

Field Manual  
No. 55-50

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
Washington, DC, 30 September 1993

## ARMY WATER TRANSPORT OPERATIONS

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Change 1

HEADQUARTERS  
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Washington, DC, 22 March 1995

## ARMY WATER TRANSPORT OPERATIONS

This change adds procedures for Army watercraft crewing to the basic publication.

1. Change FM 55-50, 30 September 1993, as follows:

Remove pages  
i and ii  
2-15

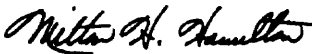
Insert pages  
i and ii  
2-15 through 2-24

2. A star (\*) marks new or changed material.
3. File this transmittal page in front of the basic publication.

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## PREFACE

In a theater of operations, all modes of transport—air, motor, rail, and water—move cargo from the water's edge in the communications zone (COMMZ) through the corps and into the division areas. This manual describes the transportation doctrine and organizational structures required for Army water transport operations in a generic theater.

During a protracted contingency operation, strategic sealift transports 90 percent of the supplies and equipment required by operating military forces. Strategic sealift consists of government-owned and/or -controlled vessels and commercial merchant vessels. This group includes military-specific designed ships such as auxiliary crane ships and common merchant designs such as roll-on/roll-off (RO/RO) ships, containerships, and large tankers. These ships transport supplies and equipment to a conflict area and discharge either at ports with fixed facilities or at unimproved beach locations. The Transportation Corps is the primary operator of these contingency water terminals. It must plan and conduct discharge operations and identify the watercraft resources required to accomplish assigned missions.

In a theater of operations, Army water transport units (companies, teams, and detachments) provide watercraft to support port, inland waterway, logistics-over-the-shore (LOTS), and intratheater movement operations.

This manual is primarily for unit and vessel masters, key personnel, higher headquarters staffs, theater planners, and commanders of operational allied units. It covers roles, missions, and concepts of employment for individual craft, entire units, and groups of units.

This publication implements the following international agreement:

- QSTAG 592, Forecast Movement Requirements - Rail, Road, and Inland Waterways, 1979.

The proponent of this publication is Headquarters, Training and Doctrine Command (TRADOC). Send comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commandant, US Army Transportation School, ATTN: ATSP-TD, Fort Eustis, Virginia 23604-5399.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.



## CHAPTER 1

**COUNTERING THE THREAT****INTRODUCTION**

Total involvement of all participants characterizes modern warfare; rear areas are no longer secure. Army watercraft units must perform their operational mission regardless of the levels of threat in the theater. Commanders and leaders must recognize the threat and know each unit's vulnerability to it. The threat force concept of operation is based on the expectation that future warfare will be highly mobile. All means of inflicting casualties on the enemy will be used.

Because watercraft units must be prepared to operate anywhere, it is impossible to describe specific threat forces, equipment, or doctrine. This chapter focuses on types of threats common to all watercraft units and ways to defeat them. If the threat is based on the Soviet model, FMs 100-2-1, 100-2-2, and 100-2-3 are used. Remember, watercraft units may face weapons systems from all over the world, including the United States (US).

**THREATS TO WATERCRAFT**

Threats can generally be classified as coming from air, water, or land forces; the electronic warfare (EW) environment; or the nuclear, biological, and chemical (NBC) environment. Watercraft units are particularly at risk because ports and terminals are prime targets for threat forces. Appendix A covers NBC threat.

**Air Threat**

The air threat consists of –

- Fixed- or rotary-wing aircraft. Both fixed- and rotary-wing aircraft can operate at night and use a variety of cannon, guns, bombs, and missiles to attack targets. Precision-guided munitions let aircraft selectively attack individual boats.
- Remotely piloted vehicles (RPVs). RPVs are used for reconnaissance and targeting platforms. They use a variety of photo, infrared (IR), thermal, and electronic devices to locate potential targets.

- Long- or medium-range missiles. Missiles can deliver conventional or special ordnance over a very large area. Missile systems today can impact within 200 meters of the intended target.

**Water Threat**

The water threat consists primarily of–

- Other surface craft. Surface craft include every craft from rubber boats to battleships. Of primary concern are fast patrol boats which can operate close to the shore and on rivers.
- Subsurface craft. Army watercraft are not likely targets for submarines, but it is possible, especially for the logistics support vessels (LSVs).
- Mines. Many types of mines including freed and free-floating mines are available to threat forces. A variety of means including physical contact, magnetic fields, or sound detonate these mines. They often include some type of anti-handling device.
- Swimmers. Special operations forces threaten Army watercraft by swimming or otherwise infiltrating an area and performing reconnaissance or sabotage.

**Land Forces Threat**

Land forces present a spectrum of threats ranging from individual saboteurs to large conventional forces. The greatest threat from a large land force might occur during the early stages of an amphibious operation before the beachhead is secure. A more realistic scenario is that small teams of saboteurs or terrorists would try to disrupt operations. The threat from artillery and short-range missile fire directed against watercraft operations is significant.

**Electronic Warfare Threat**

Electronic warfare threatens watercraft operations because of our reliance on electronic communications equipment. Threat forces can intercept