NATIONAL REGISTER ELIGIBILITY ASSESSMENT
VESSEL: ex-USNS *Meteor* (T-AKR-9)

The Roll on/Roll off cargo vessel USNS *Meteor* underway circa late 1990s. Maritime Administration photograph.

Vessel History

The former USNS *Sea Lift* (LSV-9), a Roll On/Roll Off (Ro/Ro) cargo ship, was built by Lockheed Shipbuilding and Construction Co., in Seattle, Washington and was delivered to the U.S. Navy's Military Sea Transportation Service (MSTS), now the Military Sealift Command (MSC), on May 19, 1967. The vessel is an enlarged and improved version of the prototype Ro/Ro vessel built in 1957, USNS *Comet* (T-AK-269). *Sea Lift* was assigned to MSTS Pacific where it transported military vehicles to East Asia, including Vietnam. In 1975, *Sea Lift* was one of seven ships that formed the Rapid Deployment Force (RDF) in Diego Garcia, an island in the Indian Ocean. The RDF was the precursor to today's Maritime Prepositioning Squadrons (MPS). The ship was renamed *Meteor* to conform with the names *Comet* and two other Ro/Ro vessels *Mercury* (T-AKR-10) and *Jupiter* (T-AKR-11). In 1982 *Meteor* grounded and damaged its port propulsion shafting. After it was repaired, *Meteor* continued in service but with operational restrictions that limited its speed.

In 1984, *Meteor* was among a number of MSC dry cargo and tank vessels assigned to the Maritime Administration's (MARAD) Ready Reserve Force (RRF). The RRF is a subset of the

National Defense Reserve Fleet (NDRF), which was established under Section XI of the Merchant Ship Sales Act of 1946 to serve as a reserve of ships for national defense and national emergencies.

In August 1990, 78 of the 96 ships assigned to the RRF were activated to support Operations DESERT SHIELD/DESERT STORM. This was the first large-scale activation of the RRF since it was created in 1976. The vessels involved included Ro/Ros, break-bulk cargo ships, tankers and barge carriers. *Meteor* was in the first group of 17 vessels activated. The ship was berthed in San Pedro at the time and was activated by a local shipyard before being loaded with cargo bound for Saudi Arabia; the staging area for inbound cargo. After its initial voyage, *Meteor* was directed to the U.S. East Coast to load additional cargo. *Meteor* continued in this service, U.S. East Coast to Saudi Arabia via the Mediterranean, for the duration of the conflict. The vessel operated well despite its shaft problems by carefully observing its operating restrictions. By late 1991 the need for RRF ships to move retrograde cargo back to the U.S. diminished so MSC deactivated *Meteor*. The ship sailed to the West Coast where it entered the National Steel and Shipbuilding Co. shipyard for extensive repairs and lay-up. Repairs to the ship's propulsion shafting finally resolved its propulsion problem. After the ship was deactivated, *Meteor* was again berthed at San Pedro along with USNS *Comet*. It was later moved to the San Francisco Bay area and was eventually berthed at the Alameda Naval Air Station after the navy transferred part of that facility to MARAD through the Base Realignment and Closure (BRAC) process.

More than seventy-five percent of the RRF provided sealift to support the U.S. effort's in the Persian Gulf between August 1990 and April 1991. The ships transported 750,000 short tons of dry cargo, which was one-fifth of the total dry cargo sealifted during the conflict. The Ro/Ros proved to be the most effective vessels and they delivered nearly twenty percent of Central Command's material and other support during the first phase of the operations.

Meteor was activated for Fuertes Caminos, a nation assistance exercise in Guatemala in October 1993 and later participated in exercises off South Korea. In the mid-1990s, MARAD and MSC developed a plan to improve the material and operational reliability of RRF ships assigned to four and five day status by placing them in Reduced Operating Status (ROS) with permanent retention crews. Systems and equipment were kept active, rather than in deep lay-up. *Meteor* and *Comet* were upgraded to ROS-5 status while in Alameda. Budget cuts in 1999 and 2000 forced MARAD to downgrade *Meteor* to a 10-day retention status so MARAD moved the ship to its Suisun Bay Reserve Fleet (SBRF) in Benicia, California on February 29, 2000. Along with *Comet* and many other RRF vessels, MSC reactivated *Meteor* to serve in Operation IRAQI FREEDOM in 2003. At the conclusion of the sealift operations, *Meteor* returned again to the SBRF. By the time of IRAQI FREEDOM, the military was well on its way to shipping ammunition in containers, thus ending the last mission for the traditional break-bulk general cargo ship. MARAD removed *Meteor* and *Comet* from the RRF program in 2006, thus formally

ending their active service careers. Both vessels are currently at the SBRF awaiting final disposition.

Description/Characteristics of Vessel Type

Ship:	ex-USNS *Meteor*, ex-USNS *Sea Lift*
Type:	Roll On/Roll off
Class:	C4-ST-67a
Builder:	Lockheed Shipbuilding and Construction Co.
Year:	1967
Location:	Suisun Bay Reserve Fleet, Benicia, California
Length:	540'
Beam:	83'
Draft:	24'
Net Tons:	11505
Gross Tons:	16467
Displacement, Summer	21480 tons
Displacement, Lightweight	9154 tons
Speed:	18 Knots
Propulsion:	Geared Steam Turbine x 2

As the name suggests, Ro/Ro cargo ships load and unload wheeled cargo by driving vehicles across ramps between ship and shore. A series of internal ramps and bulkhead doors allow the wheeled cargo to be maneuvered through the ship and stowed. In some respects, the Ro/Ro vessel is a seagoing parking garage. It is difficult to determine the precise origin of the Ro/Ro carrier; it may be an outgrowth of the type of vessel used to ferry wagons and later rail cars in the early to mid-nineteenth century. This type of vessel existed for many years prior to the development of powered vehicles and well before the globalization of heavy construction and other industries. Gradually, the need to support developing markets led to using ferries to transport road vehicles over relatively long distances.

An international market in motor cars developed shortly after the end of World War II. At that time, Swedish ship owner Oluf Wallenius perceived the need for specialized vessels to carry these vehicles in a way that would not only be less costly than using break-bulk vessels, but one that would also reduce the frequency and severity of vehicle damage. Beginning in 1953, Wallenius began developing car-carrying vessels that featured storage decks and improved loading methods. The first Wallenius vessel to exhibit the modern Ro/Ro arrangement form was *Aniara* in 1963.

In parallel with Wallenius' efforts, and drawing on wartime experience with transporting amphibious military vehicles, the U.S. Navy sought to develop a method to rapidly load and discharge wheeled military vehicles. Their efforts led to the development of USNS *Comet* in 1957. *Comet* was a transitional vessel having both Ro/Ro and break-bulk capabilities. The Ro/Ro arrangement was the primary means of cargo handling and was the first to exhibit the now-common arrangement of internal and external ramps. The conventional break-bulk cargo gear and hatches were essentially back-ups for the ramps when port facilities might not allow

their use. The gear could also handle other types of cargo that might be assigned to the ship. Although a transitional vessel, the fully developed Ro/Ro form justifiably earned *Comet* the nickname "Mother of all Ro/Ros" late in its career.

Comet was roughly the size of the standard MARAD "C3" cargo ship, with slightly increased beam. Four cargo holds were provided; three forward of the engine room and one aft. Drive-through passageways allowed vehicles to move between the Ro/Ro holds on either side of the engine room and superstructure. It was fitted with four sideports, two each on port and starboard on the second deck, and a stern ramp on centerline. Vehicle lashing sockets were provided throughout the main deck, second deck, first platform and second platform deck, arranged in an appropriate pattern. Vehicle lashing fittings were provided as necessary. The ship was propelled by standard marine geared steam turbines driving two propellers.

Comet was successful in service, and generally validated the effort to develop the Ro/Ro concept. Despite the success, attempts to construct follow-on ships were frustrated several times in the defense budget, and it would be nine years before the next Ro/Ro was delivered to the navy. The new vessel was larger and faster than its predecessor, but followed the original basic concepts and arrangements. Roughly the size of a MARAD "C4" cargo ship, *Meteor* was longer, wider, deeper and faster than its predecessor. The twin-screw, geared-turbine propulsion plant was retained, as were the conventional cargo gear and hatches.

Statement of Significance

Meteor was the first evolutionary refinement of the prototype Ro/Ro vessel *Comet*. Although slightly larger and with incremental improvements to cargo handling equipment, *Meteor* shares *Comet*'s basic arrangement and features and methods of construction. Machinery and equipment fitted to *Meteor* are standard commercial items from the era and are not noteworthy. There is little to distinguish *Meteor* from its revolutionary predecessor.

Meteor's service while a naval vessel was not particularly noteworthy. Along with *Comet* and the gas-turbine propelled Ro/Ro *Admiral William M. Callaghan*, *Meteor* delivered cargo to Vietnam – the first Ro/Ros to do so; however, their individual service histories and contributions to the Vietnam sealift effort were not distinctive. The activation of *Meteor* during the build-up for DESERT SHIELD/DESERT STORM was the RRF's first large-scale activation since its creation in 1976. *Meteor* delivered cargoes of military supplies and ammunition without significant incident and provided desperately needed services in a time of national need. Until its 2006 downgrade to non-retention status *Meteor* provided similar services in subsequent crises involving MARAD's role of assisting the military during national emergencies.

Integrity of Characteristics/Features

Meteor's overall condition is good; it has experienced only normal wear and aging for a vessel of its age, and routine upgrades to navigation and communications systems. The hull, machinery, passenger and crew accommodations are largely intact. The ship retains integrity precisely because it is now obsolete and is unlikely to meet any further national or economic need.

National Register Eligibility Statement

Meteor may possess sufficient integrity of design and materials necessary for listing; however the ship is not yet 50 years old and does not possess the extraordinary historical significance in any category necessary to be eligible for listing on the National Register of Historic Places. Its role in Vietnam as one of the first Ro/Ro vessels to deliver military cargoes was not a substantial or distinctive contributor to that conflict. Although *Meteor* did participate in DESERT SHIELD/DESERT STORM in 1990-91, it was only one of 78 RRF vessels activated by the navy to support those operations and its role was not significant enough to qualify under criteria A, particularly considering the recent nature of those operations.

Determination: NOT ELIGIBLE
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