|INCH-POUND|

MIL-B-16115G
28 June 1991
SUPERSEDING
MIL-B-16115F
21 August 1978

MILITARY SPECIFICATION

BUOYS, MOORING, AND MARKER

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers marker buoys and telephone, peg top, and cylindrical mooring buoys used in mooring systems; a peg top buoy having a cylindrical upper portion, a frustum shaped lower portion and tension bars.

1.2 Classification. Buoys will be of the following types and sizes as specified (see 6.2):

Type II - Telephone mooring buoy.

Size 14 - 14 feet diameter, 7 feet deep.
Size 16 - 16 feet diameter, 8-1/2 feet deep.
Size 17 - 17 feet diameter, 10-1/2 feet deep.

Type III - Marker buoy.

Size 3-1/2 - 3-1/2 feet diameter, spherical shape.

Type IV - Peg top mooring buoy.

Size 12 - 12 feet diameter, 9-1/2 feet deep.

|Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commanding Officer (Code 156), Naval Construction Battalion Center, Port Hueneme, CA 93043-5000, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.|

AMSC N/A FSC 2050

Type V - Cylindrical mooring buoy.

Size 5 - 5 feet 6 inches diameter, 9 feet 6 inches long, MK V.
Size 8 - 8 feet diameter, 14 feet 8 inches long, MK IV.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. The following specifications and standards form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

FEDERAL

TT-E-522 - Enamel, Phenolic, Outside.

MILITARY

MIL-T-704 - Treatment and Painting of Material.
MIL-C-18295 - Chain and Fittings for Fleet Moorings.
MIL-P-24441 - Paint, Epoxy-Polymide, General Specification for.

STANDARDS

FEDERAL

FED-STD-595 - Colors.

MILITARY

MIL-STD-130 - Identification Marking of US Military Property.
MIL-STD-271 - Requirements for Nondestructive Testing Methods.

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Naval Publications and Forms Center, (ATTN: NPODS), 5801 Tabor Avenue, Philadelphia, PA 19120-5099.)

2.1.2 Government drawings. The following Government drawings form a part of this specification to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

DRAWINGS

NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC)

620657 - Standard Fleet Moorings Telephone Type Buoy Details Capacity 390,000 Lbs.
620660 - Standard Fleet Moorings Telephone Type Buoy Details Capacity 170,000 Lbs.

620662 - Standard Marker or Mooring Buoy 3' -6" Diameter Capacity 12,000 Lbs.
1404480 - Standard Fleet Moorings 12 Foot Diameter Buoy Details.
1404481 - Standard Fleet Moorings 12 Foot Diameter Buoy Details.
1404482 - Standard Fleet Moorings 12 Foot Diameter Buoy Details.
1404483 - Standard Fleet Moorings 12 Foot Diameter Buoy Details.
1404484 - Standard Fleet Moorings 12 Foot Diameter Buoy Details.
1404485 - Standard Fleet Moorings 12 Foot Diameter Buoy Details.
1404486 - Standard Fleet Moorings 12 Foot Diameter Buoy Details.
1404487 - Standard Fleet Moorings 12 Foot Diameter Buoy Details.
1404490 - Standard Fleet Moorings Chain and Fitting Details.
1404491 - Standard Fleet Moorings Chain and Fitting Details.
1404492 - Standard Fleet Moorings Chain and Fitting Details.
1404493 - Standard Fleet Moorings Chain and Fitting Details.

NAVAL SEA SYSTEM COMMAND

275040 - Mooring Buoy MK IV (Cylindrical 8'0" x 14'8") General Arrangement and Details.
275043 - Mooring Buoy Mark V (Cylindrical, 5'6" x 9'6") General Arrangement and Details.

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

2.2 Non-Government publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of the documents which are DOD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents which is current on the date of the solicitation (see 6.2).

AMERICAN NATIONAL STANDARDS INSTITUTE, INC. (ANSI)

ANSI B18.2.1 - Square and Hex Bolts and Screws Inch Series, including Hex Cap Screws, and Lag Screws.
ANSI B18.2.2 - Square and Hex Nuts (Inch Series).
ANSI B18.6.1 - Wood Screws (Inch Series).
ANSI B18.6.2 - Slotted Head Cap Screws, Square Head Set Screws, and Slotted Headless Cap Screws.
ANSI B18.21.1 - Lock Washers.

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

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 27 - Steel Castings, Carbon, for General Applications.
ASTM A 36 - Structural Steel.

ASTM A 123 - Zinc (Hot Dipped Galvanized) Coatings on Iron and Steel Products.

ASTM A 570 - Steel, Sheet and Strip, Carbon, Hot Rolled, structural quality.
ASTM D 2000 - Classification System for Rubber Products in Automotive Applications.
ASTM D 3951 - Commercial Packaging

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

AMERICAN WOOD-PRESERVERS' ASSOCIATION (AWPA)

AWPA C2 - Lumber, Timbers, Bridge Ties and Mine Ties-Preservative Treatment by Pressure Processes.
AWPA M4 - Standard for the Care of Pressure-Treated Wood Products.

(Application for copies should be addressed to the American Wood-Preservers' Association, 1625 Eye St., N.W., Washington, DC 20006.)

AMERICAN WELDING SOCIETY (AWS)

AWS D1.1 - Structural Welding Code.
AWS B2.1 - Welding Procedure and Performance Qualifications.

(Application for copies should be addressed to the American Welding Society, 2501 N.W. 7th St., Miami, FL 33125.)

NATIONAL MOTOR FREIGHT TRAFFIC ASSOCIATION

National Motor Freight Classification.

(Application for copies should be addressed to the American Trucking Associations, Inc., Tariff Order Sections, 1616 P Street, N.W., Washington, DC 20036.)

SOUTHERN PINE INSPECTION BUREAU (SPIB)

Standard Grading Rules for Southern Pine Lumber.

(Application for copies should be addressed to the Southern Pine Inspection Bureau, P.O. Box 846, Pensacola, FL 32502.)

UNIFORM CLASSIFICATION COMMITTEE, AGENT

Uniform Freight Classification.

(Application for copies should be addressed to the Uniform Classification Committee, Tariff Publishing Officer, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

WESTERN WOOD PRODUCTS ASSOCIATION (WWPA)

Grading Rules for Western Lumber, 3rd Edition.

(Application for copies should be addressed to the Western Wood Products Association, Yeon Bldg., Portland, OR 97204.)

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein (except for associated detail specifications, specification sheets or MS standards), the text of this specification takes precedence. Nothing in this specification, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First article. When specified in the contract or purchase order, a sample shall be subjected to first article inspection (see 4.3 and 6.2).

3.2 Materials. Materials used shall be free from defects which would adversely affect the performance or maintainability of individual components or of the overall assembly. Materials not specified herein shall be of the same quality used for the intended purpose in commercial practice. Unless otherwise specified herein, all equipment, material, and articles incorporated in the work covered by this specification are to be new and fabricated using materials produced from recovered materials to the maximum extent possible without jeopardizing the intended use. The term "recovered materials" means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. Unless otherwise specified, none of the above shall be interpreted to mean that the use of used or rebuilt products are allowed under this specification .

3.2.1 Structural steel. Steel plates, shapes, and bars shall conform to ASTM A 36. Steel sheet shall conform to ASTM A 570, condition and finish as appropriate. Wherever drawings call for obsolete ASTM designations A 7 or A 245, the ASTM designation A 36 and A 570, respectively, shall be used. Basic oxygen- or electric-process steel may be used in lieu of the open hearth process steel specified in drawings 275040 and 275043.

3.2.2 Cast steel. Steel castings for telephone buoy swivel ring and post shall conform to MIL-C-18295 and the applicable drawings. Other castings shown on drawings shall conform to ASTM A 27, of the class shown on the applicable drawings.

3.2.3 Wood. Lumber for rubbing and bearing strips shall be yellow pine dense structural 86 or long leaf structural 86, conforming to the SPIB Standard Grading Rules for Southern Pine Lumber or construction grade Douglas Fir, conforming to the WWPA Standard Grading Rules for Western lumber. All lumber shall be creosoted as specified in 3.7.3.

3.2.4 Rubber. Rubber for fenders shall conform to classification 3 BA 725 A14 B13 as specified in ASTM D 2000. Short lengths shall not be used.

3.3 Construction.

3.3.1 Buoys. Buoys shall be constructed as specified herein and on the applicable drawings listed in table I. The contractor shall furnish the type II buoys complete with swivel posts and swivel ring castings. Plastic rope and floats for type III buoy shall be as shown on drawing 620662. Manholes for type II and III buoys may be cut, where required, provided they are closed by a watertight full penetration weld around the closing plate after all interior work has been completed and inspected.

TABLE I. Applicable drawings for buoys.

Type	Size	Drawing No.
II	14 and 16	620660, 1404490-1404493
II	17	620657, 1404490-1404493
III	3-1/2	620662
IV	12	1404480-1404487
V	5	275043
V	8	275040

3.3.2 Steel fabrication. The steel used in fabrication shall be free from kinks, sharp bends, and other conditions which would be deleterious to the finished product. Manufacturing processes shall not reduce the strength of the steel to a value less than intended by the design. Manufacturing processes shall be done neatly and accurately. All bends shall be made by controlled means to insure uniformity of size and shape.

3.3.3 Hard facing. Unless otherwise specified (see 6.2), the surfaces of eyes in tension bars and swivel ring castings, as shown on the applicable drawings, shall be hard faced by the metal spray process. All surfaces to be faced shall be thoroughly prepared by removal of all foreign material and corrosion products and then roughened by grit blasting using an abrasive of angular steel or nonmetallic grit of a range of 25 to 40 mesh. A coating of self-fluxing metal powder composed of chromium, boron, nickel, and silicon shall be sprayed onto the prepared surfaces to produce a finished coating, after fusing, of not less than 20 mils thickness. The sprayed coating shall be fused to the base metal by uniformly heating with oxygen-acetylene torches, or in a controlled atmosphere oven, to the proper fusing temperature (approximately 1,900 degrees Fahrenheit (^{o}F)). Extreme care shall be exercised to prevent overheating during the fusing process in order to prevent running or sagging of the coating. The sprayed part shall be cooled slowly in accordance with recommendations of the metal spray manufacturer. The finished coating shall be of fine texture, uniform thickness, free of unatomized or unfused particles of metal, and shall have a hardness of 56 to 61 on the Rockwell C scale or 79 to 81.5 on the Rockwell A scale.

3.3.4 Swivel posts and swivel rings. The swivel posts and swivel rings shall be fabricated as shown on drawings 620657, 620660, and shall conform to MIL-C-18295, group 3, except that the class of casting shall be as shown on the drawings.

3.4 Steel pipe and fittings. Pipe shall be regular commercial seamless or welded steel pipe except where wrought iron pipe is shown on the drawings.

Pipe shall be of the size, schedule, and wall thickness shown. Pipe fittings shall be standard steel and cast iron as shown.

3.5 Fasteners. Studs, nuts, bolts, wood screws, and cap screws shall be of the characteristics, dimensions, and quantities as shown on the drawings. Steel fasteners, other than stainless steel, shall be zinc coated in conformance with ASTM A 123.

3.5.1 Bolts and nuts. Bolts and nuts shall conform to the requirements for regular hexagon, bolts and nuts of ANSI B18.2.1 and B18.2.2. Material shall be type 316 stainless steel.

3.5.2 Cap screws. Cap screws shall conform to the requirements for hexagon head cap screws of ANSI B18.6.2. Material shall be type 316 stainless steel.

3.5.3 Wood screws. Wood screws shall conform to the requirements for slotted and recessed wood screws of ANSI B18.6.1. Material shall be brass.

3.5.4 Washers. Circular washers shall be flat, smooth and shall conform to the requirements for type A washers as specified in ANSI B18.22.1. Material shall be type 316 stainless steel.

3.6 Tightness. Type II and III buoys shall not leak when tested by air or hydrostatic pressure in accordance with 4.4.1 or 4.4.2, the method of testing to be determined by the manufacturer. When tested hydrostatically, the buoys, and individual compartments of buoys, shall withstand an internal hydrostatic pressure of 5 pounds per square inch (lb/sq-in), maintained for a period of not less than 15 minutes, without leakage, joint failure, or abnormal bulging of plates. Type IV and V buoys shall be tested as specified on the drawings.

3.7 Treatment and painting.

3.7.1 Metal surfaces. After each buoy has passed all tests as specified, and before installation of fenders, rubbing and bearing strips, the exterior metal surfaces of all buoys, tension bars, and swivel posts, except threaded surfaces, shall be cleaned, treated, and painted in accordance with MIL-T-704, Type B, except that, finish paint shall conform to MIL-P-24441. Unless otherwise specified (see 6.2), the finish color shall be lusterless black NO. 37038 of FED-STD-595. In addition, the interior surfaces of Type IV and V buoys shall be cleaned, treated, and painted in accordance with MIL-T-704, Type C, except that the finish coat of Type IV shall be in accordance with TT-E-522, Type I.

3.7.2 Threaded surfaces. The threaded surfaces of all fasteners in tapped holes, and all pipe plugs installed prior to and after testing, shall be coated with a thick mixture of red and white lead in linseed oil. As an option threaded surfaces can be protected with plastic thread protectors.

3.7.3 Wood treatment. All wood shall be pressure treated with creosote to a net retention of 20 pounds (lb) in accordance with AWPA C2. All treated lumber, cut or bored after treatment, shall have the cut surfaces coated with creosote in accordance with AWPA M4.

3.8 Identification marking. The equipment shall be marked for identification in accordance with MIL-STD-130. Unless otherwise specified on the drawings, marking shall be 1/8-inch raised letters 1-inch high located on the buoys under railing for type I and II buoys or as shown on the applicable drawing. The legend shall include size of buoy, weight in lb, and year of manufacture.

3.9 Workmanship.

3.9.1 Steel fabrication. The steel used in fabrication shall be free from kinks, sharp bends, and other conditions which would be deleterious to the finished product. Manufacturing processes shall not reduce the strength of the steel to a value less than intended by the design. Manufacturing processes shall be done neatly and accurately. All bends shall be made by controlled means to insure uniformity of size and shape.

3.9.2 Bolted connections. Bolt holes shall be accurately punched or drilled and shall have the burrs removed. Washers or lockwashers shall be provided in accordance with good commercial practice, and all bolts, nuts, and screws shall be tight.

3.9.3 Welding. Surfaces to be welded shall be free from foreign matter which would be injurious to the weld. Welding shall conform to AWS D1.1. Spot, tack, or intermittent welds for strength will not be permitted. All welding shall be performed by welders qualified as specified herein. Qualification of welders and duration of qualification period shall be in accordance with the requirements of AWS B2.1.

3.9.4 Wood fabrication. Wood bearing and rubbing strips shall be neatly and accurately cut, contoured, finished, and drilled as shown, and shall fit snugly to the buoy without forcing.

3.10 Servicing and restoration. Each unit tested shall be serviced and restored to a service condition equal to the original condition of the unit, neglecting nominal wear incurred during the tests. The restoration shall include paint touch up or repainting, as required for delivery.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items must meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or

supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

4.1.2 Component and material inspection. Components and materials shall be inspected in accordance with all the requirements specified herein and in applicable referenced documents.

4.2 Classification of inspections. The inspection requirements specified herein are classified as follows:

a. First article inspection (see 4.2.1).
b. Quality conformance inspection (see 4.2.2).

4.2.1 First article inspection. When specified (see 6.3), first article inspection shall be performed on one buoy. This inspection shall include the examination of 4.3 and the tests of 4.4. The first article shall be the first buoy produced prior to initiation of the production items.

4.2.2 Quality conformance inspection. The quality conformance inspection shall include the examination of 4.3, the tests of 4.4, and the packaging inspection of 4.5. This inspection shall be performed on the samples selected in accordance with 4.3.

4.3 Examination. Each buoy shall be examined in accordance with table II for compliance with the requirements specified in section 3 of this specification. This element of inspection shall encompass all visual examinations and dimensional measurements. Noncompliance with any specified requirements or presence of one or more defects preventing or lessening maximum efficiency shall constitute cause for rejection.

TABLE II. Classification of defects.

Classification	Defects	Requirement paragraph
Major:		
101	Material not as specified.	3.2
102	Construction not as specified. Dimensions not as shown on referenced drawings.	3.3
103	Hard facing not as specified. Facing cracked, chipped, or rough.	3.3.3
107	Steel pipe and fittings not as specified.	3.4
108	Workmanship is inferior and not as specified. Extrusions not free from burrs and sharp edges, bolt holes not accurately drilled to coincide with bolts or other fittings; welds are sparse or incomplete.	3.9

4.3.1 Welding inspection. Visual inspection will be made while the operators are making the welds, and again after the work is completed for penetration of the weld metal, fusion, and general ability of the operator. The

inspector will pay particular attention to surface cracking, surface porosity, surface slag inclusions, undercut, overlap, and size of welds.

4.4 Test. Tests for type IV and V buoys shall be as shown on the drawings. For type I, II, and III buoys, before painting the first article shall be subject to the test of either 4.4.1 or 4.4.2 and the test of 4.4.3.

4.4.1 Pneumatic test. Each buoy having one or more compartments, shall be tested for tightness of joints by the application of air pressure of not less than 5 lb/sq-in for a minimum period of 30 minutes. While the buoy is under pressure, a soapsuds solution shall be applied externally to reveal any leaks or as an option, the pressurized buoy shall be given full immersion to detect any leaks.

4.4.2 Hydrostatic test. After completion of all welding, the buoy shall be subjected to a hydrostatic test of not less than the specified pressure (see 3.6) maintained for a period of 15 minutes. Any joint failure or leaks shall be cause for rejection. The water used for hydrostatic testing shall be made rust inhibiting by the addition of sodium dichromate at a concentration of 1/2 percent by weight. After completion of the test, each buoy shall be thoroughly drained to remove all liquids.

4.4.3 Radiographic test. Radiographic tests of parts, where shown on the drawings and required herein, shall be in accordance with MIL-STD-271; evidence of defects which would affect the strength of these parts shall be cause for rejection.

4.5 Packaging inspection. The preservation-packaging, packing, and marking of the buoys and tension bars shall be inspected to verify conformance to the requirements in section 5.

5. PACKAGING

5.1 Preservation, packing and marking. Each buoy shall be preserved, packed and marked in accordance with ASTM D 3951. Packing shall be acceptable to commercial carriers and comply with Uniform Freight Classification Rules or National Motor Freight Classification Rules as applicable.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. Type II buoys are used in standard fleet mooring assemblies. Type III buoys are used for marking the ends of submerged fuel transfer lines, marking centerline of tanker berth, and for small craft moorings, as appropriate for the size. Type IV and V buoys are used for mooring and flotation.

6.2 Acquisition requirements. Acquisition documents must specify the following:

a. Title, number, and date of this specification.
b. Type and size buoy required (see 1.2).

c. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1.1 and 2.2).
d. When first article is required for inspection and approval (see 3.1, 4.2.1, and 6.3).
e. When hard surfacing shall be applied by methods other than metal spraying (see 3.3.3 and 6.4).
f. When finish paint shall be other than as specified (see 3.7.1).
g. When color of finish paint shall be other than as specified (see 3.7.1).

6.3 First article. When a first article inspection is required, the item will be tested and should be a first production item as specified in 4.2.1. The first article should consist of one unit. The contracting officer should include specific instructions in acquisition documents regarding arrangements for examination, test, and approval of the first article.

6.4 Hardfacing alternates. Hard facings normally are applied by the gas welding, metal arc welding, atomic-hydrogen arc welding, or spray welding process. The advantages of spray welding are mainly economic. First, it saves alloy by achieving a more closely controlled deposit, and second, the cost of finishing the more uniform deposit is less.

6.5 Subject term (key word) listing.

Fenders
Fleet moorings
Manholes
Rubbing and bearing strips
Swivel posts
Swivel ring
Tension Bars

6.6 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodian:
Navy - YD

Preparing activity:
Navy - YD

Review activity:
Navy - OS

(Project 2050-0031)

User activity:
Army - ME

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER	2. DOCUMENT DATE (YYMMDD)
	MIL-B-16115G	910628

3. DOCUMENT TITLE

BUOYS; MOORING AND MARKER

4. NATURE OF CHANGE *(Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)*

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME *(Last, First, Middle Initial)*	b. ORGANIZATION	
c. ADDRESS *(Include Zip Code)*	d. TELEPHONE *(Include Area Code)* (1) Commercial (2) AUTOVON *(If applicable)*	7. DATE SUBMITTED *(YYMMDD)*

8. PREPARING ACTIVITY

a. NAME	b. TELEPHONE *(Include Area Code)* (1) Commercial	(2) AUTOVON
C. FENAROLI	(805) 982-5604	551-5604
c. ADDRESS *(Include Zip Code)* CIVIL ENGINEERING SUPPORT OFFICE (1564F) NAVAL CONSTRUCTION BATTALION CENTER PORT HUENEME, CA 93043-5000	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340 AUTOVON 289-2340	