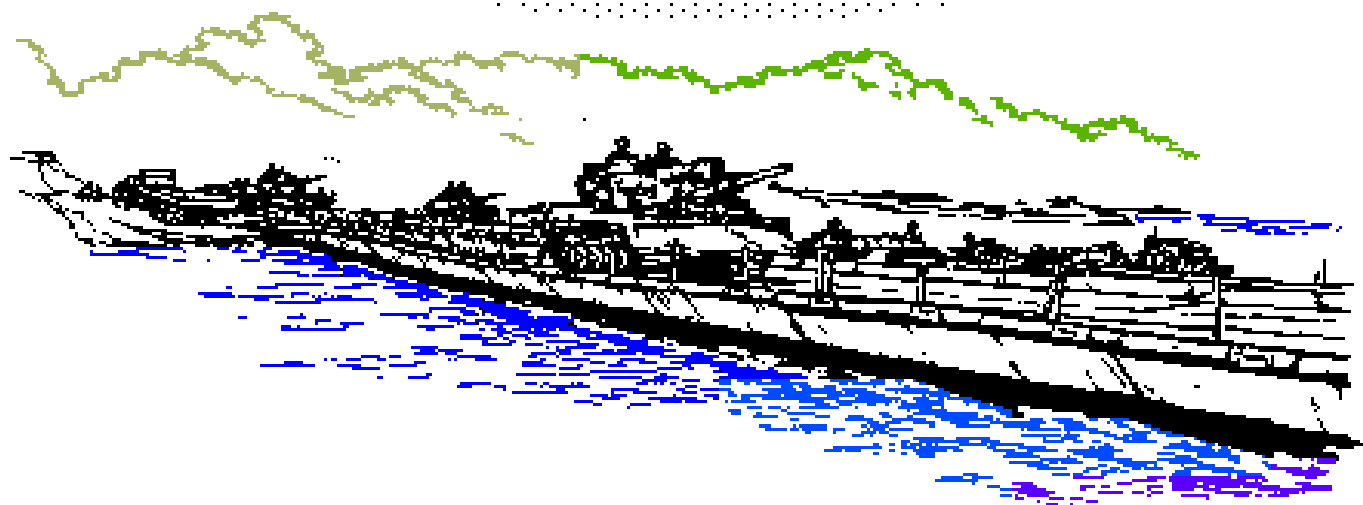


# **FM 90-13 / MCWP 3-17.1**

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## *River-Crossing Operations*



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**HEADQUARTERS, DEPARTMENT OF THE ARMY**  
**US MARINE CORPS**

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# River-Crossing Operations

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## PREFACE

*Field Manual (FM) 90-13* describes how divisions and brigades conduct river crossings. It shows the relationship to corps operations, where appropriate, and includes details for lower echelons to support the brigades. It provides doctrine, tactics, techniques, and procedures (TTP) in one reference to accomplish this special operation.

The corps assigns missions and provides the necessary support and equipment. The divisions normally assign bridgehead objectives and control movement across the river. The brigades are the bridgehead forces that execute the crossings, either independently or as elements of a larger force.

River-crossing skills and knowledge are highly perishable. As with many other tactical operations, they require constant practice in planning and execution. There are relatively few opportunities to train with the frequency needed to keep a high degree of proficiency in this tough operation. For that reason, this manual includes considerable detail on techniques and procedures.

A river crossing is a special operation in that it requires specific procedures for success because the water obstacle prevents normal ground maneuver. It demands more detailed planning and technical support than normal tactical operations. It also features specific control measures to move the force across a water obstacle. This obstacle may be a river, a lake, or a canal. Unlike other obstacle types, the water obstacle remains effective during and after the crossing operation. See *FM 90-13-1* for other counterobstacle operations.

As in the past, the United States (US) Army conducts river crossings within the context of its basic doctrine. This manual applies the current Army-operations doctrine described in *FM 100-5* to river crossings. It incorporates recent developments in command and control (C<sup>2</sup>) for command-post (CP) facilities and the military decision-making process. It also aligns US doctrine more closely with ongoing standardization efforts in the North Atlantic Treaty Organization (NATO).

*Appendix A* contains an English to metric measurement conversion chart.

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The proponent of this publication is HQ TRADOC. Send comments and recommendations on *Department of the Army (DA) Form 2028* directly to Commander, US Army Engineer School, ATTN: ATSE-TD-D-WC, Fort Leonard Wood, MO 65473-6650.

This publication implements the following international agreement: *Standardization Agreement (STANAG) 2395, Edition 1, Opposed Water Crossing Procedures*.

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

# CHAPTER 1

## Concepts

### GENERAL

The purpose of any river crossing is to project combat power across a water obstacle to accomplish a mission. A river crossing is a unique operation. It requires specific procedures for success because the water obstacle prevents normal ground maneuver. It also requires detailed planning and control measures and different technical support than other tactical operations require. The nature and size of the obstacle, the enemy situation, and available crossing assets limit the tactical commander's options.

The challenge is to minimize the river's impact on the commander's ability to maneuver. The force is vulnerable while

crossing, as it must break its movement formations, concentrate at crossing points, and reform on the far shore before continuing to maneuver. The tactical commander cannot effectively fight his force while it is split by a river. He must reduce this vulnerability by decreasing his force's exposure time. The best method is to cross rivers in stride as a continuation of the tactical operation, whether in the offense or retrograde. Only as a last resort should the force pause to build up combat power or crossing means before crossing. This chapter introduces river-crossing operations by discussing the characteristics of this special, difficult, and dangerous task.

### TYPES OF CROSSINGS

Units expected to conduct a river crossing anticipate and plan for it in advance. All river crossings require detailed planning. The planning requirements and engineer technical support are similar, whether the crossing is hasty, deliberate, or retrograde.

#### HASTY

A hasty river crossing is a continuation of an attack across the river with no intentional pause at the water to prepare, so that there is no loss of momentum. This is possible when enemy resistance is weak and the river is not a severe obstacle.

A hasty river crossing is preferable to a deliberate crossing. A hasty river crossing features decentralized control at the brigade level. The brigade may use organic, existing, or expedient crossing means, but additional support from the division or corps is often necessary due to the bridge

companies being controlled at corps level. That support is only available when those headquarters have taken purposeful action to position the assets at the right time and place to make a brigade hasty crossing feasible. Coordination for support must be made early in the planning process.

Small gaps that prohibit vehicles from self-bridging are encountered more frequently than large gaps that require extensive bridging. Each maneuver force should task-organize itself with organic mobile crossing assets that enable it to install bridges quickly, cross small gaps, and recover the bridges for future crossings. Follow-on bridges, such as the medium-girder bridge (MGB), may need to be positioned before assault bridges are removed at these minor gaps. The two types of hasty crossings are the dry- and wet-gap crossings.