**NAVELEX** 0101,105

# NAVAL SHORE ELECTRONICS CRITERIA

# SATELLITE COMMUNICATION SYSTEMS

DEPARTMENT OF THE NAVY NAVAL ELECTRONIC SYSTEMS COMMAND WASHINGTON , D.C. 20360

**JUNE 1970** 

# LIST OF EFFECTIVE PAGES

Total number of pages in this manual is 73 consisting of the following:

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JUNE 1970

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# **RECORD OF CHANGES**

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#### FOREWORD

The purpose of this book is twofold: to present general indoctrinational information for those unfamiliar with the field of satellite communications and to provide general technical installation criteria for Field Technical Authority representatives.

Although "television via satellite" is familiar to everyone, a knowledge of some of the basic fundamentals of satellite communication systems may prove helpful to those involved in planning for and technically supervising the installation of the earth terminal components of specific satellite communication systems.

All of the present and planned military operational satellite communication systems are sponsored by the Department of Defense and, as such, are designed for tri-service use. The Secretary of Defense assigned responsibility for procurement of all land-based earth terminals to the Department of the Army. All land-based terminals are designed to be mobile and air-transportable, and are housed either in vans or shelters.

The technical installation criteria included in this book are necessarily general. A Department of Defense policy precludes removal of earth terminal equipments from the original vans or shelters so that the terminals will be maintained in a transportable condition. Within the above policy limitations, Department of the Navy policy prescribes semipermanent installation of all Navy-operated terminals.

No attempt has been made in this book to establish complete installation criteria for any particular earth terminal. A separate Base Electronic System Engineering Plan (BESEP) for each installation should be prepared and submitted for approval. This plan should be prepared using the general criteria contained in this book and detailed information given in specific equipment technical manuals, with due consideration of the expected environmental conditions of the local site.

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