
**JOINT SURVEILLANCE TARGET
ATTACK RADAR SYSTEM (Joint STARS)**

TABLE OF CONTENTS

	Page
PREFACE	iii
CHAPTER 1 – INTRODUCTION	1-1
What is Joint STARS?	1-1
Mission	1-1
What Does It Provide?	1-1
Major Components	1-3
Air Force E-8 Aircraft Staffing	1-3
Ground Station Module	1-5
CHAPTER 2 – EQUIPMENT	2-1
Air Force E-8 Aircraft	2-1
Army Ground Station Modules	2-7
Block I, Medium Ground Station Module (MGSM)	2-15
Block I, Light Ground Station Module (LGSM)	2-16
Common Ground Station (CGS)	2-18
CHAPTER 3 – MISSION OPERATIONS	3-1
Ground Station Modules	3-1
Preplanned and Baseline Taskings	3-2
E-8 Tasking	3-6
Reporting	3-12
Radar Service Requests	3-14
Post Mission Analysis	3-14
Post Mission Imagery Exploitation	3-15
Multiple Asset Integration	3-16
Ground Station Module-Unmanned Aerial Vehicle	3-16
Joint Tactical Terminal	3-16
Ground Station Module-Satellite Communications	3-20
Operational Emplacement	3-20
Division	3-33
Armored Cavalry Regiment (ACR)	3-34

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

Aviation Brigade Corps and Division	3-35
Maneuver Brigade	3-39
CHAPTER 4 – ECHELON SUPPORT AND PRODUCTS	4-1
Echelons Above Corps (Theater Army)	4-1
Corps and Division GSM Products and Applications	4-1
Future Capabilities	4-9
CHAPTER 5 – SURVIVABILITY	5-1
Threat	5-1
Survival Measures Against Conventional Threats	5-2
Survival in a Nuclear, Biological, and Chemical Environment .	5-3
Operations Security	5-3
Physical Security	5-4
CHAPTER 6 – MAINTENANCE AND LOGISTICS	6-1
Maintenance	6-1
Logistics	6-3
CHAPTER 7 – TRAINING	7-1
Imagery Ground Station Operator (96H)	7-1
Maintainer (33T)	7-2
Unit Trained Critical Tasks	7-2
Unit Sustainment Training and Crew Drills	7-2
Basic Noncommissioned Officer Course	7-4
Leader, Warrant, and Officer Training	7-5
APPENDIX A – JOINT STARS MISSION PLANNING FACTORS (CLASSIFIED)	A-1
APPENDIX B – GROUND STATION MODULE COMMUNICATIONS	B-1
Connectivity	B-2
Cryptographic Material, Communications Security, and Signals Operations Instructions	B-2
APPENDIX C – CONTINGENCY OPERATIONS	C-1
Joint STARS Contingency Mission	C-3
Examples of Contingency Operations Support	C-4
APPENDIX D – JOINT TACTICAL TERMINAL	D-1
Communications	D-1
JTT Nets	D-1
Future Joint STARS and JTT Capability	D-3
GLOSSARY	Glossary-1
REFERENCES	Reference-1
INDEX	Index-1

PREFACE

This manual provides doctrine and the tactics, techniques, and procedures (TTP) for the employment of the Joint Surveillance Target Attack Radar System (Joint STARS). It also describes the equipment, function, and placement on the battlefield.

This manual describes the doctrine and TTP for the E-8 aircraft crew down to the individual ground station module (GSM) operator. Appendix A is classified and contains Joint STARS mission planning factors. Appendixes B through D describe specific Joint STARS techniques and procedures.

This manual is designed for use by commanders and their staffs; all MI commanders, their staffs, and trainers; and MI personnel at all echelons. It applies equally to the Active Army, United States Army Reserve (USAR), and Army National Guard (ARNG). It is intended for commanders and staffs of joint and combined commands; content may be applicable to United States Navy (USN), United States Marine Corps (USMC), United States Air Force (USAF), and the military forces of allied countries.

The proponent of this publication is the United States Army Intelligence Center and Fort Huachuca, Fort Huachuca, AZ. Send comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commander, US Army Intelligence Center and Fort Huachuca, ATTN: ATZS-TDL-D, Fort Huachuca, AZ 85613-6000.

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

This manual does not implement any International Standardization Agreements but complies with Standardization Agreement (STANAG) 5620, Standards for the Interoperability of Fire Support Automatic Data Processing (ADP) Systems.

Chapter 1

INTRODUCTION

We will never again want to fight without a Joint STARS kind of system

—LTG William C. Key, USMC
Commanding General, 2d Marine Division
(during DESERT STORM)

Joint STARS provides continuous wide area surveillance of surface activity. It serves the ground component commander in much the same way as the Airborne Warning and Control System (AWACS) serves the Air Component Commander (ACC).

WHAT IS JOINT STARS?

Joint STARS is an Army and Air Force multiservice system designed to provide real-time surveillance, intelligence, targeting, and battlefield management information to the Land Component Commander (LCC).

MISSION

The primary mission of Joint STARS is to provide dedicated support to the corps commander and other ground commanders, under the overall direction of the Joint Force Commander (JFC).

One Joint STARS consists of an Air Force owned E-8 aircraft staffed by Air Force and Army personnel and GSMs staffed by Army personnel. Figure 1-1 shows a GSM deployment. Three to five positions onboard the E-8 are staffed by Army personnel who provide tasking and reporting channels between the E-8 and the GSMs.

WHAT DOES IT PROVIDE?

Joint STARS provides Ground Component Commanders (GCCs) access to near-real-time (NRT) radar imagery data that is valuable and accurate and supports the decisionmaking process. Joint STARS provides—

- A value-added capability because it provides NRT indications and warnings (I&W) of threat activity during peacetime or pre-hostilities.