap to video size



TTCAA
Safer Skies



**AERONAUTICAL
SEARCH & RESCUE
AND
AIR NAVIGATION
SECURITY
UNIT**

International Standards
and Recommended Practices



Annex 12
to the Convention on
International Civil Aviation

Search and Rescue

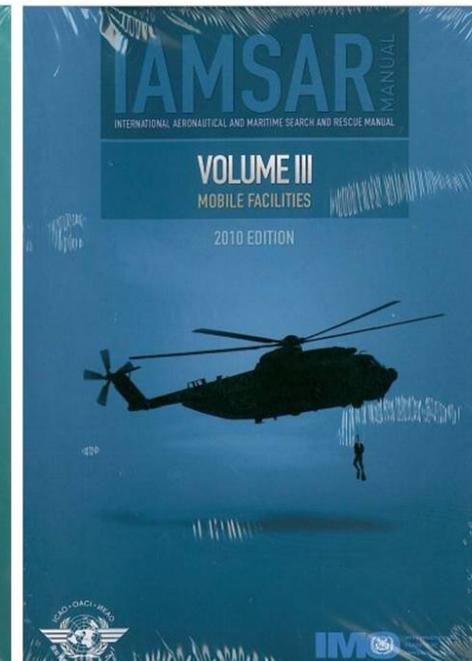
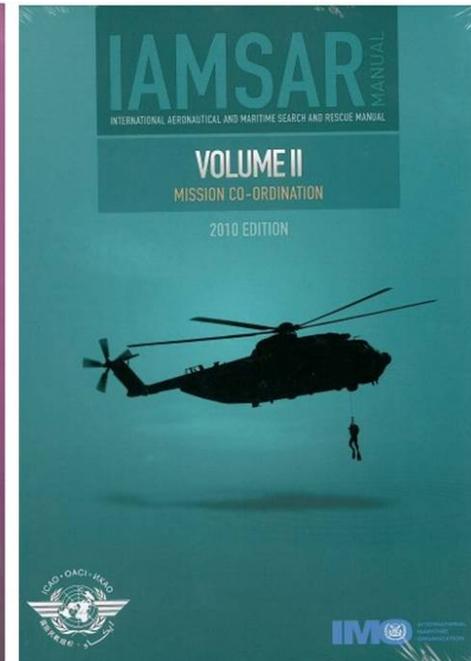
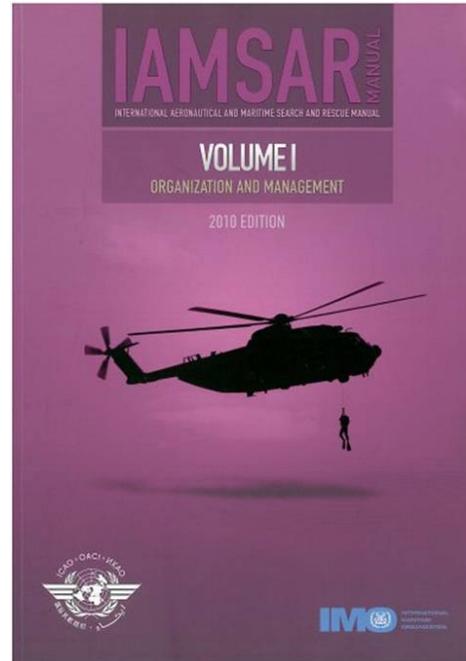
This edition incorporates all amendments adopted by the Council prior to 24 February 2004 and supersedes, on 25 November 2004, all previous editions of Annex 12.

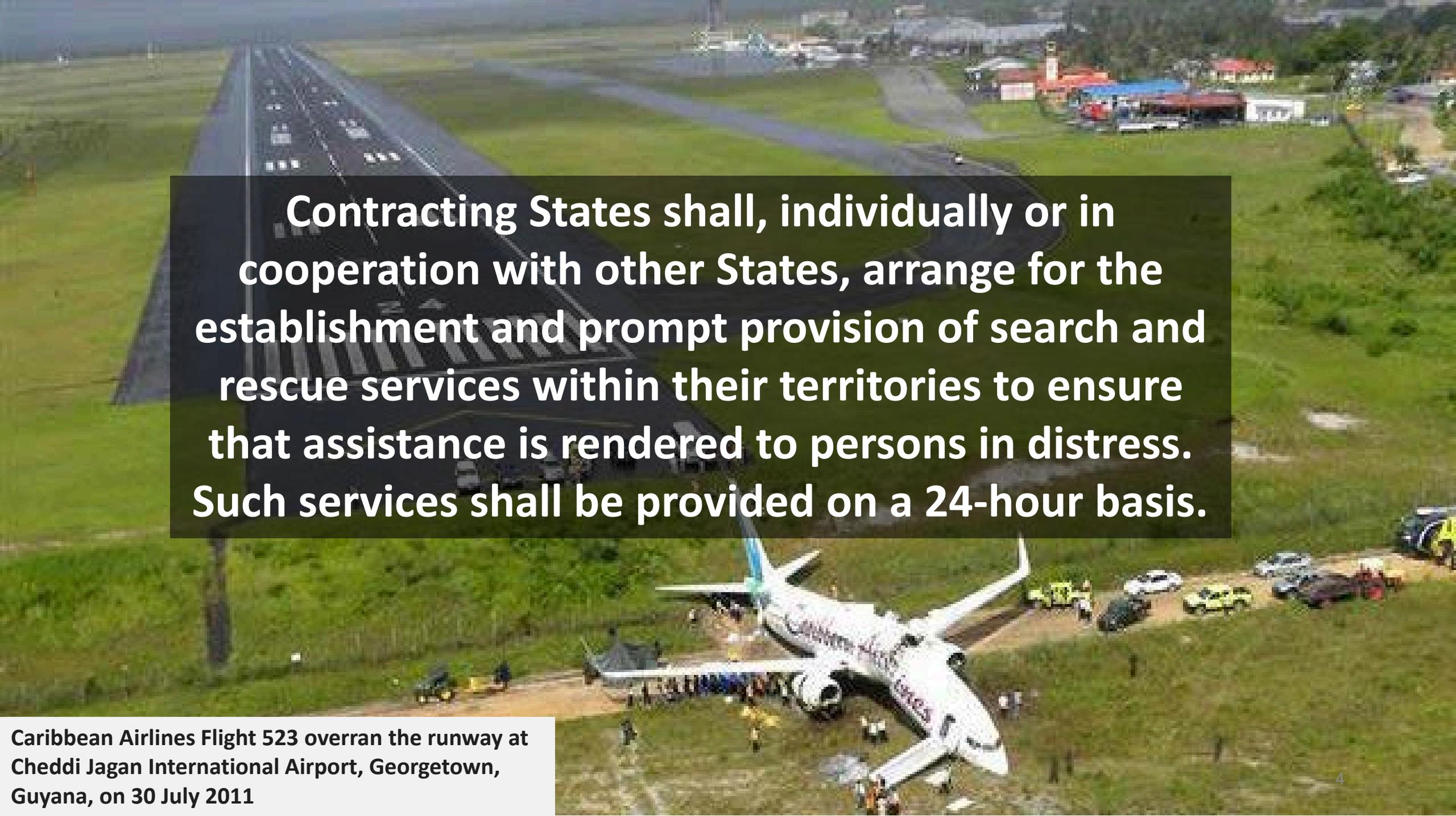
For information regarding the applicability of the Standards and Recommended Practices, see Foreword.

Eighth Edition
July 2004

International Civil Aviation Organization

SEARCH AND RESCUE

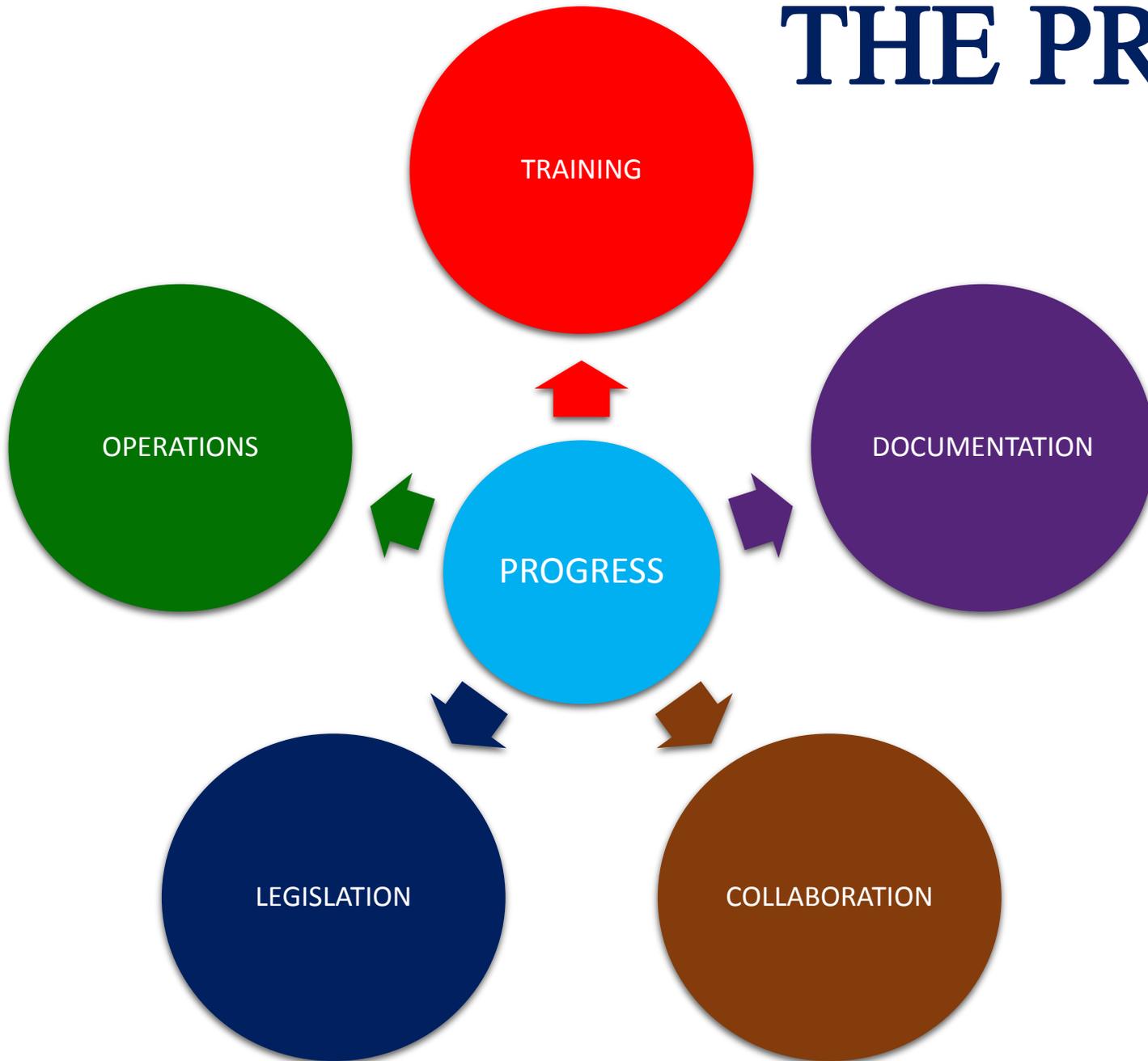


An aerial photograph of an airport. A long, dark asphalt runway runs diagonally from the top left towards the center. To the right of the runway is a taxiway and a grassy area. In the background, there are several buildings, including a large terminal with a red roof and a smaller building with a blue roof. In the foreground, a white Caribbean Airlines aircraft is parked on the grass, tilted at an angle. Several ground crew members and vehicles are visible around the aircraft.

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.

Caribbean Airlines Flight 523 overran the runway at Cheddi Jagan International Airport, Georgetown, Guyana, on 30 July 2011

THE PROGRESS OF SAR



“Be not afraid of going slowly, be afraid only of standing still.” (Chinese Proverb)



TRAINING

1. Trinidad and Tobago was invited to participate in the Search and Rescue (SAR) Controllers Training and Meeting, hosted by the United States Coast Guard (USCG) and the National Oceanic and Atmospheric Administration (NOAA).
2. The training is held annually at the National Satellite Operations Facility in Maryland USA.



**PARTICIPANTS AT THE SAR CONTROLLERS 2014,
NOAA FACILITY, MARYLAND**

PARTICIPATION AT MEETINGS



**TTCAA REPRESENTATIVES IN CUBA 2015,
MARITIME SAR DRILL**



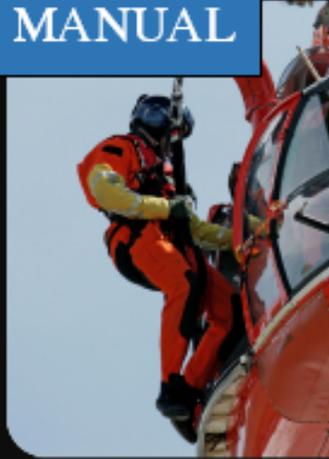
TTCAA REPRESENTATIVES AT ICAO MEXICO SAR MEETING



TTCAA REPRESENTATIVES AT FRENCH ANTILLES SAR DRILL, MARTINIQUE

DOCUMENTATION

A/SAR/RDR/AS UNIT OPERATIONS MANUAL

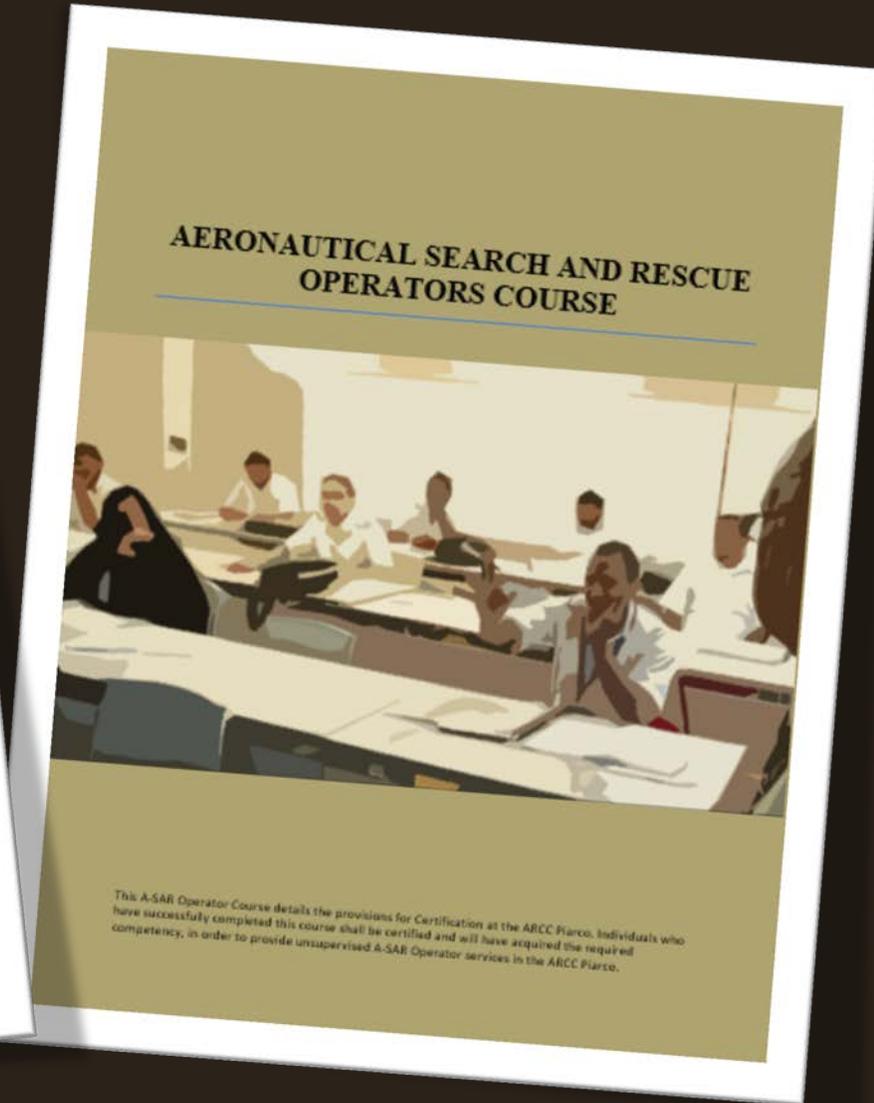
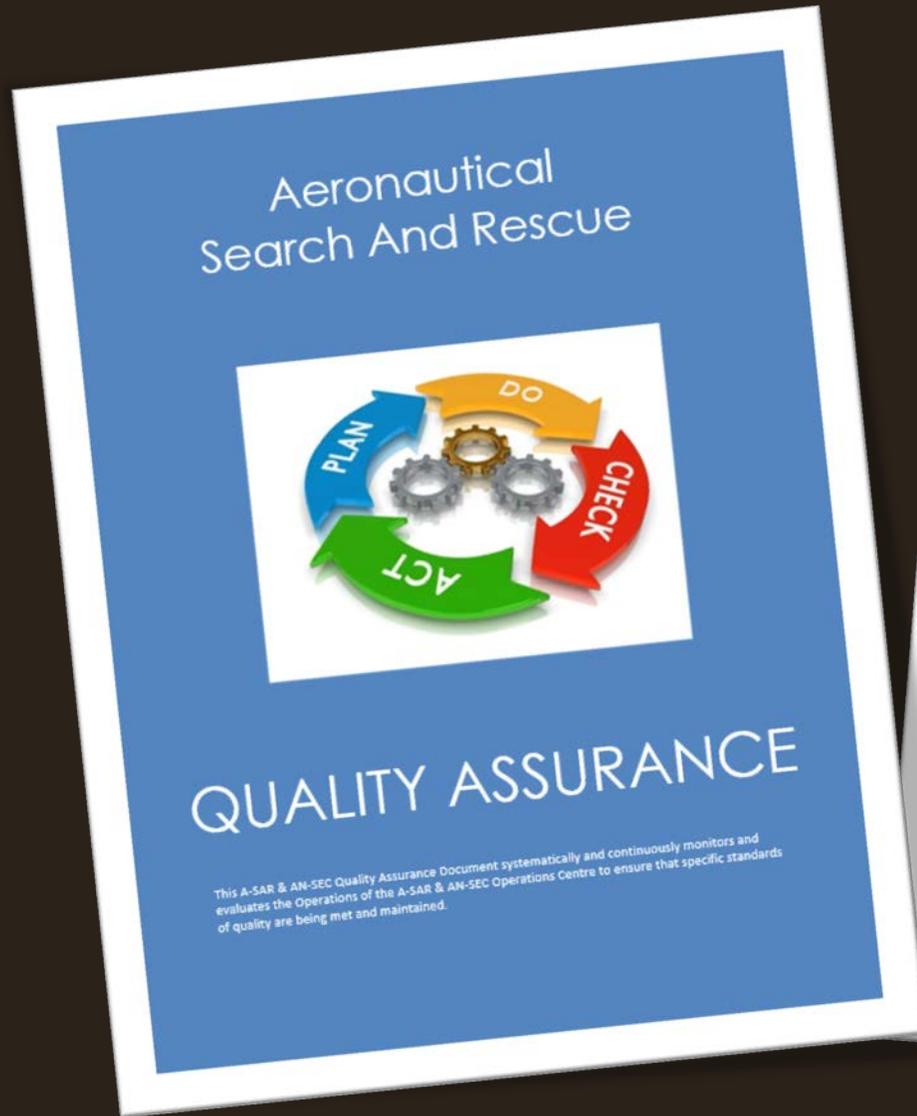


Nicholas Mark
Aeronautical Search and Rescue, Regional
Disaster Response and Air Navigation
Services Security (A/SAR/RDR/AS) Unit
3/14/2014

The A/SAR/RDR/AS Unit Operations Manual aims to provide the guiding principles needed for operational efficiency through Coordination, Information Sharing and Training within all Agencies within the Piarco Fir/SRRs.

- Operations Manual.
- Training Manual.
- Quality Assurance Manual

DRAFT DOCUMENTATION



COLLABORATION



- SPATIA Workshop for Military Personnel – commenced April, 2013
- Maritime Meteorological Workshop for Military Personnel – to start July, 2014

- Early Warning Systems (EWS) meeting hosted by the UNDP – National Capacity Development for Disaster Risk Management Project on Monday 10th of March, 2014
- Joint Task Force created between Maritime and Aeronautical facilities – created May, 2014

COLLABORATION

TT SRR/WG SECOND MEETING ON THE IMPLEMENTATION OF GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS) AND SAR 8-9 MAY, 2014.



- **Countries Update on their GMDSS and SAR Systems**
- **Development of National SAR Plans and Regional SAR Plan**
- **Development of SOP's and the requisite Training Programs**
- **Development of an Interstate Multilateral Agreement**



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AN/109

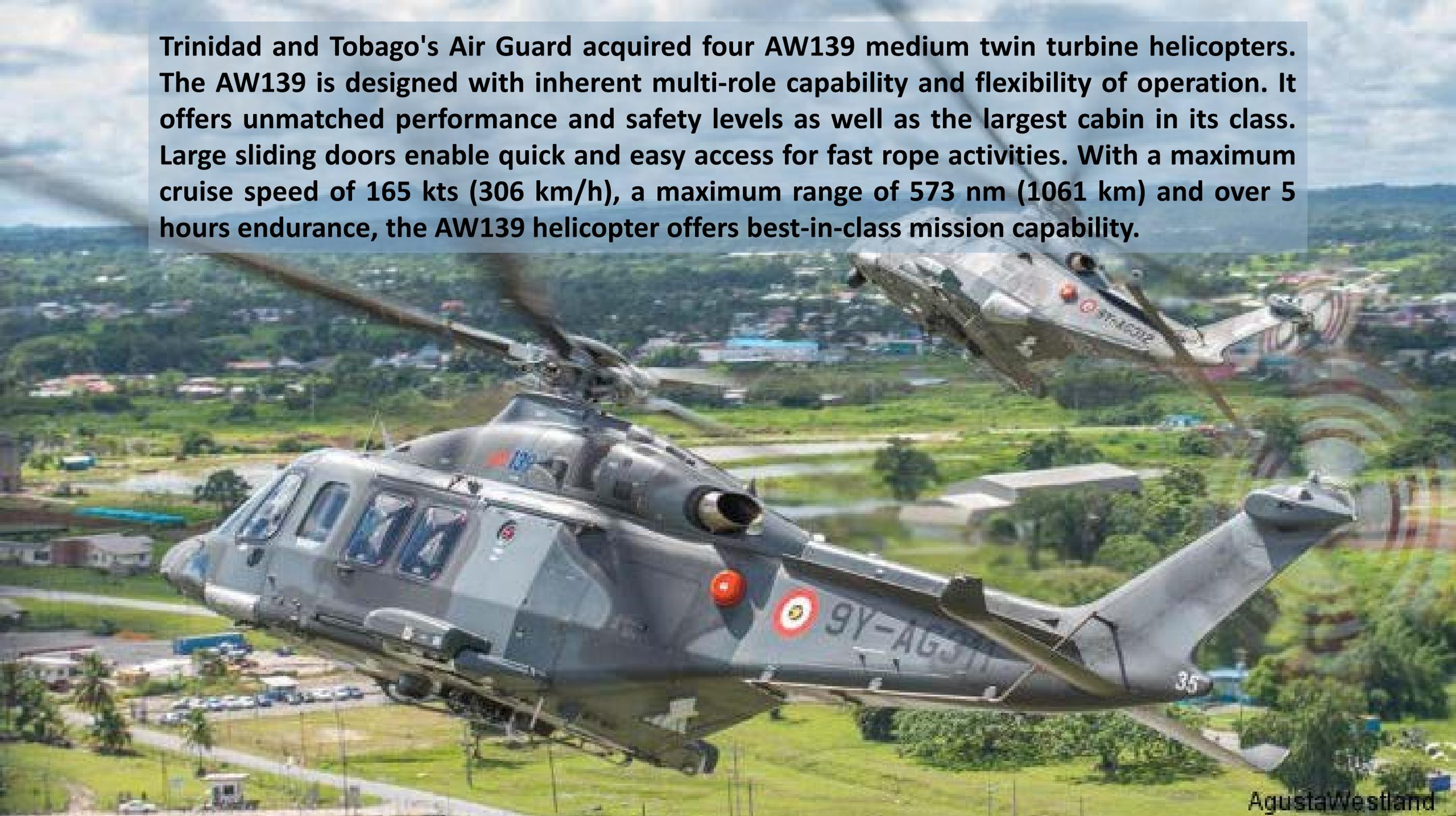
Civil/Military Cooperation in Air Traffic Management

Approved by the Secretary General
and published under his authority

International Civil Aviation Organization

CIVIL/MILITARY COORDINATION

Trinidad and Tobago's Air Guard acquired four AW139 medium twin turbine helicopters. The AW139 is designed with inherent multi-role capability and flexibility of operation. It offers unmatched performance and safety levels as well as the largest cabin in its class. Large sliding doors enable quick and easy access for fast rope activities. With a maximum cruise speed of 165 kts (306 km/h), a maximum range of 573 nm (1061 km) and over 5 hours endurance, the AW139 helicopter offers best-in-class mission capability.





TRINIDAD AND TOBAGO RECENTLY ACQUIRED FOUR DAMEN STAN PATROL 5009 COASTAL PATROL VESSELS, TWO DAMEN FAST CREW SUPPLY 5009 UTILITY VESSELS, AND SIX DAMEN INTERCEPTOR DI 1002 BOATS.

WITH A RANGE OF 2,500 N MILES AND A TOP SPEED OF MORE THAN 28 KT, THE DAMEN STAN PATROL 5009 COASTAL PATROL VESSELS MEASURE 51 M LONG AND 9 M WIDE AND CAN CARRY AN 11 M INTERCEPTOR PLUS A 7.5 M RIGID HULL INFLATABLE BOAT. WITH A RANGE EXCEEDING 3,000 N MILES, THE DAMEN 5009 UTILITY VESSEL IS 54 M LONG AND 10 M WIDE AND CAN TRAVEL AT SPEEDS OF MORE THAN 20 KT. THE INTERCEPTOR DI 1002 IS 11 M LONG AND HAS A SPEED OF MORE THAN 53 KT.

- The Changing International Defense and Security Environment:
- The Evolving Role of the Military; Environmental Protection and
- Resilience; Hemispheric Security and Defense Cooperation Policy: A Case for Strengthened Humanitarian Emergency Assistance.



LEGISLATION

MULTI-LATERAL AGREEMENT **Concerning Co-operation of Maritime and** **Aeronautical Search and Rescue among the States of** **Barbados, Grenada, St. Vincent and the Grenadines** **and Trinidad and Tobago**



From left to right: Lt Cdr Fernella Cordle, Mr Kyane Ragobar, Petty Officer Kirk Aziz, Ms Ida Eversley, Lt Cdr Deon Henry, Sub-Lt Gerald Charles, Sgt Watson Edwards, Mr Kees Koning, Midshipman Jadon Robinson, Capt Kirton Huggins (Chair), Mr Christer Waldegren, Mr Anthony Belmar, Midshipman Valene Valentine, Mr Brent Williams, Sub-Lt Daniel Castagne, Ms Diana Henry, Mr Ronald Kennedy, Ms Esther Derrick, Petty Officer Ronald Nicholas, Ms Veronica Sahadeo

Copyright Kees Koning

- Proposed amendments to the Draft Multilateral Agreement by individual States – Due July, 2014.
- Generation of a final Draft Multilateral Agreement – Due July, 2014.
- Submission of Operational SAR Plans – Due September, 2014.
- Submission of Regional SAR Plan – Due January, 2015.

LETTERS OF AGREEMENTS



5.  2.
Embaixada de Portugal
Caracas

No. 257
Proc. 055

La Embajada de Portugal presenta sus más atentos saludos a la Honorable Embajada de Trinidad y Tobago y tiene el honor de remitir en anexo una propuesta de Protocolo de Cooperación entre la República Portuguesa y la República de Trinidad y Tobago relativo a Operaciones Aeronáuticas de Búsqueda y Salvamento, mucho agradeciendo su reenvío a las autoridades competentes en la materia.

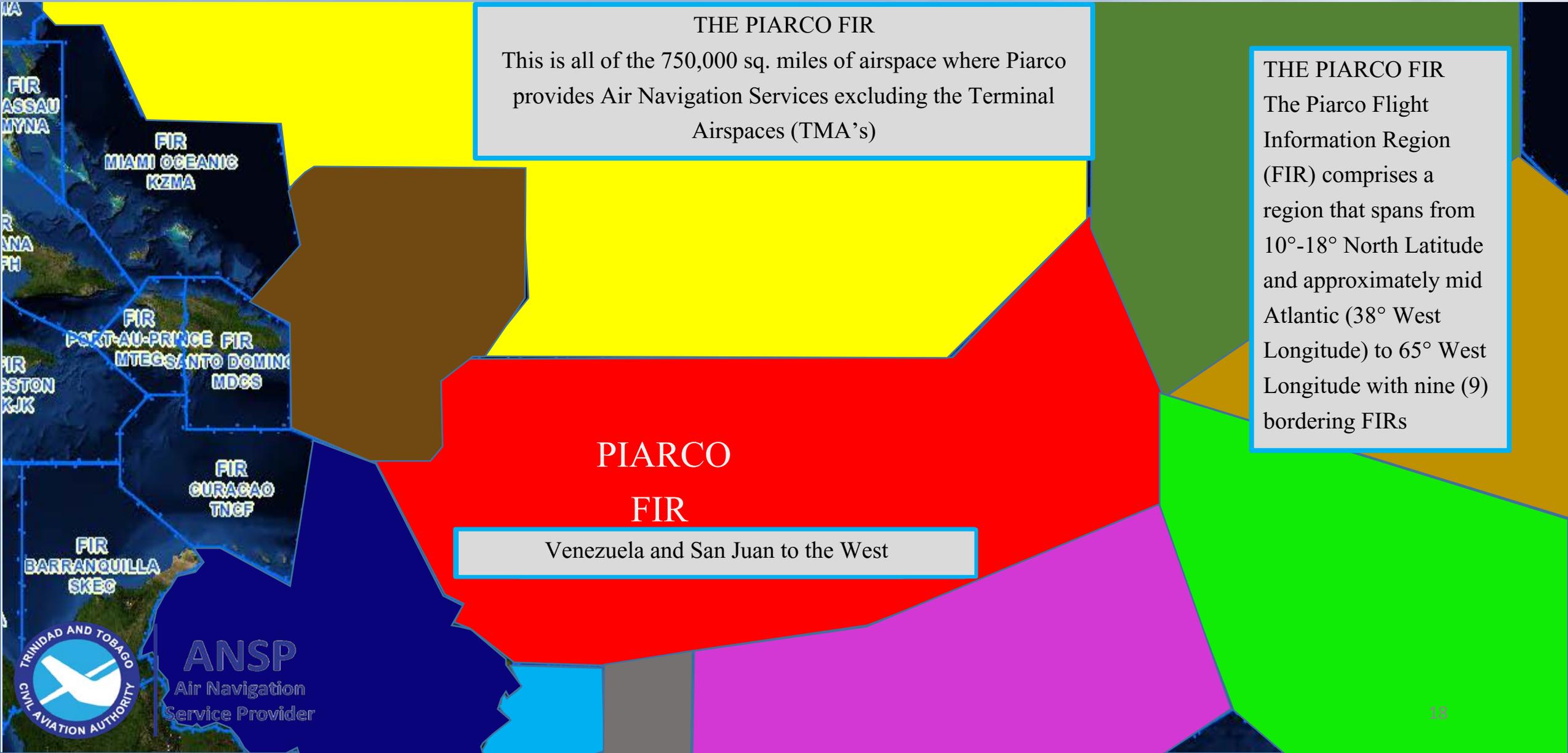
La Embajada de Portugal aprovecha la oportunidad para reiterar a la Honorable Embajada de Trinidad y Tobago las seguridades de su más alta y distinguida consideración.

Curacas, 08 de mayo de 2013



Honorable
Embajada de la República de Trinidad y Tobago
Caracas

AIRSPACES AROUND THE PIARCO FIR



THE PIARCO FIR

This is all of the 750,000 sq. miles of airspace where Piarco provides Air Navigation Services excluding the Terminal Airspaces (TMA's)

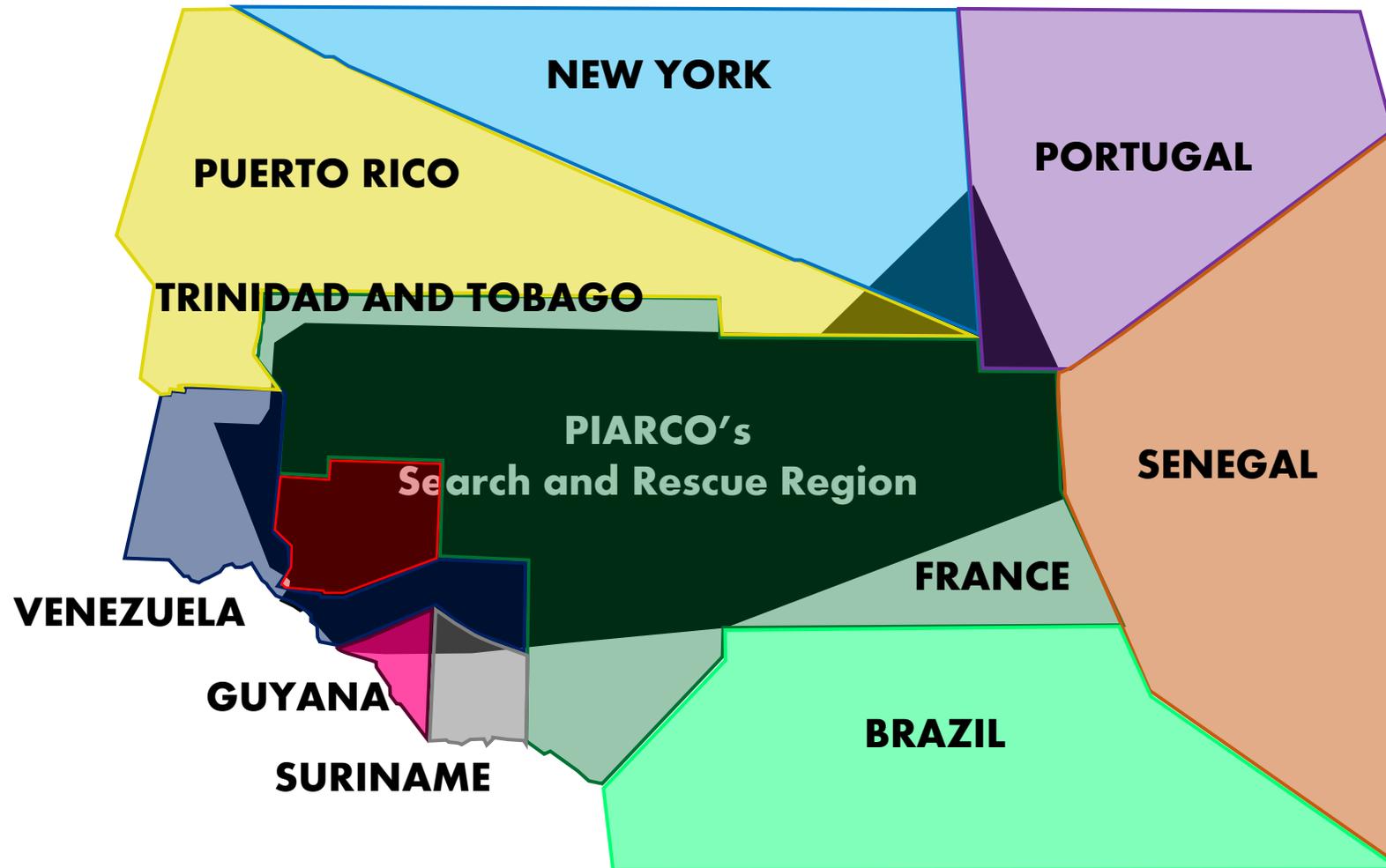
THE PIARCO FIR
The Piarco Flight Information Region (FIR) comprises a region that spans from 10°-18° North Latitude and approximately mid Atlantic (38° West Longitude) to 65° West Longitude with nine (9) bordering FIRs

PIARCO FIR

Venezuela and San Juan to the West



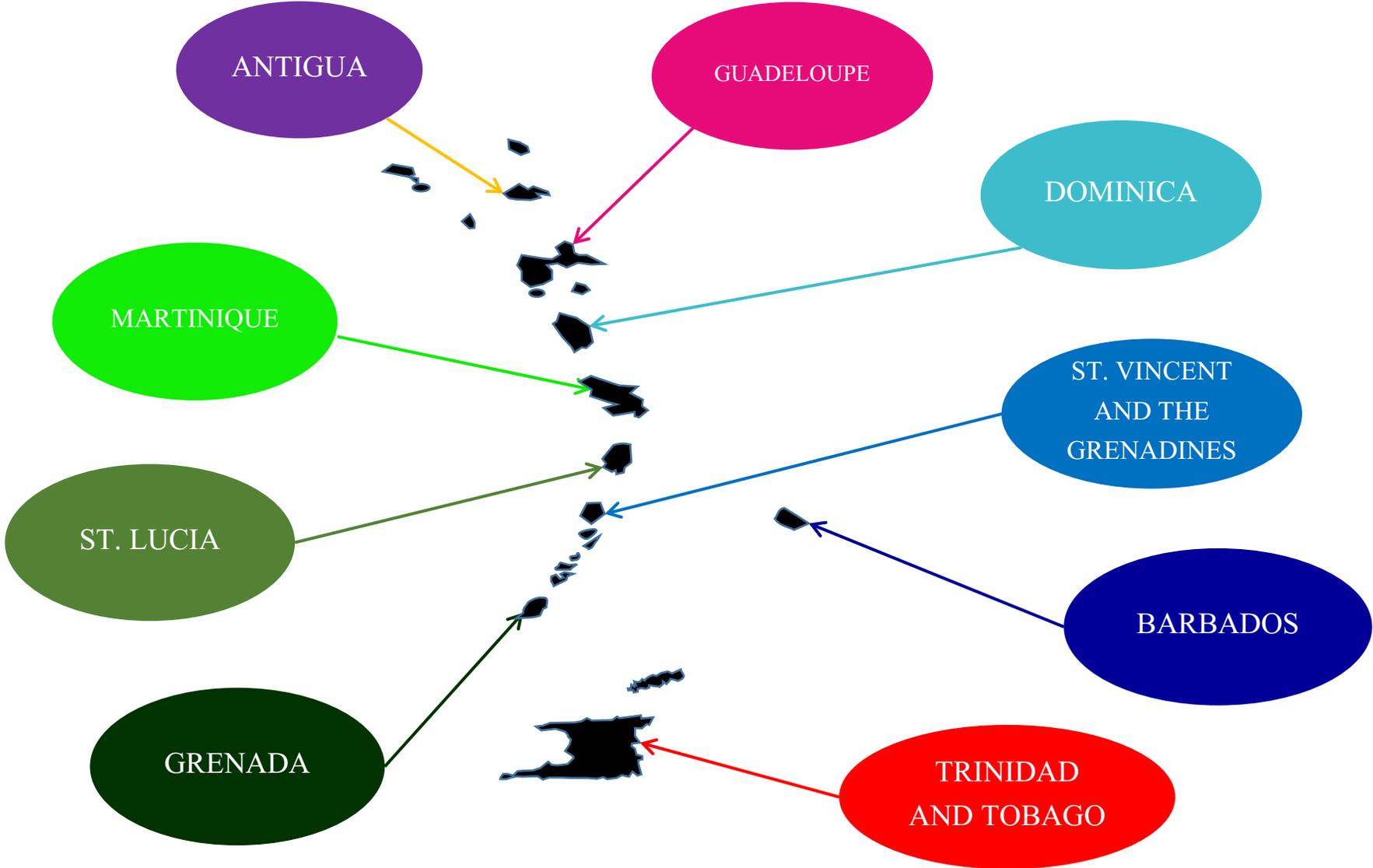
INTERNATIONAL COORDINATION RESPONSIBILITIES



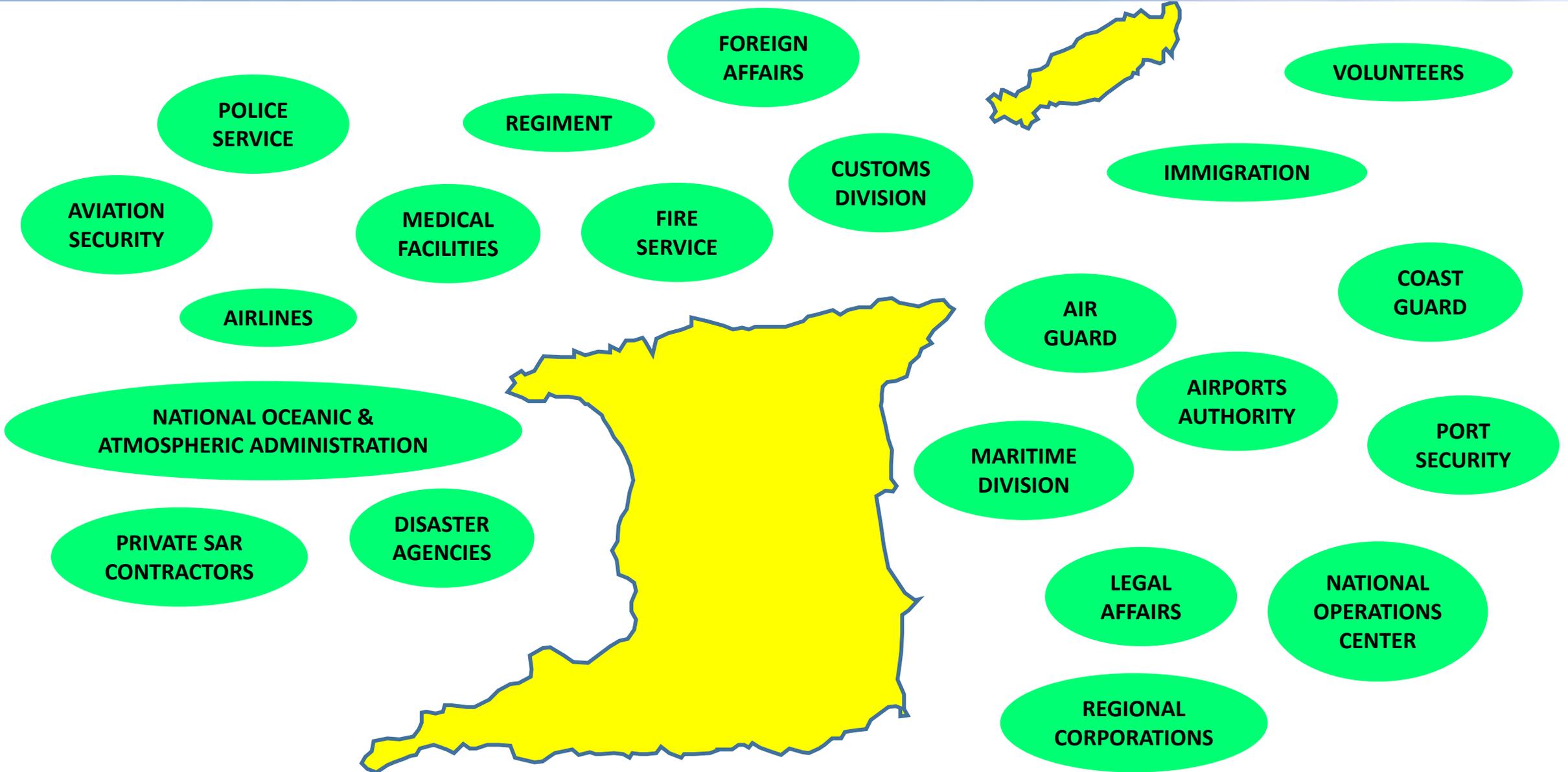
Aeronautical Search and Rescue Region (SRR)

An area of defined dimensions, associated with a Rescue Co-ordination Centre, within which Search and Rescue services are provided.

REGIONAL COORDINATION RESPONSIBILITIES

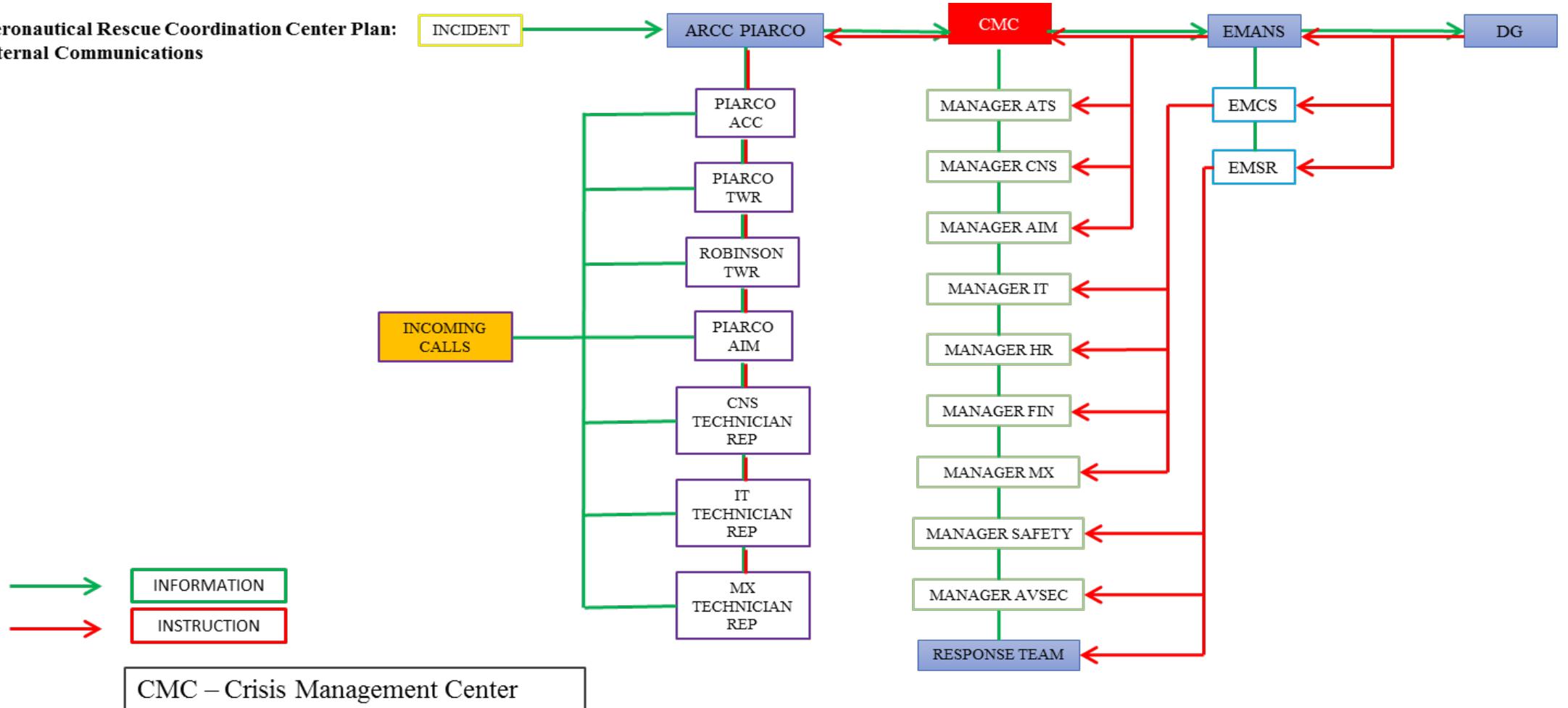


NATIONAL COORDINATION RESPONSIBILITIES



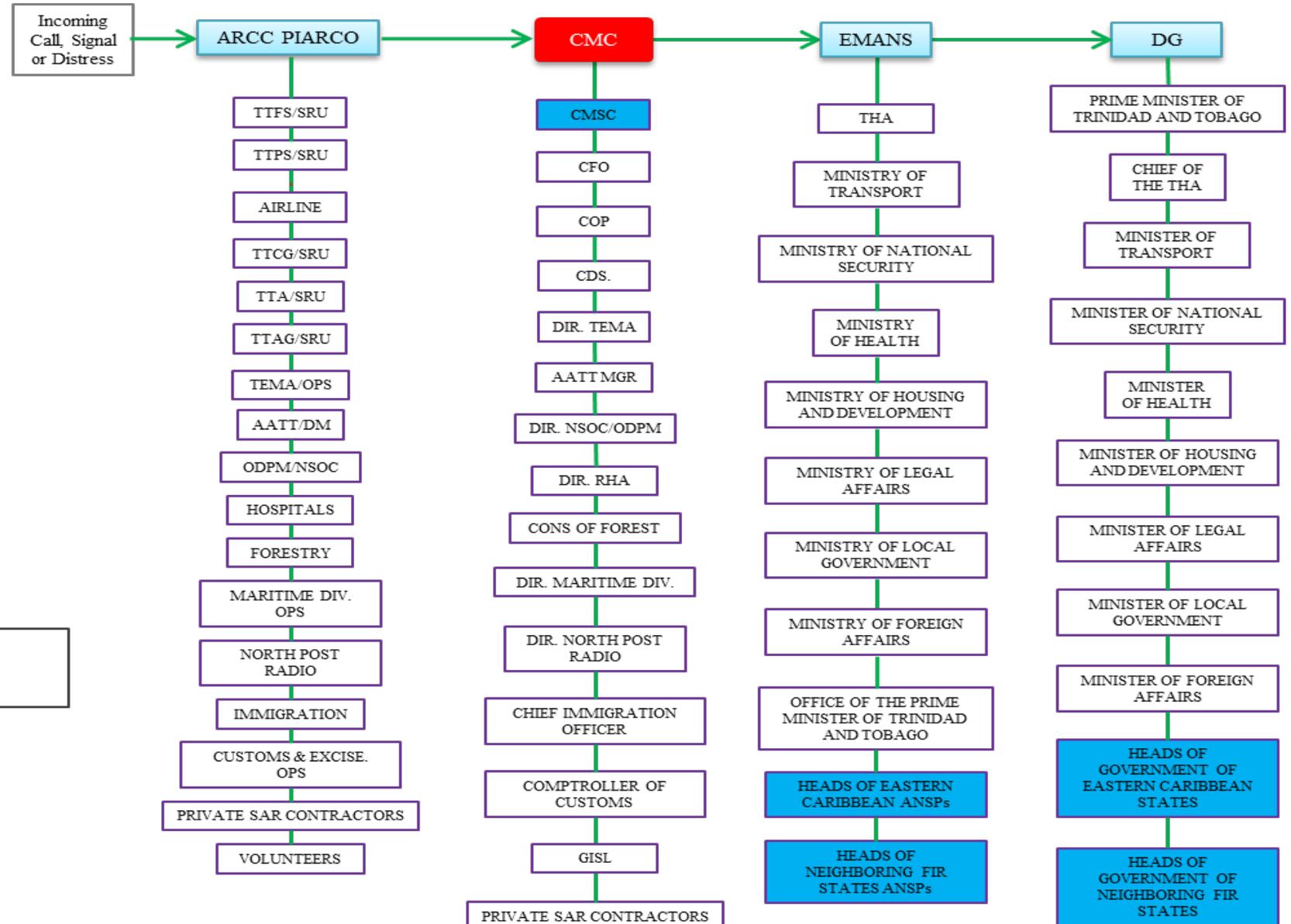
A-SAR & AN-SEC INTERNAL COMMUNICATIONS FLOW CHART

Aeronautical Rescue Coordination Center Plan:
Internal Communications



A-SAR & AN-SEC EXTERNAL COMMUNICATIONS FLOW CHART

**Aeronautical Rescue Coordination Center Plan:
External Communications**



→ INFORMATION

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

International Standards
and Recommended Practices



Annex 17
to the Convention on
International Civil Aviation

Security

Safeguarding International Civil Aviation
Against Acts of Unlawful Interference

This edition incorporates all amendments
adopted by the Council prior to 1 December 2006
and supersedes, on 1 July 2006, all previous
editions of Annex 17.

For information regarding the applicability
of the Standards and Recommended Practices,
see Foreword.

Eighth Edition
April 2006

International Civil Aviation Organization

AIR NAVIGATION SECURITY

AIR NAVIGATION SECURITY

Air Navigation Security is the qualitative aspect of the ANSP being secure. Air Navigation Security identifies, assesses, controls, manages and contains all threats, whether espionage, crime, terrorism or any other related misdemeanor which may constitute as a risk to the ANSP Operations, Capital or Earnings.

LOCALIZER



NDB



VOR



ANSP FACILITY



ILS



RADAR



VSAT



HUMAN RESOURCE

AIR NAVIGATION SECURITY

SECURITY CONTINGENCY PLANS

TERRORISM CONTINGENCY PLAN

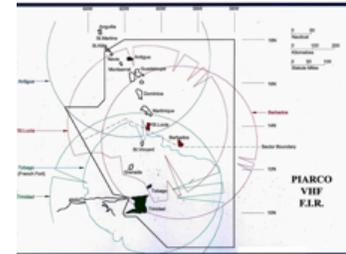


WAR AND/OR CIVIL DISORDER CONTINGENCY PLAN



ANS CONTINGENCY PLANS

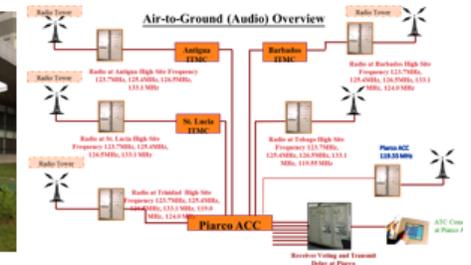
ATM CONTINGENCY PLAN



AIM CONTINGENCY PLAN



CNS CONTINGENCY PLAN



MET CONTINGENCY PLAN

MAN-MADE DISASTER CONTINGENCY PLANS

DISEASE OUTBREAK CONTINGENCY PLAN



POLLUTION CONTINGENCY PLAN



NATURAL DISASTER CONTINGENCY PLANS

HURRICANE CONTINGENCY PLAN



FLOODING CONTINGENCY PLAN



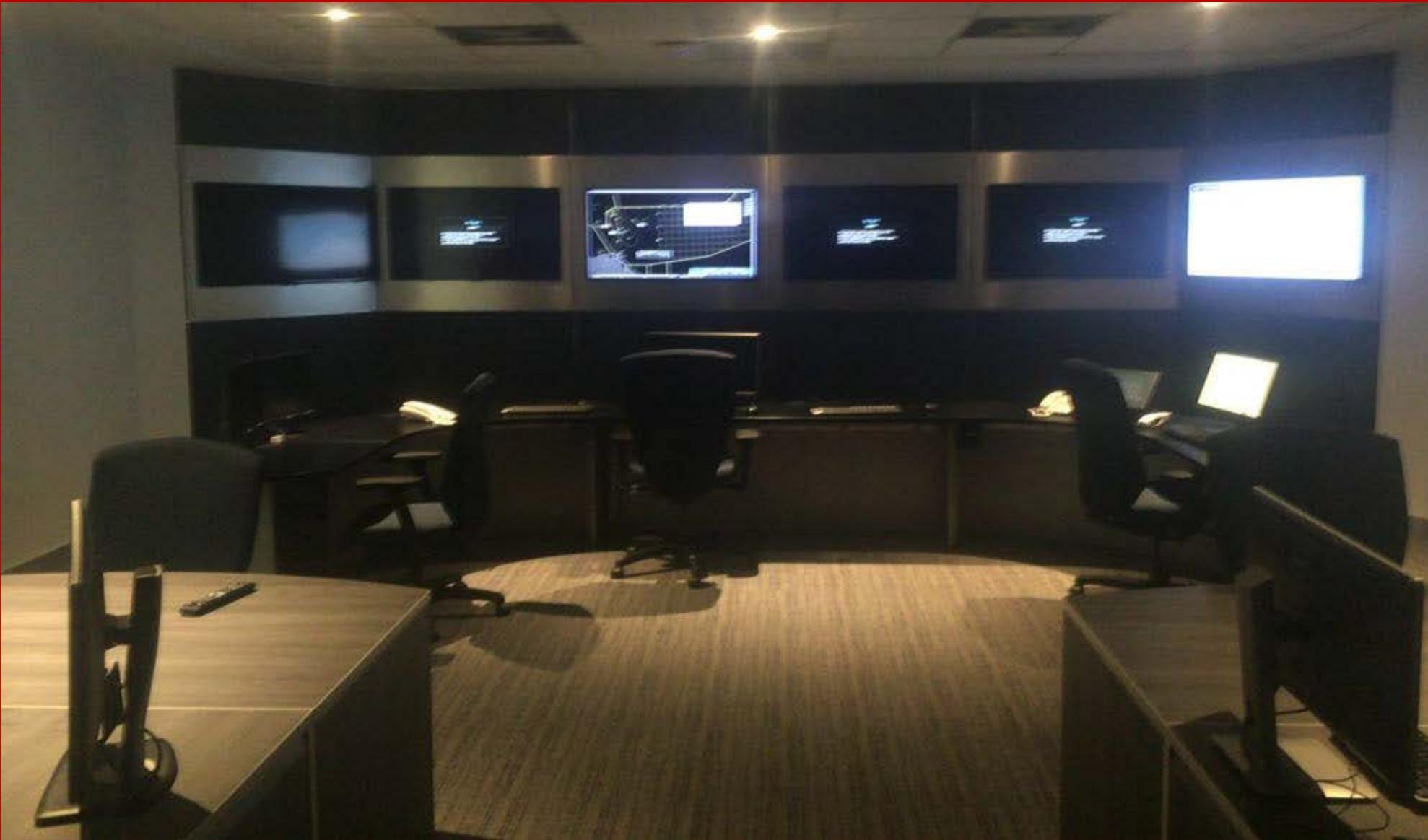
EARTHQUAKE CONTINGENCY PLAN



WILDFIRES CONTINGENCY PLAN

TSUNAMI CONTINGENCY PLAN

A-SAR & AN-SEC OPERATIONS CENTRE



THANK YOU

THE END