

# Hurricane Relief From The Sea



## HURRICANE RELIEF FROM THE SEA

### SUMMARY OF OPTIONS

#### Option #1

Estimated cost to: Activate one (1) Cape L Class RO/RO now located at Wilmington, NC

ROS-10 to FOS	\$300,000 to	\$500,000
FOS 180 days (\$30,000* x 180)		5,400,000
Return to ROS-10	300,000 to	500,000
ROS-10 180 days (\$8,000 x 180) (Non hurricane season)		1,440,000
<b>Total</b>	<b>\$7,440,000 to</b>	<b>\$7,840,000**</b>

\*Includes crew wages, stores, regulatories, e.g. insurance, fuel, communication capabilities, misc. voyage repairs, other misc.repairs.

\*\*Does not include cost of relief supplies/equipment and cost to load/unload vessels as case may be.

#### Option #2

Same as Option #1 but with additional relief features added to vessel.

Reverse Osmosis Purification Unit (1)	\$500,000
Industrial Ice Maker (1)	500,000
Diesel generator (1 set)	1,000,000
Additional berth and messing (30 persons)	500,000
Media Center	500,000
Helicopter Deck	<u>1,000,000</u>
<b>Sub total</b>	<b>\$ 4,000,000</b>

Activation, deactivation, operating costs, and ROS-10 for 180 days non-hurricane season

Total cost \$11,440,000 to \$11,840,000

#### Option #3

Activate two (2) Class L RO/ROs. Preload and pre-position one ship on the Atlantic coast and one ship on Gulf coast.

Without additional features	\$14,880,000 to \$15,680,000
With additional features	\$22,880,000 to \$23,680,000

#### Option #4

Conclude agreement with DoD to transfer two RRF RO/ROs in ROS-5 or 10 status to sponsoring relief agency for six month hurricane season. Sponsoring agency would assume fiscal responsibility for that period. Ships would be preloaded and pre-positioned, one on Atlantic and one on Gulf coast. No relief features added to vessel. Activation/deactivation costs responsibility of sponsoring agency. Assumption is that vessels would not be Class L RO/RO but that activation/deactivation costs would be same as Class L RO/RO. Vessels returned to DoD control as per agreement with Marad at end of hurricane season.

Total cost \$12,000,000 to \$12,800,000

#### Option #5

Pair two (2) state maritime academy training ships with options #3 or #4. Cost to bring vessels to hurricane relief ship status and return to state control is estimated to be \$700,000 per ship, or total of \$1,400,000. No relief features added. Vessels not pre-loaded. Vessels remain under control of maritime academies until activated by Secretary of Transportation.

\$1,400,000 would be added to cost of options #3 and #4

#### Option #6

Contract for contingency use of two (2) cruise ships. One ship on Atlantic coast and one ship on Gulf coast. Contract activated at discretion of relief from the sea sponsoring agency. No estimate of contract cost. Above options assume FOS for a hurricane relief vessel(s) for the 180 day hurricane season. Sponsoring agency would, however, have discretion to maintain vessel(s) in less than FOS, e.g. ROS 2-5. Keeping vessel(s) in less than FOS would, on the one hand, significantly decrease vessel operating costs, while on the other hand, increase vessel(s) response time.

“Hurricane Relief From The Sea” and Hurricane Relief From The Sea-Options” can be viewed at the Strom Thurmond Institute web site ([www.strom.clemson.edu](http://www.strom.clemson.edu)).