National Defense Reserve Fleet (NDRF) Disaster Relief Capabilities

The Maritime Administration's (MARAD) NDRF program has the capability to support emergency operation efforts in anticipation of natural or hostile disasters. In coordination with the Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA), support from NDRF/Ready Reserve Force (RRF) ships can be arranged with Department of Defense (DOD) concurrence as per the RRF MOA. USTRANSCOM, as a supporting command to USNORTHCOM, may desire to utilize this sealift capability for homeland disaster response to support DHS requirements. The following provides a brief outline of response capability:

Emergency Safe-Store (**SafeStor**): RRF Roll-on Roll-off ships located in port facilities remain at their locations for long periods and have reduced crews that can load vehicles and trailers into the cargo spaces with very little notice. Typically, this capability is used by local government emergency management organizations to ensure their vehicles, boats, and skid mounted helicopters can ride out a storm.

The concept of using RRF ships for sheltering emergency workers and disaster recovery groups was greatly expanded after Hurricane Katrina in 2005. The RRF ships CAPE KENNEDY and CAPE KNOX rode-out the storm in New Orleans and were quickly seen as an asset after the storm passed. The Port made its headquarters there for a long time and relief workers were supported too. An additional seven ships were moved to the area and used for similar purposes. See the MARAD video, *Danger and Opportunity: Hurricane Recovery Support* by clicking <u>HERE.</u>

Shortly after Katrina, Hurricane Rita underlined the value of a safe haven for emergency workers and their vehicles when the CAPE VINCENT and CAPE VICTORY were used to protect critical items from storm damage in Beaumont, Texas. By the time the storms of 2008 came, several communities were focused on the abilities of the RRF ships located in their ports and they were used again in Beaumont, in Charleston, and in Galveston.

Emergency Messing and Berthing: Limited by the supply of food provisions, RRF ships and State Maritime school training ships can provide bunks and provisions for those in need. Berthing can be expanded with the use of cots and trailer homes. Additional provisions and water can also be brought on the vessel. In the case of an extreme emergency, they can take persons aboard and provide comfortable berthing.

Follow-on Messing and Berthing: Ships can be activated within 2 to 4 days from non-affected locations and transit to the affected areas. School training ships are especially suited for this mission. For example, the EMPIRE STATE, from the State University of New York Maritime College could provide 625 berthing spaces.

Follow-on Cargo Deliveries: Numerous RRF ships can be activated to provide relief supplies to an affected area. These vessels can carry vehicles that can be loaded with supplies and then delivered to remote areas. They can also carry heavy equipment that can be used to clear debris and restore the road infrastructure. Additional emergency service vehicles can be delivered for firefighting and emergency medical assistance too.

Follow-on Port Restoration: Some RRF ships have the ability to act as cargo transfer platforms to restore a port's cargo handling equipment if it is inoperable. These "Crane Ships" go along side a terminal and cargo ships are secured outboard. The cranes reach over the cargo ship to deliver the cargo to the pier.

2008 Hurricane NDRF Ship Usage (Gustav – Hanna – Ike)

As Hurricane Gustav approached the US East and Gulf Coast, NDRF/RRF ships and school training ships remained on alert. The Maritime Administration activated the Maritime Command Center in Washington and their regional counterparts. The Maritime Administration reviewed plans to assist the Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA) and prepared to activate vessels for relief operations and for chartering commercial vessels if necessary.

As Gustav got closer to land fall, the City of Beaumont, the local U.S. Coast Guard, and the Army Corps of Engineers requested that their vehicles and boat trailers be moved on to the RRF vessel CAPE VINCENT (SafeStor). The ship is moored at a hurricane strengthened layberth in the port of Beaumont, TX that is designed to protect ships during storms. USTRANSCOM approved the request and on August 29, the Coast Guard started moving aboard. They finished on September 1 just before Gustav hit Louisiana near Morgan City. They learned in 2005 after Hurricane Rita that a ship is a good place to be during this type of an event.

Even though Gustav hit near New Orleans, the CAPE KENNEDY and CAPE KNOX, which are located there, were not affected. However, they prepared for hurricane force winds and were ready to provide SafeStor capability for local emergency responders as well.

On September 2, as Tropical Storm Hanna approached the East Coast, the Charleston County Sheriff's Department requested protection for their emergency equipment. Later, the South Carolina Dept. of Natural Resources and the Federal Law Enforcement Training Center requested assistance too. They were aware of the protection capability afforded by RRF ships during planning discussions and knew the ships in the old Charleston Naval Ship Yard were available. Approvals were given and the CAPE EDMONT was designated as the SafeStor vessel. Approximately 30 vehicles and trailered boats from the Charleston, SC Sheriff's Dept and other Federal, state, and local law enforcement agencies moved aboard the CAPE EDMONT at the MARAD RRF ROS layberth in Charleston. Even though Hanna failed to strengthen and moved north, the real-event exercise was valuable and is expected to be repeated for future storms.

Just hours before the forecasted landfall of Hurricane Ike, the City of Beaumont, Texas, Jefferson County Texas, and the U.S. Coast Guard loaded over 140 vehicles including 8 ambulances, 19 boats and 3 helicopters on board the CAPE VINCENT. As wind speed increased, CAPE VINCENT and its sister ship CAPE VICTORY also provided a safe haven for over 160 emergency first responders, Coast Guard, and National Guard personnel. The emergency responders and their equipment safely rode out Hurricane Ike and by 10 AM on Saturday morning, they were able to off-load equipment from the vessel and begin Search and Rescue (SAR) operations. Both ships continued to support a 50-person Coast Guard SAR team and provide a home base for local government emergency response managers well after the storm left the area. A local newspaper reporter and photographer, from the Beaumont Enterprise, were on the CAPE VINCENT to cover the story and later published an article titled "First responder's wait for Ike aboard ship in Beaumont's port".

The CAPE TAYLOR, CAPE TEXAS, and CAPE TRINITY, moored in Houston, TX also provided support to local first responders and other local personnel by providing hot showers, hot meals and air conditioning.

<u>2010 NDRF Ship Usage</u> (Operation Unified Response – Haiti)

MARAD activated three (3) of its ships for relief operations in Haiti just after the earthquake on January 12, 2010.

- The HSV (High Speed Vessel) HUAKAI was used extensively shuttling between Florida or Guantanamo, Cuba to Port-au-Prince.
- The RRF ship CORNHUSKER STATE is a crane ship that was designed to recover a port facility's
 destroyed throughput capacity. It served that function, supported lighterage operations, provided
 potable water to various vessels, and served as the Coast Guard's Marine Transportation System
 Recovery Unit headquarters.
- The RRF ship CAPE MAY delivered JLOTS (Joint Logistics Over The Shore) equipment for establishing shallow water cargo operations. The vessel remained on station to assist in various ways, including providing potable water, limited meals and berthing for relief workers, and assisting with repairs to water craft with its 2,000-ton capacity barge elevator.

Other MARAD ships were on stand-by for activation orders including the five NDRF school ships, which have the capability to feed and berth hundreds of personnel.