



U.S. Department  
of Transportation

# **Maritime Administration**

**Ship Characteristics**

**Ready Reserve Force**

**Training Ships**

**Special Mission Ships**

**Retention Ships**

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## **RRF**

The Ready Reserve Force (RRF) was created in 1976 as a subset of the Maritime Administration's National Defense Reserve Fleet (NDRF) program to support the rapid worldwide deployment of U.S. military forces. As a key element of Department of Defense (DOD) strategic sealift, the RRF primarily supports transport of Army and Marine Corps unit equipment, combat support equipment, and initial resupply during the critical surge period before commercial ships can be marshaled. The RRF provides nearly one-half of the government-owned surge sealift capability. Management of the RRF program is defined by a Memorandum of Agreement (MOA) between DOD and the Department of Transportation. Reliability is 100% on-time activation of mission-ready ships and 180 days of operation without a major casualty. This booklet advertises the official capabilities of the RRF. The current layberth location of all RRF vessels can be found at: [http://www.marad.dot.gov/wp-content/uploads/pdf/Current\\_RRF\\_Locations.pdf](http://www.marad.dot.gov/wp-content/uploads/pdf/Current_RRF_Locations.pdf)

## **TRAINING SHIPS**

The training ships are also part of the NDRF program and are loaned to the U.S. Merchant Marine Academy, six U.S. State Maritime Academies, and the Seafarer's Harry Lundeberg School of Seamanship. Future mariners practice seamanship skills on the ships moored at the campuses and take them to sea for training cruises throughout the year. Because of their large personnel support capacity, these ships may be considered for use during humanitarian assistance / disaster relief. When on a mission assignment for disaster relief, an alternative training platform may be provided.

## **SPECIAL MISSION / RETENTION SHIPS**

Retention ships in the NDRF program can be activated for special missions. These vessels are mostly former RRF ships that are kept in deep lay-up, preserved for potential future use by government agencies. Estimates for activation times and costs can be provided, but vary greatly. Currently, two NDRF vessels are assigned as special mission ships for the Missile Defense Agency (MDA).



## UNIQUE CAPABILITIES

**Aviation Platform:** *CURTISS* and *WRIGHT* have military-capable helicopter decks that can support most military helicopters. The FSS, *CAPE Rs* and *CAPE Vs* can be certified for daytime VFR helicopter operations with reasonable upgrades. Nearly all RRF ships can support helicopter operations (hover-only) as per USCG regulations. *CURTISS* and *WRIGHT* are being evaluated for V-22 operations.

**Containerized Ammunition Capabilities:** *GEM STATE*, *GRAND CANYON STATE* and *KEYSTONE STATE* each have the capacity to carry up to 480 TEUs of ammunition.

**In-Stream Ramps:** *CAPE Rs* and *BELLATRIX* have ramps designed for in-stream use certified by ABS. *CAPE TRINITY* has an approved capability only when using the installed in-stream ramp monitoring system.

**Lashing Gear:** Lashing gear for securing vehicles, containers and other cargo is carried aboard all MARAD RRF ships. Additional lashing gear is available from the MARAD Shore-based Spares system.

**MARAD Command Center (MCC):** The MCC is capable of communications via e-mail, telephone, fax, teleconference, and video teleconference (VTC) at both unclassified and classified levels (up to Secret).

**Nautical Systems 5 (NS5):** MARAD RRF vessels use NS5, a commercial off-the-shelf software suite that provides integrated maintenance and logistics support. Each ship is outfitted with a server, client workstations, and a database for processing transactions. On a scheduled basis, the transaction data is replicated via Secure File Transfer Protocol (SFTP) to MARAD's NS5 central database and subsequently pushed back out to all of the applicable sites to update their respective databases.

## UNIQUE CAPABILITIES

**Oversized / Overheight Internal Cargo Capacity** The CAPE Rs and CAPE Hs are capable of carrying oversized / overheight cargo internally. CAPE RACE and CAPE HENRY have been specifically modified to carry V-22 Ospreys internally.

**SafeStor:** In the event of an impending natural disaster, RRF vessels may be used to pre-stage local or regional emergency vehicles onboard. This is a "last measure" effort to securely store these vehicles and related emergency equipment and allows their immediate use once a safe environment is regained. This capability is known as "SafeStor." SafeStor as a preventative measure is a local emergency response that requires in-the-field planning to ensure equipment compatibility with vessel's safe loading procedures and heavy weather mooring arrangements. SafeStor does not require vessel activation or movement. MARAD will consult with U.S. Transportation Command (USTRANSCOM) on all SafeStor requests to ensure there is no planned DOD use of the RRF vessel. MARAD will secure liability waivers for damage or loss of emergency response equipment or personnel seeking shelter onboard the RRF vessels.

**Specialized Missions:** RRF and NDRF vessels are able to serve as platforms for highly-specialized military as well as non-military missions. The RRF and NDRF have supported the Organisation for the Prohibition of Chemical Weapons and the U.S. Army Edgewood Chemical Biological Center, the Federal Emergency Management Agency, the U.S. Agency for International Development, and a variety of state and local governments. MARAD has been able to leverage RRF vessels' unique characteristics, such as high berthing capacity and long-term availability. Vessels have also undergone modifications in order to meet specific mission requirements.

## Maritime Administration: Ready Reserve Force

### ADM CALLAGHAN Class

### ROS-5

Ship	Location	Built
ADMIRAL W. M. CALLAGHAN	Alameda, CA	1967



Vessel Type.....	RO-RO
Length Overall.....	694.3 FT
Beam.....	92.0 FT
Draft (Summer LL).....	29.1 FT
Displacement (Summer LL).....	26,648 LT
Lightship Displacement.....	13,148 LT
Total DWT (Summer LL).....	13,500 LT
Gross Tonnage.....	24,471
Net Tonnage.....	11,505
Engine Type.....	Gas Turbine
Crew / Supercargo / Total Persons Allowed.....	28 / 12 / 40
RRF Speed - Max.....	23 KTS*
RRF Speed - Contract / Economical.....	21.3 / 11 KTS
Cargo Capacity.....	141,843 SQFT
Fuel Type.....	MGO
Fuel Consumption At Sea - Max.....	178 MT per day
Fuel Consumption - Contract / Economical.....	155 / 37 MT per day
Fuel Consumption In Port.....	6 MT per day
Ramp Capacity.....	55.8 LT
Country Built.....	United States

## Maritime Administration: Ready Reserve Force

### CAPE D Class

### ROS-5

Ship	Location	Built
CAPE DECISION	Charleston, SC	1973
CAPE DIAMOND	Charleston, SC	1972
CAPE DOMINGO	Charleston, SC	1973
CAPE DOUGLAS	Charleston, SC	1973
CAPE DUCATO	Charleston, SC	1972



Vessel Type.....	RO-RO
Length Overall.....	680.4 FT
Beam.....	97.0 FT
Draft (Summer LL).....	31.5 FT
Displacement (Summer LL).....	34,617 LT
Lightship Displacement.....	13,220 LT
Total DWT (Summer LL).....	21,397 LT
Gross Tonnage.....	13,083
Net Tonnage.....	9,129
Engine Type.....	Medium Speed Diesel
Crew / Supercargo / Total Persons Allowed.....	29 / 16 / 45
CAPE DUCATO.....	26 / 16 / 42
RRF Speed - Max.....	17.1 KTS *
RRF Speed - Contract / Economical.....	16.2 / 14 KTS
Cargo Capacity.....	167,339 SQFT
TEU Capacity.....	378
Fuel Type.....	MGO
Fuel Consumption At Sea - Max.....	85 MT per day
Fuel Consumption - Contract / Economical.....	66 / 66 MT per day
Fuel Consumption In Port.....	8 MT per day
Ramp Capacity.....	DIAMOND, DOMINGO 128 LT DECISION, DUCATO, DOUGLAS 65 LT
Country Built.....	Sweden / France

## Maritime Administration: Ready Reserve Force

### CAPE E Class

### ROS-5

**Ship**  
CAPE EDMONT

**Location**  
Charleston, SC

**Built**  
1971



Vessel Type.....	RO-RO
Length Overall.....	652.9 FT
Beam.....	94.0 FT
Draft (Summer LL).....	31.5 FT
Displacement (Summer LL).....	32,516 LT
Lightship Displacement.....	12,533 LT
Total DWT (Summer LL).....	19,983 LT
Gross Tonnage.....	12,902
Net Tonnage.....	7,373
Engine Type.....	Medium Speed Diesel
Crew / Supercargo / Total Persons Allowed.....	28 / 16 / 44
RRF Speed - Max.....	17.1 KTS *
RRF Speed - Contract / Economical.....	16.2 / 14 KTS
Boom SWL.....	35 T
Cargo Capacity.....	161,372 SQFT
TEU Capacity.....	446
Fuel Type.....	MGO
Fuel Consumption At Sea - Max.....	85 MT per day
Fuel Consumption - Contract / Economical.....	66 / 66 MT per day
Fuel Consumption In Port.....	8 MT per day
Ramp Capacity.....	128 LT
Country Built.....	Sweden

## Maritime Administration: Ready Reserve Force

### CAPE H Class

### ROS-5

Ship	Location	Built
CAPE HENRY	Alameda, CA	1979
CAPE HORN	San Francisco, CA	1979
CAPE HUDSON	San Francisco, CA	1979



Vessel Type.....	RO-RO
Length Overall.....	749.7 FT
Beam.....	105.8 FT
Draft (Summer LL).....	35.5 FT
Displacement (Summer LL).....	51,829 LT
Lightship Displacement.....	15,000 LT
Total DWT (Summer LL).....	31,929 LT
Gross Tonnage.....	37,812
Net Tonnage.....	28,397
Engine Type.....	Slow Speed Diesel
Crew / Supercargo / Total Persons Allowed .....	28 / 12 / 40
CAPE HENRY .....	29 / 12 / 41
RRF Speed - Max.....	18.5 KTS *
RRF Speed - Contract / Economical.....	17.4 / 14.5 KTS
Boom SWL.....	39 T
Cargo Capacity.....	214,365 SQFT
TEU Capacity.....	HENRY 679 / HORN 629 / HUDSON 662
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	99 MT per day
Fuel Consumption - Contract / Economical.....	80 / 50 MT per day
Fuel Consumption In Port.....	8 MT per day
Ramp Capacity.....	178 LT
Country Built.....	Japan / Norway

## Maritime Administration: Ready Reserve Force

### CAPE I Class

### ROS-5

Ship	Location	Built
CAPE INSCRIPTION	Long Beach, CA	1976
CAPE INTREPID	Tacoma, WA	1976
CAPE ISABEL	Long Beach, CA	1976
CAPE ISLAND	Tacoma, WA	1976



Vessel Type.....	RO-RO
Length Overall.....	684.8 FT
Beam.....	102.0 FT
Draft (Summer LL).....	34.0 FT
Displacement (Summer LL).....	36,027 LT
Lightship Displacement.....	16,072 LT
Total DWT (Summer LL).....	19,955 LT
Gross Tonnage.....	23,382
Net Tonnage.....	17,021
Engine Type.....	Steam Turbine
Crew / Supercargo / Total Persons Allowed.....	26 / 14 / 40
RRF Speed - Max.....	20.5 KTS *
RRF Speed - Contract / Economical.....	18.9 / 18.5 KTS
Cargo Capacity .....	149,088 SQFT
TEU Capacity.....	(Empty Containers on Tier 3 only)....345
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	122 MT per day
Fuel Consumption - Contract / Economical.....	109 / 95 MT per day
Fuel Consumption In Port.....	24 MT per day
Ramp Capacity.....	100 LT
Country Built.....	United States



## Maritime Administration: Ready Reserve Force

### CAPE K Class

### ROS-5

Ship	Location	Built
CAPE KENNEDY	New Orleans, LA	1979
CAPE KNOX	New Orleans, LA	1979



Vessel Type.....	RO-RO
Length Overall.....	695.8 FT
Beam.....	105.8 FT
Draft (Summer LL).....	35.2 FT
Displacement (Summer LL).....	44,480 LT
Lightship Displacement.....	15,723 LT
Total DWT (Summer LL).....	28,757 LT
Gross Tonnage.....	21,145
Net Tonnage.....	11,698
Engine Type.....	Slow Speed Diesel
Crew / Supercargo / Total Persons Allowed.....	27 / 13 / 40
RRF Speed - Max.....	17.6 KTS *
RRF Speed - Contract / Economical.....	16.6 / 16.6 KTS
Cargo Capacity.....	146,895 SQFT
TEU Capacity.....	717
Fuel Type.....	IFO-180
Fuel Consumption At Sea — Max.....	87 MT per day
Fuel Consumption - Contract / Economical.....	74 / 74 MT per day
Fuel Consumption In Port.....	8 MT per day
Ramp Capacity.....	196.8 LT
Country Built.....	Japan



## Maritime Administration: Ready Reserve Force

### CAPE O Class

### ROS-5

#### Ship

CAPE ORLANDO

#### Location

Alameda, CA

#### Built

1981



Vessel Type.....	RO-RO
Length Overall.....	635.3 FT
Beam.....	91.9 FT
Draft (Summer LL).....	30.2 FT
Displacement (Summer LL).....	32,799 LT
Lightship Displacement.....	12,395 LT
Total DWT (Summer LL).....	20,404 LT
Gross Tonnage.....	15,623
Net Tonnage.....	8,856
Engine Type.....	Slow Speed Diesel
Crew / Supercargo / Total Persons Allowed.....	33 / 12 / 45
RRF Speed - Max.....	18.5 KTS
RRF Speed - Contract / Economical.....	17 / 16.2KTS
Cargo Capacity .....	118,780 SQFT
TEU Capacity.....	302
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	75 MT per day
Fuel Consumption - Contract / Economical.....	60 / 60 MT per day
Fuel Consumption In Port.....	6 MT per day
Ramp Capacity.....	(Twin Slewing Stern Ramps) 91.6 LT each
Country Built.....	Sweden

## Maritime Administration: Ready Reserve Force

### CAPE R Class

### ROS-5

Ship	Location	Built	Converted
CAPE RACE	Portsmouth, VA	1977	1999
CAPE RAY	Portsmouth, VA	1977	1999
CAPE RISE	Portsmouth, VA	1977	1999



Vessel Type.....	RO-RO
Length Overall.....	647.9 FT
Beam.....	105.6 FT
Draft (Summer LL).....	32.7 FT
Displacement (Summer LL).....	35,358 LT
Lightship Displacement.....	12,872 LT
Total DWT (Summer LL).....	28,830 LT
Gross Tonnage.....	31,236
Net Tonnage.....	9,370
Engine Type.....	Medium Speed Diesel
Crew / Supercargo / Total Persons Allowed.....	35 / 13 / 48
CAPE RISE.....	36 / 12 / 48
RRF Speed - Max.....	19 KTS
RRF Speed - Contract / Economical.....	18 / 16.6 KTS
Cargo Capacity.....	176,313 SQFT
TEU Capacity.....	348
Fuel Type.....	MGO
Fuel Consumption At Sea - Max.....	97.8 MT per day
Fuel Consumption - Contract / Economical.....	81 / 81 MT per day
Fuel Consumption In Port.....	8 MT per day
Ramp Capacity.....	(In-stream Certified / Slewing) 160 LT
Country Built.....	Japan

## Maritime Administration: Ready Reserve Force

### CAPE T Class

### ROS-5

Ship	Location	Built	Converted
CAPE TAYLOR	Beaumont, TX	1977	1981



Vessel Type.....	RO-RO
Length Overall.....	633.9 FT
Beam.....	88.8 FT
Draft (Summer LL).....	28.3 FT
Displacement (Summer LL).....	26,455 LT
Lightship Displacement .....	12,141 LT
Total DWT (Summer LL).....	14,545 LT
Gross Tonnage.....	21,782
Net Tonnage.....	8,098
Engine Type.....	Medium Speed Diesel
Crew / Supercargo / Total Persons Allowed.....	31 / 16 / 47
RRF Speed - Max.....	16.2 KTS
RRF Speed - Contract / Economical.....	15.2 / 15.2 KTS
Cargo Capacity .....	115,619 SQ FT
TEU Capacity.....	348
Fuel Type.....	MGO
Fuel Consumption At Sea - Max.....	42 MT per day
Fuel Consumption - Contract / Economical.....	36 / 36 MT per day
Fuel Consumption In Port.....	5 MT per day
Ramp Capacity.....	(Slewing) 157.5 LT
Country Built.....	Japan

## Maritime Administration: Ready Reserve Force

### CAPE T Class

### ROS-5

Ship	Location	Built	Converted
CAPE TEXAS	Beaumont, TX	1977	1981
CAPE TRINITY	Beaumont, TX	1977	1981



Vessel Type.....	RO-RO
Length Overall.....	633.9 FT
Beam.....	88.8 FT
Draft (Summer LL).....	28.3 FT
Displacement (Summer LL).....	24,555 LT
Lightship Displacement .....	9,687 LT
Total DWT (Summer LL).....	14,864 LT
Gross Tonnage.....	21,782
Net Tonnage.....	6,534
Engine Type.....	Medium Speed Diesel
Crew / Supercargo / Total Persons Allowed.....	35 / 13 / 48
RRF Speed - Max.....	16.7 KTS
RRF Speed - Contract / Economical.....	15.7 / 15.7 KTS
Cargo Capacity .....	117,887 SQFT
TEU Capacity.....	346
Fuel Type.....	MGO
Fuel Consumption At Sea - Max.....	42 MT per day
Fuel Consumption - Contract / Economical.....	36 / 36 MT per day
Fuel Consumption In Port.....	5 MT per day
Ramp Capacity.....(Slewing / TRINITY - In-Stream Certified)	157.5 LT
Country Built.....	Germany

## Maritime Administration: Ready Reserve Force

### CAPE V Class

### ROS-5

Ship	Location	Built	Converted
CAPE VICTORY	Beaumont, TX	1984	1998
CAPE VINCENT	Beaumont, TX	1984	1998



Vessel Type.....	RO-RO
Length Overall.....	631.8 FT
Beam.....	86.9 FT
Draft (Summer LL).....	28.3 FT
Displacement (Summer LL).....	30,644 LT
Lightship Displacement.....	10,581 LT
Total DWT (Summer LL).....	20,063 LT
Gross Tonnage.....	22,425
Net Tonnage.....	11,811
Engine Type.....	Slow Speed Diesel
Crew / Supercargo / Total Persons Allowed.....	27 / 5 / 32
RRF Speed - Max.....	16 KTS
RRF Speed - Contract / Economical.....	15 / 15 KTS
Cargo Capacity.....	131,265 SQFT
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	52 MT per day
Fuel Consumption - Contract / Economical.....	44 / 44 MT per day
Fuel Consumption In Port.....	7 MT per day
Ramp Capacity.....	(Starboard Slewing) 178.6 LT
Country Built.....	Italy

## Maritime Administration: Ready Reserve Force

### CAPE W Class

### ROS-5

Ship	Location	Built
CAPE WASHINGTON	Baltimore, MD	1982
CAPE WRATH	Baltimore, MD	1982



Vessel Type.....	RO-RO
Length Overall.....	697.0 FT
Beam.....	105.6 FT
Draft (Summer LL).....	38.1 FT
Displacement (Summer LL).....	54,639 LT
Lightship Displacement.....	21,898 LT
Total DWT (Summer LL).....	33,374 LT
Gross Tonnage.....	51,960
Net Tonnage.....	13,863
Engine Type.....	Slow Speed Diesel
Crew / Supercargo / Total Persons Allowed.....	29 / 11 / 40
RRF Speed - Max.....	17 KTS*
RRF Speed - Contract / Economical.....	16 / 16 KTS
Cargo Capacity .....	295,958 SQFT
TEU Capacity.....	733
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	53 MT per day
Fuel Consumption - Contract / Economical.....	47 / 47 MT per day
Fuel Consumption In Port.....	4 MT per day
Ramp Capacity.....	Starboard 186 LT / Port 58 LT
Country Built.....	Poland



## Maritime Administration: Ready Reserve Force

### Fast Sealift Ship (FSS)

### ROS-5

Ship	Location	Built	Converted
ALTAIR	Marrero, LA	1973	1985
ANTARES	Baltimore, MD	1973	1984
POLLUX	Beaumont, TX	1973	1986



Vessel Type.....	RO-RO
Length Overall.....	946.0 FT
Beam.....	105.6 FT
Draft (Summer LL).....	36.8 FT
Displacement (Summer LL).....	54,910 LT
Lightship Displacement.....	29,316 LT
Total DWT (Summer LL).....	25,594 LT
Gross Tonnage.....	24,471
Net Tonnage.....	17,895
Engine Type.....	Steam Turbine
Crew / Supercargo / Total Persons Allowed.....	62 / 12 / 74
ANTARES.....	58 / 12 / 70
RRF Speed - Max.....	30 KTS*
RRF Speed - Contract / Economical.....	27 / 22.5 KTS
Cargo Capacity .....	199,362 SQFT
TEU Capacity.....	733
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	458 MT per day
Fuel Consumption - Contract / Economical.....	383 / 230 MT per day
Fuel Consumption In Port.....	24 MT per day
Ramp Capacity.....	(Port/Starboard Side Ramps) 90 LT
POLLUX.....	72 LT
Country Built.....	Germany

## Maritime Administration: Ready Reserve Force

### Fast Sealift Ship (FSS)

### ROS-5

Ship	Location	Built	Converted
ALGOL	Alameda, CA	1972	1984
BELLATRIX	Marrero, LA	1973	1984
REGULUS	Beaumont, TX	1973	1985



Vessel Type.....	RO-RO
Length Overall.....	946.1 FT
Beam.....	105.5 FT
Draft (Summer LL).....	36.7 FT
Displacement (Summer LL).....	55,136 LT
Lightship Displacement.....	29,888 LT
Total DWT (Summer LL).....	25,248 LT
Gross Tonnage.....	14,349
Net Tonnage.....	12,693
Engine Type.....	Steam Turbine
Crew / Supercargo / Total Persons Allowed.....	ALGOL..... 42 / 32 / 74
	BELLATRIX..... 62 / 12 / 74
	REGULUS.....47 / 12 / 59
RRF Speed - Max.....	30 KTS*
RRF Speed - Contract / Economical.....	27 / 22.5 KTS
Cargo Capacity.....	203,000 SQFT
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	458 MT per day
Fuel Consumption - Contract / Economical.....	383 / 230 MT per day
Fuel Consumption In Port.....	24 MT per day
Ramp Capacity.....	(Port / Starboard Side Ramps) 90 LT
Country Built.....	Netherlands / Germany



## Maritime Administration: Ready Reserve Force

### Fast Sealift Ship (FSS)

### ROS-5

Ship	Location	Built	Converted
CAPELLA	Alameda, CA	1972	1984
DENEBOLA	Baltimore, MD	1973	1985



Vessel Type.....	RO-RO
Length Overall.....	946.1 FT
Beam.....	105.5 FT
Draft (Summer LL).....	36.8 FT
Displacement (Summer LL).....	55,560 LT
Lightship Displacement.....	30,154 LT
Total DWT (Summer LL).....	25,406 LT
Gross Tonnage.....	48,143
Net Tonnage.....	12,693
Engine Type.....	Steam Turbine
Crew / Supercargo / Total Persons Allowed.....	CAPELLA..... 42 / 32 / 74
	DENEBOLA..... 47 / 24 / 71
RRF Speed - Max.....	30 KTS*
RRF Speed - Contract / Economical.....	27 / 22.5 KTS
Cargo Capacity .....	206,963 SQFT
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	458 MT per day
Fuel Consumption - Contract / Economical.....	383 / 230 MT per day
Fuel Consumption In Port.....	24 MT per day
Ramp Capacity.....	(Port/Starboard Side Ramps) 90 LT
Country Built.....	Netherlands / Germany

## Maritime Administration: Ready Reserve Force

### OPDS Class - Tanker

### ROS-10

Ship	Location	Built	Converted
PETERSBURG	Alameda, CA	1963	1993



Vessel Type.....	Offshore Petroleum Discharge System (OPDS) Tanker
Length Overall.....	736.3 FT
Beam.....	102.0 FT
Draft (Summer LL).....	39.3 FT
Displacement (Summer LL).....	62,000 LT
Lightship Displacement.....	12,087 LT
Total DWT (Summer LL).....	49,905 LT
Gross Tonnage.....	27,469
Net Tonnage.....	19,500
Engine Type.....	Steam Turbine
Crew / Supercargo / Total Persons Allowed.....	41 / 12 / 53
RRF Speed - Max.....	14 KTS
RRF Speed - Contract / Economical.....	13.5 / 13.5 KTS
Petroleum Cargo Capacity.....	268,071 BBLS
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	64 MT per day
Fuel Consumption - Contract / Economical.....	58 / 58 MT per day
Fuel Consumption In Port.....	14 MT per day
Country Built.....	United States

## Maritime Administration: Ready Reserve Force

### T-ACS 1, 2, 3 - Crane Ship

### ROS-5

Ship	Location	Built	Converted
KEYSTONE STATE	Alameda, CA	1966	1987
GEM STATE	Alameda, CA	1966	1986
GRAND CANYON STATE	Alameda, CA	1965	1986



Vessel Type.....	Crane Ship
Length Overall.....	668.6 FT
Beam.....	76.0 FT
Draft (Summer LL).....	33.3 FT
Displacement (Summer LL).....	31,500 LT
Lightship Displacement.....	15,325 LT
Total DWT (Summer LL).....	16,175 LT
Gross Tonnage.....	17,128
Net Tonnage.....	12,080
Engine Type.....	Steam Turbine
Crew / Supercargo / Total Persons Allowed.....	38 / 32 / 70
RRF Speed - Max.....	18 KTS*
RRF Speed - Contract / Economical.....	17 / 12.5 KTS
Crane SWL.....(In-stream) Single - 30LT / Twin - 60LT / Quad - 120LT	
Cargo Capacity.....	1,015,000 CU FT Bale
TEU (Below Deck) ..KEYSTONE 287 / GEM & GRAND CANYON...	280
TEU (Ammunition) .....	480
TEU (Other Cargo).....	584
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	96.4 MT per day
Fuel Consumption - Contract / Economical.....	56 / 32 MT per day
Fuel Consumption In Port.....	11 MT per day
Country Built.....	United States

## Maritime Administration: Ready Reserve Force

### T-ACS 4, 5, 6 - Crane Ship

### ROS-5

<b>Ship</b>	<b>Location</b>	<b>Built</b>	<b>Conv</b>
GOPHER STATE	Newport News, VA	1973	1987
FLICKERTAIL STATE	Newport News, VA	1969	1988
CORNHUSKER STATE	Newport News, VA	1969	1988



Vessel Type.....	Crane Ship
Length Overall.....	610.0 FT
Beam.....	78.0 FT
Draft (Summer LL).....	31.6 FT
Displacement (Summer LL).....	26,670 LT
Lightship Displacement.....	13,710 LT
Total DWT (Summer LL).....	12,911 LT
Gross Tonnage.....	17,932
Net Tonnage.....	12,460
Engine Type.....	Steam Turbine
Crew / Supercargo / Total Persons Allowed.....	35 / 35 / 70
FLICKERTAIL STATE.....	17 / 51 / 68
CORNHUSKER STATE.....	41 / 27 / 69
RRF Speed - Max.....	18.5 KTS*
RRF Speed - Contract / Economical.....	17 / 15 KTS
Crane SWL.....	Single 36 LT / Twin 72 LT / Quad 144 LT
Cargo Capacity.....	945,200 CU FT Bale
TEU (Above/Below Deck).....	194 / 501
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	93.5 MT per day
Fuel Consumption - Contract / Economical.....	69 / 50 MT per day
Fuel Consumption In Port.....	13 MT per day
Country Built.....	United States

## Maritime Administration: Ready Reserve Force

### T-AVB Class - Aviation Support

### ROS-5

Ship	Location	Built	Converted
CURTISS	San Diego, CA	1969	1986
WRIGHT	Baltimore, MD	1970	1986



Vessel Type.....	Aviation Logistics Support
Length Overall.....	602.0 FT
Beam.....	90.0 FT
Draft (Summer LL).....	30.0 FT
Displacement (Summer LL).....	23,800 LT
Lightship Displacement.....	14,329 LT
Total DWT (Summer LL).....	15,694 LT
Gross Tonnage.....	23,255
Net Tonnage.....	14,436
Engine Type.....	Steam Turbine
Crew / Supercargo / Total Persons Allowed.....	41 / 325 / 366
RRF Speed - Max.....	20 KTS*
RRF Speed - Contract / Economical.....	18.7 / 15 KTS
Boom SWL.....	70 LT
Cargo Capacity.....	158,305 SQFT
TEU Capacity (IMA Mode).....	684
TEU Capacity (MF 52 Access).....	300
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	107 MT per day
Fuel Consumption - Contract / Economical.....	93 / 69 MT per day
Fuel Consumption In Port.....	17 MT per day
Country Built.....	United States



## Maritime Administration: Ready Reserve Force

### CAPE M Class - SEABEE

### ROS-5

Ship	Location	Built
CAPE MAY	Norfolk, VA	1972
CAPE MOHICAN	Alameda, CA	1973



Vessel Type.....	SEABEE Barge Carrier
Length Overall.....	873.8 FT
Beam.....	105.8 FT
Draft (Summer LL).....	39.1 FT
Displacement (Summer LL).....	57,290 LT
Lightship Displacement.....	18,880 LT
Total DWT (Summer LL).....	38,410 LT
Gross Tonnage.....	21,670
Net Tonnage.....	12,130
Engine Type.....	Steam Turbine
Crew / Supercargo / Total Persons Allowed.....	40 / 10 / 50
RRF Speed - Max.....	18.0 KTS
RRF Speed - Contract / Economical.....	16.8 / 14 KTS
Cargo Capacity.....	117,786 SQ FT
Barge Complement.....	24
Elevator Capacity.....	2,000 LT
Fuel Type.....	IFO-180
Fuel Consumption At Sea - Max.....	140 MT per day
Fuel Consumption - Contract / Economical.....	125 / 92 MT per day
Fuel Consumption In Port.....	23 MT per day
Country Built.....	United States

## Maritime Administration: Training Ship

### KINGS POINTER - Training Ship

<b>Location</b>	<b>Built</b>	<b>Converted</b>
U.S. Merchant Marine Academy Kings Point, New York	1981	2013



Vessel Type.....	Training Ship
Length Overall.....	175.0 FT
Beam.....	37.0 FT
Draft (Summer LL).....	12.8 FT
Displacement (Summer LL).....	1,157 LT
Lightship Displacement.....	667 LT
Total DWT (Summer LL).....	935 LT
Gross Tonnage.....	484
Net Tonnage.....	387
Engine Type.....	Diesel
Fuel Type .....	MDO
Maximum Range.....	6,000nm at 10 KTS
NDRF Maximum Speed.....	15 KTS
Crew Size/No. of Cadets/Maximum Onboard.....	11 / 39 / 50
Country Built.....	United States

## Maritime Administration: Training Ship

### EMPIRE STATE - Training Ship

<b>Location</b>	<b>Built</b>	<b>Converted</b>
State University of New York (SUNY) Maritime College Fort Schuyler, The Bronx, New York	1962	1989



Vessel Type.....	Training Ship
Beam.....	76.0 FT
Length Overall.....	565.0 FT
Draft (Summer LL).....	25.0 FT
Displacement (Summer LL).....	17,160 LT
Lightship Displacement.....	12,116 LT
Total DWT (Summer LL).....	5,044 LT
Gross Tonnage.....	14,557
Net Tonnage.....	4,367
Engine Type.....	Steam Turbine
Fuel Type .....	IFO-180
Maximum Range.....	14,000nm at 14.5 KTS
NDRF Maximum Speed.....	20 KTS
Crew Size/No. of Cadets/Maximum Onboard.....	122 / 666 / 788
Country Built.....	United States



## Maritime Administration: Training Ship

### FREEDOM STAR - Training Ship

<b>Location</b>	<b>Built</b>	<b>Converted</b>
Seafarer's Harry Lundeberg School Piney Point, Maryland	1981	2015



Vessel Type.....	Training Ship
Length Overall.....	175.0 FT
Beam.....	37.0 FT
Draft (Summer LL).....	12.8 FT
Displacement (Summer LL).....	1,157 LT
Lightship Displacement.....	667 LT
Total DWT (Summer LL).....	935 LT
Gross Tonnage.....	484
Net Tonnage.....	387
Engine Type.....	Diesel
Fuel Type .....	MDO
Maximum Range.....	6,000nm at 10 KTS
NDRF Maximum Speed.....	15 KTS
Crew Size/No. of Cadets/Maximum Onboard.....	11 / 39 / 50
Country Built.....	United States

## Maritime Administration: Training Ship

### GENERAL RUDDER - Training Ship

<b>Location</b>	<b>Built</b>	<b>Converted</b>
Texas Maritime Academy Galveston, Texas	1984	1992



Vessel Type.....	Training Ship
Length Overall.....	224.0 FT
Beam.....	43.0 FT
Draft (Summer LL).....	15.1 FT
Displacement (Summer LL).....	2,285 LT
Lightship Displacement.....	1,465 LT
Total DWT (Summer LL).....	2,280 LT
Gross Tonnage.....	1,914
Net Tonnage.....	574
Engine Type.....	Diesel Electric
Fuel Type .....	MGO
Maximum Range.....	28,000nm at 10 KTS
NDRF Maximum Speed.....	12 KTS
Crew Size/No. of Cadets/Maximum Onboard.....	15 / 50 / 65
Country Built.....	United States

## Maritime Administration: Training Ship

### GOLDEN BEAR - Training Ship

Location	Built	Converted
California Maritime Academy Vallejo, California	1989	1996



Vessel Type.....	Training Ship
Length Overall .....	499.8 FT
Beam.....	72.0 FT
Draft (Summer LL).....	30.1 FT
Displacement (Summer LL).....	16,293 LT
Lightship Displacement.....	9,809 LT
Total DWT (Summer LL).....	6,483 LT
Gross Tonnage.....	10,930
Net Tonnage.....	4,189
Engine Type.....	Medium Speed Diesel
Fuel Type .....	MGO
Maximum Range.....	42,000nm at 15 KTS
NDRF Maximum Speed.....	20 KTS
Crew Size/No. of Cadets/Maximum Onboard.....	49 / 331 / 380
Country Built.....	United States

## Maritime Administration: Training Ship

### KENNEDY - Training Ship

<u>Location</u> Massachusetts Maritime Academy Buzzards Bay, Massachusetts	<u>Built</u> 1966	<u>Converted</u> 2003
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Vessel Type.....	Training Ship
Length Overall.....	540.0 FT
Beam.....	76.2 FT
Draft (Summer LL).....	31.0 LT
Displacement (Summer LL).....	22,191 LT
Lightship Displacement.....	7,294 LT
Total DWT (Summer LL).....	14,897 LT
Gross Tonnage.....	13,886
Net Tonnage.....	4,165
Engine Type.....	Steam Turbine
Fuel Type .....	IFO-180
Maximum Range.....	13,600nm at 16 KTS
NDRF Maximum Speed.....	20 KTS
Crew Size/No. of Cadets/Maximum Onboard.....	110 / 600 / 710
Country Built.....	United States

## Maritime Administration: Training Ship

### STATE OF MAINE - Training Ship

<b>Location</b>	<b>Built</b>	<b>Converted</b>
Maine Maritime Academy Castine, Maine	1990	1997



Vessel Type.....	Training Ship
Length Overall.....	500.0 FT
Beam.....	72.0 FT
Draft (Summer LL).....	30.5 FT
Displacement (Summer LL).....	16,269 LT
Lightship Displacement (Summer LL).....	9,293 LT
Total DWT (Summer LL).....	6,955 LT
Gross Tonnage.....	12,542
Net Tonnage.....	3,762
Engine Type.....	Diesel
Fuel Type .....	MGO and IFO-180
Maximum Range.....	40,000nm at 16 KTS
NDRF Maximum Speed.....	16 KTS
Crew Size/No. of Cadets/Maximum Onboard.....	54 / 244 / 298
Country Built.....	United States

## Maritime Administration: Training Ship

### STATE OF MICHIGAN - Training Ship

<b>Location</b>	<b>Built</b>	<b>Converted</b>
Great Lakes Maritime Academy Traverse City, Michigan	1985	2002



Vessel Type.....	Training Ship
Length Overall.....	224.0 FT
Beam.....	43.0 FT
Draft (Summer LL).....	20.0 FT
Displacement (Summer LL).....	2,298 LT
Lightship Displacement.....	1,414 LT
Total DWT (Summer LL).....	2,250 LT
Gross Tonnage.....	1,894
Net Tonnage.....	568
Engine Type.....	Diesel Electric
Fuel Type .....	MDO
Maximum Range.....	28,000nm at 10 KTS
NDRF Maximum Speed.....	12 KTS
Crew Size/No. of Cadets/Maximum Onboard.....	10 / 55 / 65
Country Built.....	United States



## Missile Defense Agency Ship

### PACIFIC COLLECTOR - Missile Instrumentation Ship

<b>Location</b>	<b>Built</b>	<b>Converted</b>
Missile Defense Agency (MDA) Portland, Oregon	1967	2006



Vessel Type.....	Missile Instrumentation Ship
Length Overall.....	393.6 FT
Beam.....	54.0 FT
Draft (Summer LL).....	18.3 FT
Displacement (Summer LL).....	5,207 LT
Lightship Displacement.....	3,995 LT
Total DWT (Summer LL).....	1,212 LT
Gross Tonnage.....	5,151
Net Tonnage.....	2,243
Engine Type.....	Diesel
Crew / Supercargo / Total Persons Allowed.....	30 / 30 / 60
RRF Max Speed.....	13 KTS
Country Built.....	United Kingdom

## Missile Defense Agency Ship

### PACIFIC TRACKER - Missile Instrumentation Ship

<b>Location</b>	<b>Built</b> <b>Converted</b>
Missile Defense Agency (MDA) Portland, Oregon	1965 2009



Vessel Type.....	Missile Instrumentation Ship
Length Overall.....	665.7 FT
Beam.....	75.0 FT
Draft (Summer LL).....	27.8 FT
Displacement (Summer LL).....	23,762 LT
Lightship Displacement.....	18,810 LT
Total DWT (Summer LL).....	5,031 LT
Gross Tonnage.....	15,018
Net Tonnage.....	9,489
Engine Type.....	Steam Turbine
Fuel Type .....	MGO and IFO-180
NDRF Maximum Speed.....	20.4 KTS
Crew / Supercargo / Total Persons Allowed.....	35 / 30 / 65
Country Built.....	United States



## Appendix A: Terminology

**Broken Stowage:** The percentage of a vessel's cargo capacity lost because cargo sizes and shapes do not exactly match the dimensions of a vessel's cargo holds and because of the space required for cargo bracing and lashing required to prevent cargo shifting and damage during the voyage. For general cargo, broken stowage is normally estimated to be 25%.

**Cargo Capacity:** This is the total cargo area available expressed in square feet, as defined in the 2007 edition of PAM 700-4 - Vessel Characteristics for Ship Loading, published by the U.S. Army's Surface Deployment and Distribution Command (SDDC) and available at the following link:

[https://tea.aep.army.mil/TEARestrictedDocs/PAM\\_700-4.pdf](https://tea.aep.army.mil/TEARestrictedDocs/PAM_700-4.pdf)

**Certificate of Inspection (COI):** The certificate issued by the U.S. Coast Guard that describes the vessel, the minimum manning requirements and the total number of persons that may be carried by the vessel.

**Contract Speed:** The continuous operating speed required of an RRF ship in its Ship Manager contract. The speed is based on expected practical weather conditions and hull condition.

**Crew:** The total of the "minimum crew" and "other persons in crew" listed on the COI.

**Economical Speed:** The speed that produces the lowest cost for the customer, taking into account a number of different factors including fuel cost as well as daily operating cost (among many others). For some ships, the contract speed and economical speed are identical, or differ only slightly.

**Fuel Consumption:** Consumption at max speed, contract speed, economical speed and in port are given in Metric Tons (MT) per Day. (1MT of IFO-180 = 6.53 Barrels. 1MT of MGO = 7.5 Barrels.)

## Appendix A: Terminology

**Gross Tonnage:** A measure of the overall size of a vessel, calculated as a percentage of the total volume of a ship's enclosed spaces.

**In-Stream Capable:** The vessel can conduct cargo operations while at anchor.

**Lift-On/Lift-Off (LO-LO):** The use of booms or cranes to load or unload cargo.

**Max ABL (Above Baseline):** The height from the keel to the highest point.

**Maximum Speed:** The maximum operating speed attainable by an RRF ship at its design draft in calm water with a clean hull. An asterisk \* next to the figure indicates that fuel curves are available.

**Minimum Crew:** The minimum amount of crew members required to sail the vessel as listed on the U.S. Coast Guard Certificate of Inspection (COI).

**Mission Assignments:** The Federal Emergency Management Agency (FEMA) uses Mission Assignments (MA) to task and reimburse other federal departments and agencies to provide direct assistance during emergencies and disasters. MARAD has a number of pre-scripted Mission Assignments (PSMAs) for RRF vessels

**National Defense Waiver:** In order to maintain operations in the interest of national defense, a waiver of applicable U.S. navigation or inspection laws or regulations can be requested. Requests must be endorsed by the Commander, Military Sealift Command.

**Net Tonnage:** A measure of a vessel's cargo carrying capacity, calculated as a percentage of the volume of all cargo spaces.

**Other Persons in Crew:** The number of crew members in addition to the Minimum Crew who may sail on the vessel as listed on the U.S. Coast Guard COI.

## Appendix A: Terminology

**Outporting:** RRF ships are berthed at variety of government-owned, military, local municipality, commercial terminals or private facilities

**Persons in Addition to Crew:** The number of non-crew members who are allowed to sail on the vessel as listed on the U.S. Coast Guard COI.

**Ramp SWL:** The main ramp safe working loads in long tons.

**RO-RO:** A roll-on-roll-off vessel that loads wheeled cargo using a system of ramps. RO-RO capacity is the SQFT area accessible by ramps or elevators.

**ROS:** Reduced Operating Status is the term used to describe the practice of keeping a partial crew on a ship to ensure reliable activation readiness from a semi-layup condition.

**Slewing:** The vessel's ramp is able to pivot (rotate).

**Supercargo:** The number of "Persons in Addition to Crew" that the vessel is allowed to carry underway, as listed on the COI.

**Total Persons Allowed:** The maximum number of people that the vessel may carry underway. The sum of Minimum Crew, Other Persons in Crew and Persons in Addition to Crew as listed on the U.S. Coast Guard COI.

**TEU Capacity:** This is the container capacity, expressed in Twenty-Foot Equivalent Units (TEUs), for spaces with cell guides. The TEU capacity for RORO ships without cell guides is only for the weather deck and is already counted as RORO SQFT. Container capacity used decreases the available RORO SQFT.

## Appendix B: Retention Ships

<b><u>Ship Name</u></b>	<b><u>Built</u></b>	<b><u>Type</u></b>	<b><u>Location</u></b>
CAPE ANN	1962	Break Bulk-SEF	JRRF
CAPE AVINOF	1963	Break Bulk-SEF	JRRF
CAPE BOVER	1966	Break Bulk	SBRF
CAPE CHALMERS	1963	Break Bulk	Charleston, SC
CAPE FAREWELL	1973	Barge Ship	BRF
CAPE FEAR	1971	Barge Ship	SBRF
CAPE FLATTERY	1971	Barge Ship	BRF
CAPE FLORIDA	1971	Barge Ship	BRF
CAPE GIRARDEAU	1968	BB / MCDS	SBRF
CAPE JACOB	1961	BB / MCDS	SBRF
CAPE JUBY	1962	BB / MCDS	JRRF
CAPE MENDOCINO	1972	Barge Ship	BRF
CAPE NOME	1969	Break Bulk	JRRF
CHESAPEAKE	1964	Tanker	BRF
DEL MONTE	1968	Break Bulk	Little Creek, VA
DIAMOND STATE	1960	Crane Ship	BRF
FB-62	1944	Berthing Barge	SBRF
GREEN MOUNTAIN STATE	1965	Crane Ship	SBRF
HARKNESS	1967	Logistics Support	JRRF
PAUL BUCK	1985	Tanker	BRF
RICHARD G. MATTHIESEN	1985	Tanker	BRF
SAMUEL L. COBB	1985	Tanker	BRF
SAVANNAH	1962	Break Bulk	Baltimore , MD
TRIUMPH	1984	Research	SBRF

(JRRF- James River Reserve Fleet; BRF- Beaumont Reserve Fleet;  
SBRF - Suisan Bay Reserve Fleet)

## Appendix C: Former Names of RRF Ships

<b><u>Ship Name</u></b>	<b><u>Former Name</u></b>
CAPE DECISION	TOMBARRA
CAPE DIAMOND	TRICOLOR
CAPE DOMINGO	TARAGO
CAPE DOUGLAS	LALANDIA
CAPE DUCATO	BARRANDUNA
CAPE EDMONT	PARALLA
CAPE HENRY	BARBER PRIAM
CAPE HORN	BARBER TONSBERG
CAPE HUDSON	BARBER TAIF
CAPE INSCRIPTION	MAINE; TYSON LYKES
CAPE INTREPID	ARIZONA; LIPSCOMB LYKES; JUPITER
CAPE ISABEL	NEVADA; CHARLES LYKES
CAPE ISLAND	ILLINOIS; MERCURY
CAPE KENNEDY	NEDLLOYD ROSARIO
CAPE KNOX	NEDLLOYD ROUEN; ROUEN
CAPE ORLANDO	FINNEAGLE; ZENIT EAGLE; AMERICAN EAGLE
CAPE RACE	SEASPEED AMERICA; G & G ADMIRAL; STENA AMERICA
CAPE RAY	SEASPEED ASIA; SAUDI MAKKAH
CAPE RISE	SEASPEED ARABIA; SAUDI RIYADH
CAPE TAYLOR	RABENFELS; CYGNUS
CAPE TEXAS	REICHENFELS; LYRA
CAPE TRINITY	CANADIAN FORREST; SANTOS
CAPE VICTORY	MERZARIO BRITANNIA

## Appendix C: Former Names of RRF Ships

<b><u>Ship Name</u></b>	<b><u>Former Name</u></b>
CAPE VINCENT	TAABO ITALIA
CAPE WASHINGTON	HUAL TRANSPORTER
CAPE WRATH	HUAL TRADER
ALTAIR	SEA-LAND FINANCE
ANTARES	SEA-LAND GALLOWAY
POLLUX	SEA-LAND MARKET
ALGOL	SEA-LAND EXCHANGE
BELLATRIX	SEA-LAND TRADE
REGULUS	SEA-LAND COMMERCE
CAPELLA	SEA-LAND McLEAN
DENEbola	SEA-LAND RESOURCE
PETERSBURG	SINCLAIR TEXAS
KEYSTONE STATE	PRESIDENT HARRISON
GEM STATE	PRESIDENT MONROE
GRAND CANYON STATE	PRESIDENT POLK
GOPHER STATE	EXPORT LEADER
FLICKERTAIL STATE	C. V. LIGHTNING
CORNHUSKER STATE	C. V. STAG HOUND
CURTISS	MORMACSKY; GREAT REPUBLIC
WRIGHT	MORMACSUN; YOUNG AMERICA
CAPE MAY	ALMERIA LYKES
CAPE MOHICHAN	TILLIE LYKES



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