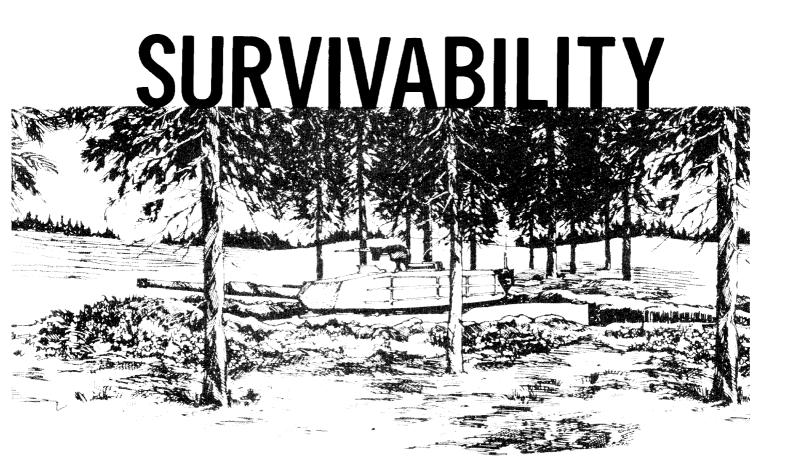
Field Manual No. 5-103

## \*FM 5-103

Headquarters Department of the Army Washington, DC, 10 June 1985



\*This publication supersedes FM 5-15, 27 June 1972 and TB 5-15-1, 16 July 1969.

## **CONTENTS**

	PREFACEv
Chapter 1	SURVIVABILITY ON THE
	BATTLEFIELD
	The AirLand Battlefield1-2
	The Threat 1-2   Role of US Forces 1-6
	Kole of US Forces
Chapter 2	SURVIVABILITY ANALYSIS2-1
	The Planning Process2-2
	Data Collection2-3
	Evaluation
	Command and Control2-8
Chapter 3	PLANNING POSITIONS
<b>r</b>	Weapons Effects
	Construction Materials
	Position Categories
	Construction Methods
	Special Construction Considerations
Chapter 4	DESIGNING POSITIONS4-1
	Basic Design Requirements
	Individual Fighting Positions
	Crew-Served Weapons Fighting Positions
	Vehicle Positions
	Trenches
	Unit Positions
	Special Designs
Chapter 5	SPECIAL OPERATIONS AND
-	SITUATIONS
	Special Terrain Environments5-2
	Combined Operations
	Contingency Operations5-25

Appendix A	SURVIVABILITY EQUIPMENTA-1
Appendix B	BUNKER AND SHELTER ROOF DESIGNB-1
Appendix C	POSITION DESIGN DETAILS
Appendix D	CAMOUFLAGED-1
Glossary	Glossary-1
<b>References</b>	References-1
Index	Index-1

## PREFACE

 $\mathbf{T}$  he purpose of this manual is to integrate survivability into the overall AirLand battle structure. Survivability doctrine addresses when, where, and how fighting and protective battlefield positions are prepared for individual soldiers, troop units, vehicles, weapons, and equipment. This manual implements survivability tactics for all branches of the combined arms team.

Battlefield survival critically depends on the quality of protection afforded by the positions. The full spectrum of survivability encompasses planning and locating position sites, designing adequate overhead cover, analyzing terrain conditions and construction materials, selecting excavation methods, and countering the effects of direct and indirect fire weapons.

This manual is intended for engineer commanders, noncommissioned officers, and staff officers who support and advise the combined arms team, as well as combat arms commanders and staff officers who establish priorities, allocate resources, and integrate combat engineer support.

The proponent of this publication is the US Army Engineer School. Submit changes for improving this publication on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forward it directly to Commandant, US Army Engineer School, ATTN: ATZA-TD-P, Fort Belvoir, VA 22060-5291.

Unless otherwise stated, whenever the masculine or feminine gender is used, both men and women are included.

## CHAPTER 1 SURVIVABILITY ON THE BATTLEFIELD

he concept of survivability on the AirLand battlefield includes all aspects of protecting personnel, weapons, and supplies while simultaneously deceiving the enemy. The lethal battlefield requires commanders to know all survivability tactics available including building a good defense; employing frequent movement; using concealment, deception, and camouflage; and constructing fighting and protective positions for both individuals and equipment. The worth of survivability positions has been proven throughout history. Protective construction in the form of fighting and protective positions by itself cannot eliminate vulnerability on the modern battlefield. It can, however, limit personnel and equipment losses by reducing exposure to Threat acquisition, targeting, and engagement. Protective construction also gives confidence to soldiers in fighting positions to use their weapons, or weapons system, more effectively. This chapter discusses basic survivability doctrine, Threat doctrine, and the role of the United States (US) forces on the AirLand battlefield.

- The AirLand Battlefield 1-2
  - The Threat 1-2
  - Role of US Forces 1-6