



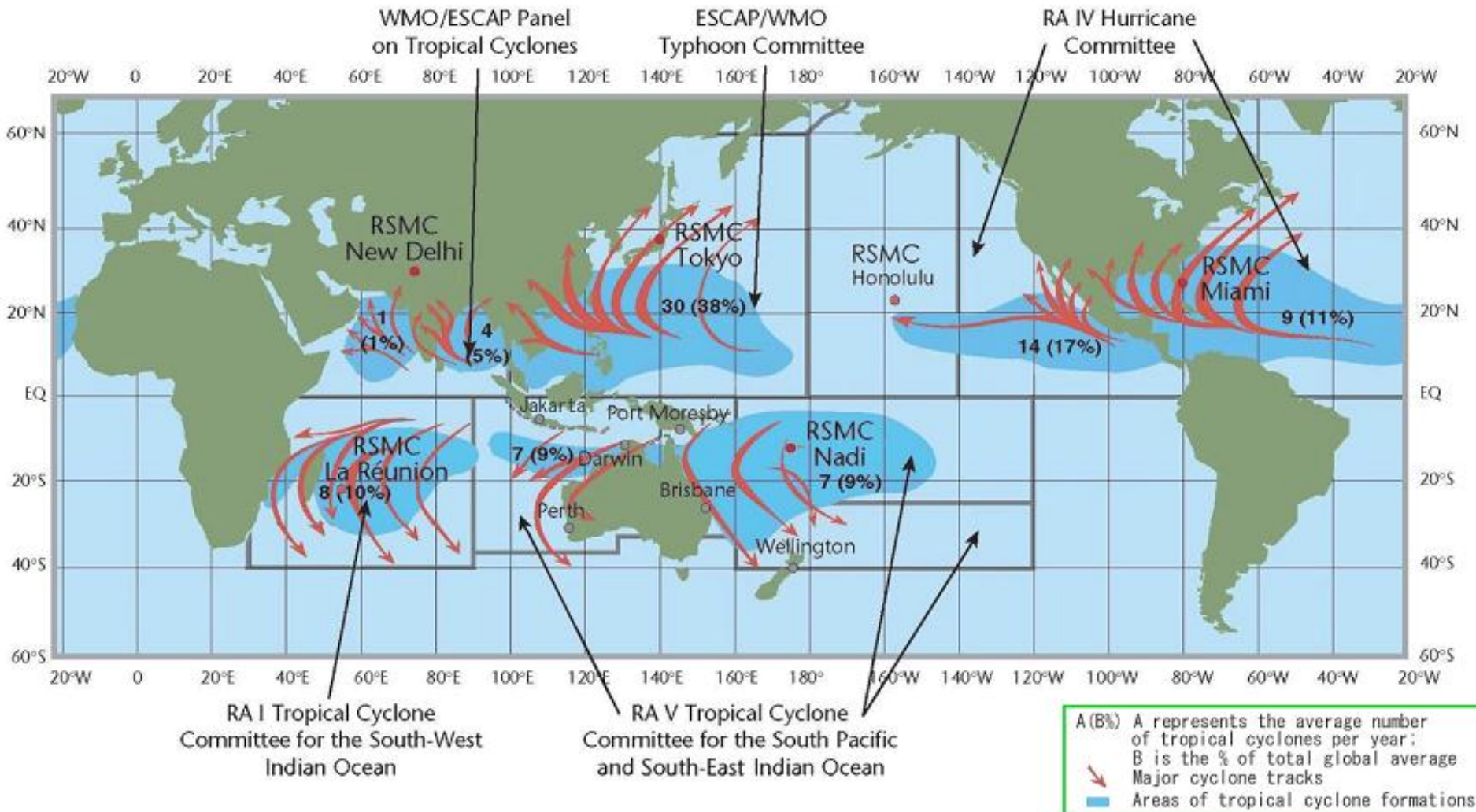
# CHALLENGES AND OPPORTUNITIES FOR COORDINATION OF WATCH AND WARNING SYSTEMS IN THE CARIBBEAN

Contribution of the RA IV Hurricane Committee

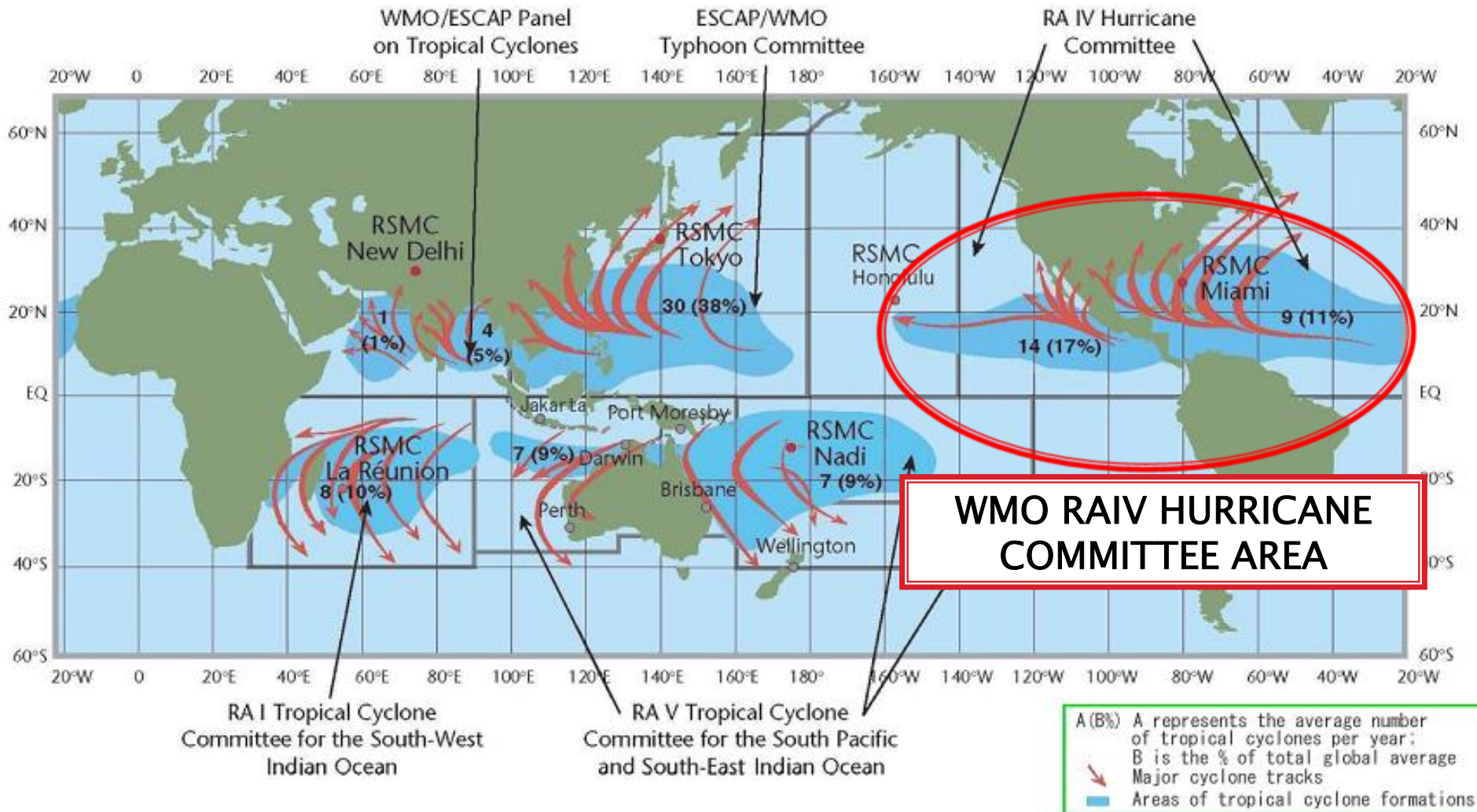
**Dr. Jose Rubiera**  
**Vice-Chairman WMO RAIV Hurricane**  
**Committee**

Technical Cooperation Workshop for Development of the Caribbean Regional Cooperation  
Programme in Multi-Hazard Early Warning System  
*2-5 November, 2010, Christ Church, Barbados*

# WMO TROPICAL CYCLONE PROGRAMME BODIES



# WMO TROPICAL CYCLONE PROGRAMME BODIES





**Regional Association IV  
Hurricane Committee  
*was established in 1978***

Antigua & Barbuda  
Bahamas  
Barbados  
Belize  
British Caribbean Territories  
Canada  
Colombia  
Costa Rica  
Cuba  
Dominica  
Dominican Republic  
El Salvador  
France  
Guatemala  
Haiti  
Honduras  
Jamaica  
Mexico  
Netherlands Antilles and Aruba  
Nicaragua  
Panama  
St. Lucia  
Trinidad and Tobago  
UK (Bermudas)  
USA – (RSMC Miami-Hurricane Center)  
Venezuela

# THE HURRICANE COMMITTEE MEETS ANNUALLY



**WMO RAIV HURRICANE COMMITTEE XXXII SESSION  
BERMUDAS MARCH 8 -12, 2010**



**THE CONTRIBUTION OF THE RA IV  
HURRICANE COMMITTEE TO THE  
TROPICAL CYCLONE WATCH AND  
WARNING SYSTEM IN THE  
CARIBBEAN IS REGULATED IN TWO  
MAIN DOCUMENTS**

# Regional Association IV Hurricane Committee HURRICANE OPERATIONAL PLAN

WORLD METEOROLOGICAL ORGANIZATION  
TECHNICAL DOCUMENT

WMO-TD No. 494

TROPICAL  
CYCLONE PROGRAMME

Report No. TCP-30

**Regional Association IV  
(North America, Central America and the Caribbean)  
Hurricane Operational Plan**

2009 Edition



SECRETARIAT OF THE WORLD METEOROLOGICAL ORGANIZATION - GENEVA  
SWITZERLAND

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# **Regional Association IV Hurricane Committee HURRICANE OPERATIONAL PLAN**

Chapter 1.- General

Chapter 2.- Responsibility of Members

Chapter 3.- Tropical Cyclone products of the RSMC Miami

Chapter 4.- Ground Radar Observations

Chapter 5.- Satellite Surveillance

Chapter 6.- Aircraft Reconnaissance

Chapter 7. Surface and Upper Air Observations

**Regional Association IV Hurricane  
Committee  
HURRICANE OPERATIONAL PLAN**

The **WMO RA IV Operational Plan** records the agreements reached on the sharing of responsibilities for the warning services, and their infrastructures, throughout the region.

**Regional Association IV Hurricane  
Committee  
HURRICANE OPERATIONAL PLAN**

The Operational Plan is designed to provide **the best possible forecasting and warning services within the limits of scientific knowledge and technological developments and of the available resources, ensuring full coordination and taking maximum advantage of the high level of cooperation which has been achieved.** This plan is updated every year at each Hurricane Committee session to incorporate new facilities, advances and developments.

# **Regional Association IV Hurricane Committee HURRICANE OPERATIONAL PLAN**

Chapter 1 - General

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# Regional Association IV Hurricane Committee HURRICANE OPERATIONAL PLAN

## CHAPTER 2

### RESPONSIBILITIES OF MEMBERS

#### 2.1 Forecasts and warnings for the general population

The area of responsibility of RBMC Miami for issuing tropical and subtropical cyclone advisories is the North Atlantic Ocean, the Caribbean Sea, Gulf of Mexico, North Pacific Ocean eastward from 140°W.

#### 2.1.1 In Region IV the responsibility for preparing and issuing warnings is as follows:

Antigua & Barbuda	The Islands and coastal waters of Antigua, Anguilla, Barbuda, British Virgin Islands, Montserrat, Nevis and St. Kitts;
Bahamas	The Islands and coastal waters of the Bahamas, Turks and Caicos Islands;
Barbados	The Islands and coastal waters of Barbados, Dominica, St. Vincent and the Grenadines;
Belize	The Islands, coastal waters and inland areas of Belize;
Bermuda	The Islands and coastal waters of Bermuda;
Canada	The Islands, coastal waters and inland areas of Canada;
Cayman Islands	The Islands, and coastal waters of Cayman Islands;
Colombia	The Islands, coastal waters and inland areas of Colombia;
Costa Rica	The Islands, coastal waters and inland areas of Costa Rica;
Cuba	The Islands, coastal waters and inland areas of Cuba;
Dominican Republic	The Islands, coastal waters and inland areas of the Dominican Republic;
El Salvador	The Islands, coastal waters and inland areas of El Salvador;
France	The coastal waters and Islands of Martinique; Guadeloupe (Grande Terre and Petite Terre); <del>Marie-Galante, Deshaies and Les Saintes; St Barthelemy; St Martin;</del>
Guatemala	The coastal waters and inland areas of Guatemala;
Honduras	The Islands, coastal waters and inland areas of Honduras;
Jamaica	The coastal waters and Islands of Jamaica;
Mexico	The Islands, coastal waters and inland areas of Mexico;
Netherlands Antilles & Aruba	The Islands and coastal waters of Aruba, Bonaire, <del>Curaçao, Saba, St. Eustatius and St Maarten;</del>
Nicaragua	The Islands, coastal waters and inland areas of Nicaragua;
Panama	The Islands, coastal waters and inland areas of Panama;
St. Lucia	The Islands, coastal waters and inland areas of St. Lucia;

# Regional Association IV Hurricane Committee HURRICANE OPERATIONAL PLAN

## RESPONSIBILITIES OF MEMBERS

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Belize	The islands, coastal waters and inland areas of Belize;

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WTNT31 KNHC 041534

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BULLETIN

TROPICAL STORM TOMAS ADVISORY NUMBER 26...CORRECTED  
NWS TPC/NATIONAL HURRICANE CENTER MIAMI FL AL212010  
1100 AM EDT THU NOV 04 2010

CORRECTED INITIAL INTENSITY TO 50 MPH

...CENTER OF TOMAS NOW MOVING NORTHWARD TOWARD JAMAICA AND  
HAITI...NEW WARNINGS ISSUED FOR CUBA...

SUMMARY OF 1100 AM EDT...1500 UTC...INFORMATION

-----  
LOCATION...16.3N 76.1W

ABOUT 125 MI...205 KM SSE OF KINGSTON JAMAICA

ABOUT 295 MI...475 KM WSW OF PORT AU PRINCE HAITI

MAXIMUM SUSTAINED WINDS...50 MPH...85 KM/HR

PRESENT MOVEMENT...N OR 350 DEGREES AT 8 MPH...13 KM/HR

MINIMUM CENTRAL PRESSURE...996 MB...29.41 INCHES

WATCHES AND WARNINGS

-----  
CHANGES WITH THIS ADVISORY...

THE GOVERNMENT OF CUBA HAS ISSUED A HURRICANE WARNING FOR THE CUBAN  
PROVINCE OF GUANTANAMO...AND A TROPICAL STORM WARNING FOR THE  
PROVINCES OF SANTIAGO DE CUBA AND HOLGUIN.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...

\* HAITI

\* THE SOUTHEASTERN BAHAMAS...AND THE TURKS AND CAICOS ISLANDS

\* THE CUBAN PROVINCE OF GUANTANAMO

A TROPICAL STORM WARNING IS IN EFFECT FOR...

\* JAMAICA

\* THE CUBAN PROVINCES OF SANTIAGO DE CUBA AND HOLGUIN

# Regional Association IV Hurricane Committee TECHNICAL PLAN

APPENDIX

III. DISASTER REDUCTION AND PREPAREDNESS

TASKS	TIMESCALE					BY WHOM	RESOURCES	COMMENTS
	2010 <sup>20</sup> 09	2011 <sup>20</sup> 40	2012 <sup>20</sup> 41	2013 <sup>20</sup> 42	2014 <sup>20</sup> 3			
<b>3.1 DISASTER REDUCTION</b>								
3.1.1	Drawing the attention of national authorities of the principal role of meteorological and hydrological factors in carrying out vulnerability analyses in the fields of physical and urban planning, land-use zoning, public works and building codes					Members	National, regional and international	
3.1.2	Promote public awareness of the hurricane risk and the associated risks prior to each hurricane season					Members	National, regional and international	Members are encouraged to collaborate with ISDR
3.1.3	Participate actively in appropriate conferences and activities related to natural hazard mitigation and multi-hazard warning systems. The Hurricane Committee will nominate a representative to attend meetings of the Sessions of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG)					Members	National, regional and international	

**METEOROLOGICAL COMPONENT**

**HYDROLOGICAL COMPONENT**

**DISASTER PREVENTION AND  
PREPAREDNESS COMPONENT**

**TRAINING**

**RESEACH**



# Regional Association IV Hurricane Committee TECHNICAL PLAN

## III. DISASTER REDUCTION AND PREPAREDNESS

TASKS		TIMESCALE					BY WHOM	RESOURCES	COMMENTS
		2009	2010	2011	2012	2013			
<b>3.1 DISASTER REDUCTION</b>									
3.1.1	Drawing the attention of national authorities of the principal role of meteorological and hydrological factors in carrying out vulnerability analyses in the fields of physical and urban planning, land-use zoning, public works and building codes						Members	National, regional and international	
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# Thank you !

# ¡ Gracias !

# Merci !

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