ROYAL BAHAMAS DEFENCE FORCE

Hurricane Avoidance Policy

Updated-19 January 21

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Introduction

The hurricane season is an annual event that creates an environment which encourages a high level of preparedness in the Royal Bahamas Defence Force (RBDF). The organization during this time, must always be at a state of readiness to assist and offer relief in times of disaster, and to take the necessary actions to ensure the safety of its personnel and fleet.

Hurricane warnings

Hurricane warnings are issued by the Meteorological Department and will be broadcast by the Broadcasting Corporation of the Bahamas via Radio Bahamas Stations and ZNS TV 13.

- **Hurricane Alert – 60 hours**
  An alert is issued when hurricane conditions are possible in any part of the Bahamas within **60 hours**.

- **Hurricane Watch – 48 hours**
  A watch is issued when hurricane conditions are possible in any part of the Bahamas within **48 hours**.

- **Hurricane Warning – 36 hours**
  A warning is issued when hurricane conditions are expected within **36 hours**.

Hurricane conditions

A tropical storm denotes a cyclonic storm, which has developed over tropical regions with wind speed between 34 and 63 knots. A hurricane is a developed tropical cyclonic storm with wind speeds in excess of 64 knots and can be expected to be accompanied by high waves and possible tidal surge.

Saffir-Simpson Hurricane Wind Scale

According to the National Hurricane Center and Central Pacific Hurricane Center (https://www.nhc.noaa.gov/aboutsshws), the **S**impson Hurricane Wind Scale is a 1 to 5 rating based on a hurricane's sustained wind speed. This scale estimates potential property damage. Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage. Category 1 and 2 storms are still dangerous, however, and require preventative measures. In the western North Pacific, the term "super typhoon" is used for tropical cyclones with sustained winds exceeding 150 mph.

Category	Sustained Winds	Types of Damage Due to Hurricane Winds
1	74-95 mph 64-82 kt 119-153 km/h	**Very dangerous winds will produce some damage:** Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.
2	96-110 mph 83-95 kt 154-177 km/h	**Extremely dangerous winds will cause extensive damage:** Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.
3 (major)	111-129 mph 96-112 kt 178-208 km/h	**Devastating damage will occur:** Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4 (major)	130-156 mph 113-136 kt 209-251 km/h	**Catastrophic damage will occur:** Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.
5 (major)	157 mph or higher 137 kt or higher 252 km/h or higher	**Catastrophic damage will occur:** A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.

Purpose

The purpose is to establish policy, guidelines, procedures, and responsibilities standardizing the response of the squadron in the anticipation of a hurricane, and the execution of a Hurricane Avoidance Patrol (HAP).

Scope

This policy applies to the Commander of Operations, to all persons in the Squadron, to the Base Executive Officer (in particular delegating personnel for Impact Teams), and to the Commanding Officer of the Disaster Management Response Unit (in particular, for providing disaster response equipment and supplies).

Hurricane Avoidance Policy

Timing is critical to implementing a safe and effective HAP. Weather systems are very dynamic as predictions can change rapidly, therefore, it is important that actions be taken in sufficient time to ensure the safety of all vessels and crews.

The HAP establishes triggers that initiates automatic actions to be taken when a weather system has fifty percent chance or greater, to develop into a potential storm that can affect any of the Bahama Islands.

First Trigger

- Any system with a chance of 50% or greater, that has the potential of impacting our territorial waters within 84 hours, triggers the following actions:

    - Activate Avoidance Operation Planning meeting.
    - Coordinate the deployment of the Advance and impact teams.
    - Coordinate the embarkation and loading impact equipment and Supplies
    - Auxiliary vessel prep to deploy to designated staging area.
    - The 30m vessels prep to deploy to the designated staging area.
    - Conduct system check of pace comms plan

Second Trigger

- Any system with a chance of 50% or greater, that has the potential of impacting our territorial waters within 72 hours, automatically triggers the following actions:

    - Activate the operations planning meeting
    - Brief status of Comms system check.
    - Auxiliary vessel deploy to Staging Area.
    - 30m vessels deploy to the staging area.
    - All assets victualed and fueled.

- Coordinate securing detachment on the island which might be affected

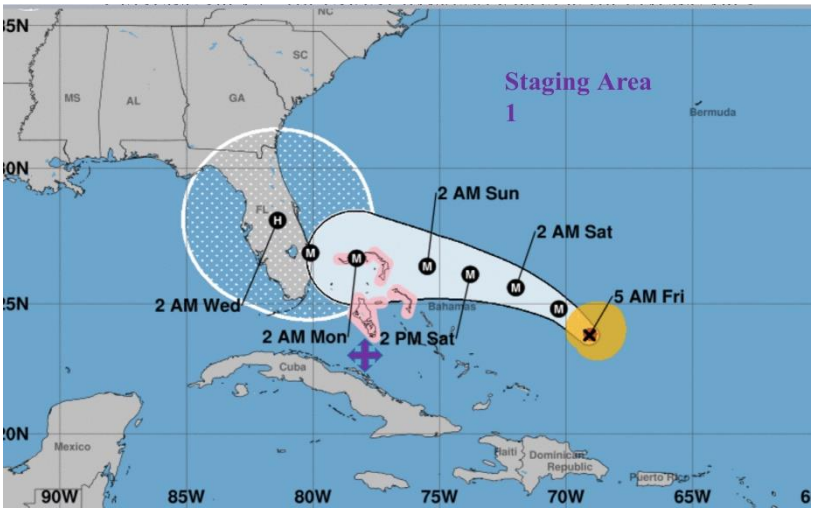
Third Trigger

- Any system with a chance of 50% or greater, that has the potential of impacting our territorial waters within 48 hours, automatically triggers the following action:

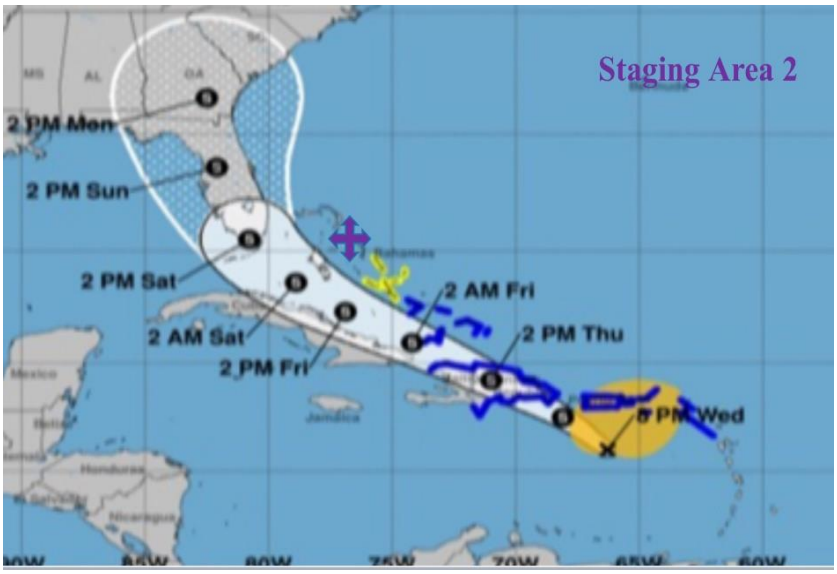
  - All ships are deployed to Avoidance Staging Area:

Staging Areas

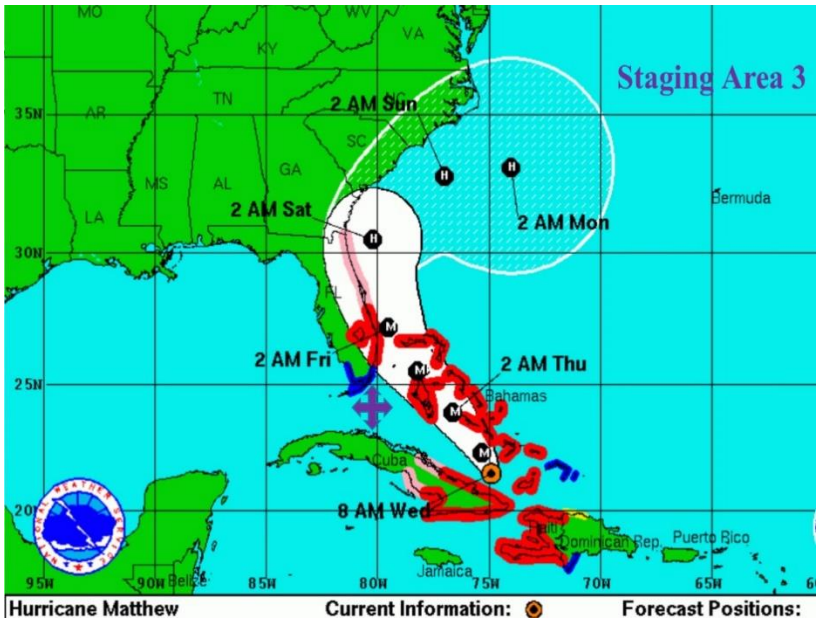
Staging Area 1:- The Hurricane Flats is the staging area for any system predicting a track to the Northeast Bahamas (diagram1).



Staging Area 2:- Freeport/Eastern Bahamas is the staging area for any system predicting a track to the west/Northwest.



Staging Area 3:- Cay sal banks, is the staging area for any system predicting a track through the center of the Bahamas



Actions Post Storm

- ❖ All vessels with supplies and impact teams proceed to affected Island/Islands as directed.

- ❖ All other vessels are to return to CHB, to prepare for sustained operational support.

Responsibilities

Commander of Operations:

a. Shall serve as the facilitator of the Operations Planning Meeting (OpsPM). The meeting shall consist of the Commander of Operations (COPs), the Squadron Commanding Officer (SCO), the Officer in Tactical Command (OTC) the Commanding Officers (CO), the Base Supply Officer (BSO), the Commander Communications Branch (CCB), the Base Executive Officer (BXO) the Commanding Officer of the Disaster Management Response Unit (CODMRU), and a representative from the Metrological Office (MET).

b. Shall conduct an evaluation of the potential system, to determine and coordinate the appropriate Course of Action (COA) from the OpsPM.

c. Shall prepare to brief the Commander Defence Force (CDF) within two (2) hours after completing the OpsPM or when required by the CDF.

d. Shall ensure that key actions are taken as necessary in accordance with the appropriate trigger.

e. Shall conduct an After Action Review (AAR) of the HAP

Squadron Commanding Officer:

a. Shall ensure that non-operational vessels are secured according Captain Coral Harbour (CCH) Hurricane Orders (Annex A Hurricane Order 2020 Berthing Plan),

b. That HAP orders are produced and delivered to the OTC and the COs.

c. That all crafts adhere to the guidelines laid out in this policy in respect to the actions taken at the appropriate triggers.

Officer in Tactical Command:

a. Is to assume command of the convoy implementing the HAP to ensure safe transit of vessels and crews.

b. To ensure that all COs adhere to this policy as briefed in accordance with the SCO HAP orders.

Commanding Officers:

a. Ensure that their crews and craft are prepared to deploy for HAP in accordance with this policy

Base Supply Officer:

a. To ensure that all assets are sufficiently victualed to be deployed for HAP in accordance with this policy.

Commander Communication Branch:

a. To ensure that communication suite throughout the convoy is operational in accordance with the RBDF Maritime NET (Annex B), so that communications is maintained with all crafts throughout the HAP

Base Executive Officer:

a. To ensure that Impact Teams are deployed in accordance with CCH hurricane orders.

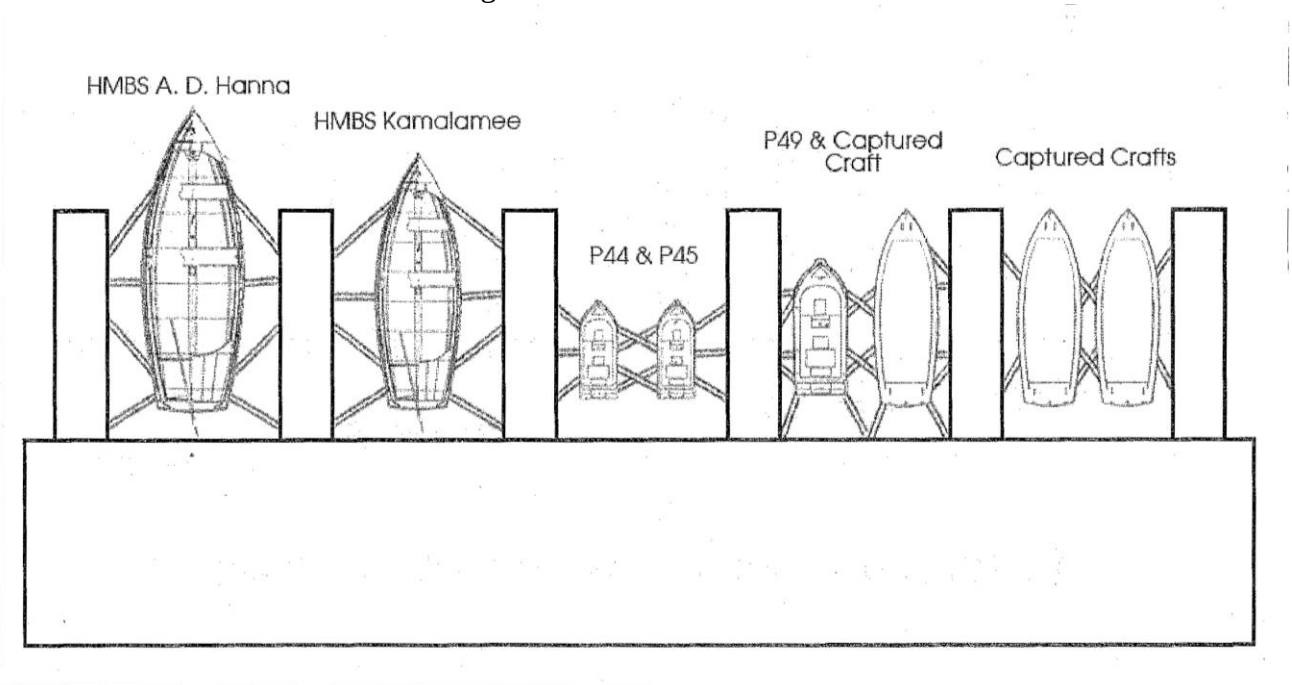
Commanding Officer Disaster Management Response Unit:

a. To ensure that DMRU supplies and equipment are coordinated and delivered so that the convoy can deploy in accordance with this policy.

The threat of a hurricane is an annual constant within the RBDF, for many years, the organization continued to manage this threat to maintain safety of its personnel and assets. The intent of this policy is to ensure that the threat of an impending hurricane is properly mitigated.

Annex

A: Hurricane Order 2020 Berthing Plan



B: RBDF Maritime Net