

## APPENDIX C

### SEALIFT SOURCES

Vessels identified herein comprise the dry cargo vessels of strategic sealift forces. Primary sources for these are government-owned or controlled and commercial vessels.

#### A. GOVERNMENT OWNED OR CONTROLLED VESSELS

Government-owned or controlled vessels fall under control of the Department of Transportation (DOT) or the Department of Defense. The DOT Maritime Administration is responsible for maintenance of the Ready Reserve Force. The United States Transportation Command, through its sealift component command, Military Sealift Command, administers Large Medium Speed Roll-on/Roll-off (RO/RO) Ships, Fast Sealift Ships and Afloat Pre-Positioning Force Ships in their common-user role. The Afloat Pre-Positioning Force Ships are available for common use after initial discharge and release by the theater commander.

#### B. COMMERCIAL VESSELS

Commercial vessels make an important contribution in supporting large-scale deployments. Sources of commercial vessels for hire include United States and foreign-flag vessels. These vessels may be chartered by one of the following methods:

1. TIME CHARTER. These vessels are chartered for specific periods of time regardless of the number of voyages.
2. VOYAGE CHARTER. These vessels are chartered for a specific number of voyages regardless of time involved.
3. SPACE CHARTER. The charter of space aboard a vessel trading in a regularly established liner or non-liner service between two points.

#### C. GENERAL VESSEL TYPES

1. BREAKBULK. These vessels fall under the category of general cargo ships because of their ability to carry a variety of cargoes in various forms, (bagged, boxed, palletized, refrigerated, and limited containerized cargoes). Configuration of a conventional breakbulk vessel is a weather deck with a series of cargo holds beneath. Cargo holds are divided by 'tween decks and accessed by a series of hatches. Cargo operations on a breakbulk vessel are generally lift on/lift off. Since the holds of a breakbulk vessel are serviced by ships' gear (booms, cranes, winches), these vessels are usually considered self-sustaining. Because of the self-sustainability of these vessels, they provide a valuable capability when operating in underdeveloped ports. Constraints encountered with these vessels are: slow speed, limited deck height and strengths, limited lifting capacity of ship's gear, extensive blocking and bracing and slow loading and unloading.
2. CONTAINER SHIPS. These vessels carry their entire load in intermodal containers (usually 20 to 40 feet in length). Full cellular stowage within holds allows containers to be secured without use of dunnage. Container ships are configured for stacked stowage of containers both in space below the main deck (frequently referred to as the weather deck) and on the main deck. Since

most container ships are non-self-sustaining, due to lack of an installed crane system, cargo operations require the use of shore-side cranes or Tactical-Auxiliary Crane Ships (T-ACS). These vessels can also transport flatracks, enabling them to carry a limited number of oversized, wheeled, and heavy tracked equipment items.

3. **RO/RO.** These vessels are designed primarily as vehicle carriers. Cargo includes helicopters and wheeled, tracked, self-propelled, and towed vehicles. Large cargo capacities and rapid cargo loading and discharge rates characterize RO/RO vessels. Rapid movement of cargo is accomplished by a series of external and internal ramps. Cargo holds are typically large, open bays, where equipment may be driven, parked, and lashed down. Most RO/RO ships have external ramps that rest on the apron of the berth, allowing access to cargo holds. Most RO/RO vessels are usually considered self-sustaining.
4. **BARGE CARRIERS.** These vessels transport barges in which cargo has been loaded and may be discharged midstream or harbor and pushed or towed to a berth. Barges are loaded or discharged at berths by shore-based cranes. When cargo operations are complete, barges are pushed or towed to the vessel, where they are brought aboard. Two types of barge carriers are Lighter Aboard Ship (LASH) and Sea Barge (SEABEE). Both types are capable of discharging and recovering their barges into the water; however, the barges themselves are not self-sustaining. Side cranes and materials handling equipment are required to support these carriers.
5. **COMBINATION VESSELS.** These vessels employ a combination of cargo operation features in making up its configuration. A combination RO/RO and containership may have a stern ramp, RO/RO decks, and holds configured for stowage of containers.
6. **SPECIAL VESSELS.** These are comprised of special mission and support vessels. Primary mission of the T-ACS is to off-load non-self-sustaining cargo vessels (i.e., containerships and cargo from barges from LASH or SEABEE vessels). In addition, they can carry limited amounts of cargo in flatracks below deck.

#### **D. PROCEDURES AND GUIDANCE**

Procedures and guidance for loading, securing, and unloading equipment on the general vessel types are available in Military Surface Deployment and Distribution Command Transportation Engineering Agency Pamphlets 55-21, Lifting and Tie-Down for Helicopter Movement; 55-22, Marine Lifting and Lashing Handbook; and 55-23, Tie-Down Handbook for Containerized Movement.