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DEPARTMENT OF THE NAVY
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Page Number	Effective Date
Title	March 1973
A, B	March 1973
Forward	March 1973
i through vi	March 1973
1-1 through 1-3	March 1973
2-1 through 2-4	March 1973
3-1 through 3-33	March 1973
4-1 through 4-13	March 1973
5-1 through 5-29	March 1973
6-1 through 6-8	March 1973
7-1 through 7-4	March 1973
8-1 through 8-4	March 1973
9-1 through 9-15	March 1973
10-1 through 10-34	March 1973
11-1 through 11-14	March 1973
12-1 through 12-14	March 1973
13-1 through 13-15	March 1973
A-1 through A-4	March 1973

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FOREWORD

PURPOSE

This handbook presents ready-reference criteria for the planning, installation and checkout of system and equipment installations at shore communications stations. Users of this handbook, such as planning, engineering and supervisory installation personnel, will find criteria concerning system configuration details, interface between the various elements of the communications station, and integration of equipment into the overall shore station complex. Topics pertinent to a communications station are treated as comprehensively as possible, by including either established standards or current practices that have been proven in the field. References to source documents are included for various topics in the text, and all sources used in the preparation of the handbook are listed in appendix A.

The material in this handbook is intended to present acceptable practices for system design and installation and to establish a basis for standardization of shore communications station systems; however, no handbook can substitute for detailed planning and sound engineering judgment in the design of each project.

SCOPE

The discussion in this handbook is confined to the buildings and the installed equipments at the three sites that comprise a communications station: the communications center, the transmitter station, and the receiver station. Technical information and planning factors pertinent both to new construction projects and to the installation of individual equipments in existing facilities are included. Discussions of transmitting and receiving systems are oriented toward HF radio communications since MF, LF, and VLF radio communication systems will be topics of other handbooks of this series. Equipments and systems external to the buildings, such as antennas and transmission lines, are covered in NAVELEX 0101,104 — "HF Radio Antenna Systems," and discussions concerning the propagation path and general site selection criteria are contained in NAVELEX 0101,103 — "HF Radio Propagation and Facility Site Selection."

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

LIST OF ILLUSTRATIONS

LIST OF ILLUSTRATIONS (Continued)

LIST OF ILLUSTRATIONS (Continued)

LIST OF TABLES

LIST OF TABLES (Continued)