

MIL-A-28768B(EC)
13 April 1984
SUPERSEDING
MIL-A-28768A
1 June 1973

MILITARY SPECIFICATION

ANTENNAS, FIXED, HIGH FREQUENCY,
GENERAL SPECIFICATION FOR

This specification is approved for use by the Naval Electronic Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE.

1.1 Scope. This specification covers the general requirements for fixed, shore-based, high frequency (HF) antenna systems for use at Naval Shore Communications Stations, hereinafter referred to as the antenna. This specification does not cover rotatable log periodic antennas or other antennas requiring mechanical movement. Specific details are specified in the applicable detail specification (see 3.1).

1.2 Classification. Antennas shall be of the powers and wind classes specified in 1.2.1 and 1.2.2, and as specified in the applicable detail specification (see 6.2).

1.2.1 Power input capability. Antennas shall be of the following powers as specified (see 6.2):

Power 0	- 250 watts average	1 kilowatt (kW) peak instantaneous (receive)
Power 1	- 1 kW average	4 kW peak instantaneous
Power 5	- 5 kW average	25 kW peak instantaneous
Power 10	- 10 kW average	40 kW peak instantaneous
Power 10a	- 10 kW average	80 kW peak instantaneous
Power 25	- 25 kW average	100 kW peak instantaneous
Power 50	- 50 kW average	400 kW peak instantaneous

1.2.2 Wind classes. Antennas shall be of the following wind classes, as specified (see 6.2):

Class	Wind and ice conditions
1	100 miles per hour (mph) (no ice)
2	125 mph (no ice)
3	90 mph with 0.5 inch (in.) radial ice on all members
4	150 mph (no ice)
	90 mph with 0.5 in. radial ice on all members
	Special case, as specified in the contract (see 6.2)

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications, standards, and handbook. Unless otherwise specified, the following specifications, standards, and handbook of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation form a part of this specification to the extent specified herein.

SPECIFICATIONS

FEDERAL

W-R-550	Rod, Ground (With Attachments)
QQ-B-654	Brazing Alloys, Silver
QQ-S-763	Steel Bars, Wire Shapes, And Forgings
	Corrosion-Resisting
RR-S-550	Sockets, Wire Rope
RR-S-1301	Safety Equipment, Climbing
TT-P-641	Primer, Coating, Zinc Dust-Zinc Oxide (For Galvanized Surfaces)

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Electronic Systems Command (ELEX-8111), Washington, DC 20363, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document, or by letter.

THIS DOCUMENT CONTAINS 23 PAGES.

FSC 5985

MIL-A-28768B(EC)

MILITARY

MIL-I-10	Insulating Compound, Electrical, Ceramic, Class L
MIL-P-116	Preservation, Methods Of
MIL-C-3650	Connectors, Coaxial, Radio Frequency, Series LC
MIL-A-9094	Arrestor, Lightning, General Specification For
MIL-C-16173	Corrosion Preventive Compound, Solvent Cutback, Cold Application
MIL-E-16400	Electronic, Interior Communication And Navigation Equipment, Naval Ship And Shore: General Specification For
MIL-E-17555	Electronic And Electrical Equipment, Accessories, And Repair Parts, Packaging And Packing Of
MIL-F-17655	Field Changes And Field Change Kits; General Specification For
MIL-I-17918	Insulator, Strain, Rigging
MIL-P-21035	Paint, High Zinc And Dust Content, Galvanizing Repair
MIL-T-22361	Thread Compound Antiseize Zinc Dust-Petrolatum
MIL-T-28732	Transformer, Impedance Matching, Balanced To Unbalanced (BALUN)
MIL-P-28766	Poles, Structural Wooden, For High Frequency (HF) Antennas
MIL-T-28767	Transformer, Impedance Matching (Balun), Receive Only
MIL-S-38228	Sealing Compound, Environmental, For Aircraft Surfaces
MIL-C-39012	Connectors, Coaxial, Radio Frequency, General Specification For
MIL-I-45108	Inspection System Requirements
MIL-A-46106	Adhesive-Sealants, Silicone, RTV, General-Purpose (For Electrical And Mechanical Sealing)
MIL-C-83488	Coating Aluminum, Ion Vapor Deposited

STANDARDS

MILITARY

MIL-STD-105	Sampling Procedures And Tables For Inspection By Attributes
MIL-STD-108	Definitions Of And Basic Requirements For Enclosures For Electric And Electronic Equipment
MIL-STD-109	Quality Assurance Terms And Definitions
MIL-STD-454	Standard General Requirements For Electronic Equipment
MIL-STD-461	Electromagnetic Emission And Susceptibility Requirements For The Control Of Electromagnetic Interference
MIL-STD-462	Electromagnetic Interference Characteristics, Measurement Of
MIL-STD-810	Environmental Test Methods And Engineering Guidelines
MIL-STD-965	Parts Control Program
MIL-STD-1364	Standard General Purpose Electronic Test Equipment

HANDBOOK

MILITARY

MIL-HDBK-419	Grounding, Bonding And Shielding For Electronic Equipments And Facilities
--------------	---

2.1.2 Other Government publications. The following other Government publications form a part of this specification to the extent specified herein.

PUBLICATIONS

NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC)

NAVFAC DM-2.2	Design Manual, Structural Engineering Loads
NAVFAC DM-7.2	Design Manual, Foundations And Earth Structures

FEDERAL AVIATION ADMINISTRATION (FAA)

FAA Advisory Circular 70/7460-1	Obstruction Marking And Lighting
------------------------------------	----------------------------------

(Copies of specifications, standards, handbooks, and publications required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. The issues of the documents which are indicated as DoD adopted shall be the issue listed in the current DoDISS and the supplement thereto, if applicable.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

Manual Of Steel Construction (latest edition)

(Application for copies should be addressed to the American Institute of Steel Construction, Inc., 400 N Michigan Avenue, Chicago, IL 60611.)

THE ALUMINUM ASSOCIATION (AA)

Aluminum Construction Manual,
Aluminum Association Standard
"Specification For Aluminum Structures" (latest edition)

(Application for copies should be addressed to The Aluminum Association, 818 Connecticut Avenue, NW, Washington, DC 20006.)

AMERICAN WELDING SOCIETY (AWS)

AWS C2.2	Recommended Practice For Aluminum and Zinc For Protection Of Iron And Steel
AWS D1.1	Structural Welding Code

(Application for copies should be addressed to American Welding Society Inc., 550 Northwest Le Jeune Road, Miami, FL 33126.)

NATIONAL FOREST PRODUCTS ASSOCIATION (NFORP)

National Design Specifications For Stress-Grade Lumber And Its Fastenings

(Application for copies should be addressed to National Forest Products Association, Forest Industries Building, 1619 Massachusetts Avenue, NW, Washington, DC 20036.)

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI C29.1	Electrical Power Insulators, Test Methods
ANSI C29.2	Wet-Porcelain Insulators (Suspension Type)
ANSI C29.3	Wet-Porcelain Insulators (Spool Type)
ANSI C29.4	Wet-Process Porcelain Insulators (Strain Type)
ANSI C29.5 and C29.5a	Wet-Process Porcelain Insulators (Low- And Medium- Voltage Pin Type) Including Supplement
ANSI C29.6 and C29.6a	Wet-Process Porcelain Insulators High-Voltage Pin Type) Including Supplement
ANSI C29.7 and C29.7a	Wet-Process Porcelain Insulators (High-Voltage Line-Post Type) Including Supplement
ANSI C29.8	Wet-Process Porcelain Insulators (Apparatus, Cap And Pin Type)
ANSI C29.9	Wet-Process Porcelain Insulators (Apparatus, Post Type)

(Application for copies should be addressed to the American National Standards Institute, 1430 Broadway, New York, NY 10018.)