

**DEFENSE SUPPLY CENTER PHILADELPHIA
CRITICAL ITEM PROCUREMENT REQUIREMENTS DOCUMENT**

DOCUMENT NUMBER

MS27576-5-21R

TITLE

**BOLT, SELF-RETAINING, IMPEDANCE TYPE,
95 KSI FSU, HEX HEAD, 450°F**

**APPLICABLE TO: NSN: 5306-00-003-4156
PART NUMBER: MS27576-5-21R
COMMERCIAL AND GOVERNMENT ENTITY: 14153**

CRITICAL SAFETY ITEM

PREPARED BY:

[Signature]

DATE: 3 June 2005

APPROVED BY:

[Signature]

DATE:

8/22/05

REVISIONS

SYM	DESCRIPTION	DATE	APPROVED

CRITICAL ITEM PROCURMENT REQUIREMENTS DOCUMENT (CIPRD)
MS27576-5-21R

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450°F**

NSN: 5306-00-003-4156

PART NUMBER: MS27576-5-21R

1. SCOPE:

This Critical Item Procurement Requirements Document (CIPRD) covers the technical requirements of the item specified in the solicitation or contract. The documents listed in paragraph 2, with current revisions are part of this package to the extent specified herein. All Military, Federal and commercial/industry specifications and standards appearing hereon or on referenced documents, are part of this procurement package to the extent specified and shall be the issue in effect on the date of the solicitation unless otherwise specified. Bolts furnished in accordance with this Critical Item Procurement Requirements Document (CIPRD) shall be products authorized by the qualifying activity.

2. REFERENCE DOCUMENTS:

**NASM 27576 – BOLT, SELF-RETAINING, IMPEDANCE TYPE, 95 KSI FSU, HEX HEAD,
450°F.**

NASM 83050 – BOLT, SELF-RETAINING, IMPEDANCE TYPE

3. REQUIREMENTS:

- (1) This CIPRD takes precedence over all documents referenced herein.
- (2) All manufacturing processes, dimensional, performance and verification requirements of NASM 27576 and NASM 83050 apply except as noted herein.
- (3) External threads per AS8879 Category 2. Incomplete thread length "X" from drawing NASM 27576 shall be a maximum of 1½ and a minimum of ½ thread pitches in length and major diameter to be 0.001 below minimum shank diameter.
- (4) The thread and shank of each bolt will be protected with a sleeve.
- (5) Hardness shall be verified on a 100% basis, or in accordance with a Statistical Process Control (SPC) program.
- (6) All specifications, standards, quality assurance provisions and/or drawings referenced in this CIPRD shall be of the latest revision at the time of contract award.

4. QUALITY ASSURANCE PROVISIONS:

Quality assurance shall be in accordance with NASM83050. In addition, the following Quality Assurance Provisions (QAPs) are levied by this CIPRD:

- QAP EQ001 - This Quality Assurance Provision will apply when sampling plans are not specified.**
- QAP EQ003 - This Quality Assurance Provision establishes requirements for contractors' inspection systems.**
- QAP 1075 - This Quality Assurance Provision establishes requirements for Product Verification Testing, Certificate of Quality Conformance and Measuring and Test Equipment.**

5. PACKAGING:

- (1) In addition to the labeling information specified in the contract, purchase order, and specification, each container (including the outside pack, the internal package and/or the individual unit pack) will display a label on each side of the package containing the following information:

CRITICAL SAFETY ITEM

- (2) The words "CRITICAL SAFETY ITEM" will be imprinted on each thread protection sleeve.

6. QUALIFIED SOURCES:

SPS Technologies (CAGE 80539)
2701 S. Harbor Blvd.
Santa Ana, CA 92704

7. QUALIFICATION PROCEDURES:

- (1) Companies wishing to qualify their product for listing in this CIPRD shall submit their request to:

Defense Supply Center Philadelphia
Office of Engineering and Technical Support
Attn: DSCP-IT
700 Robbins Avenue
Philadelphia, PA 19111
- (2) Application for qualification must comply with the requirements delineated in the Qualification Attachment and the Army Source Approval requirements found at www.redstone.army.mil/cmo/. After page opening, the applicant can then select: CAPSAR (Comprehensive Automated Process for Source Approval Request) & Policy Relating to Source Approval Request (SAR) for Aviation Requirements. The CIPRD identifies the part to be a Category V (A, B, or C) Critical Safety Item. However, since it is an "Installation Critical Item Only" the requirement of QE-STD-1 Compliance is not required. Additionally, do not use Section 1 E: Comprehensive Automated Process Source Approval Request (CAPSAR) Detailed Instructions for submittal of a CIPRD. Refer to paragraph 7. (1) above, of this Instruction, for submitting your request.
 - (a) Any new source interested in manufacturing this item must submit a qualification test sample and successfully pass testing in accordance with NASM 83050 and instructions provided by the Contracting Officer. In addition, sources that successfully meet qualification test requirements must also meet Production Lot Testing per NASM 83050 and QAP 1075, before they are deemed as an acceptable source for listing in this CIPRD.

- (b) Any established source that has manufactured this item within the last 3 years from the date of the contract order must comply with the following:
- Demonstrate that this product is still available from the listed plant, can be produced under the same conditions as originally qualified and meets the requirements of the current issue of this CIPRD and the specifications referenced herein.
 - At the request of the qualifying activity, periodically submit new test data.
 - At the request of the qualifying activity complete re-qualification testing.
- (c) Any established source that has manufactured this item but not within the last 3 years from the date of the contract order are subject to qualification testing in accordance with NASM 83050 and Production Lot Testing in accordance with QAP 1075. However, these requirements are subject to waiver by the Contracting Officer in coordination with the responsible Engineering Support Activity (ESA).

8. CERTIFICATIONS:

- (1) Copies of all records of inspection for acceptance shall be certified and shall be supplied for each production lot or portion thereof in accordance with NASM83050 requirements.
- (2) The Certified Test Report prepared in conformance with NASM 83050 must be maintained on file at the manufacturer's plant for a minimum of 10 years and be made available to the government upon request.
- (3) Upon request, certify that this product is still available from the listed plant and is being produced using the same manufacturing and quality control processes that were used to fabricate the qualification test sample. Documentation of the manufacturing process substantiating this certification must be on file at the manufacturer's plant for a minimum of 10 years and made available to the government upon request.

QUALIFICATION ATTACHMENT

The manufacturer's application shall be made by letter or other appropriate media and addressed to the Defense Supply Center Philadelphia, Attn: DPSC-IT, 700 Robbins Ave., Philadelphia, PA 19114. Each application must contain the number and date of the CIPRD under which tests are desired and the exact location (including complete street address) of the plant at which the product was manufactured.

In addition, the application must include certification that the applicant:

- Is the manufacturer of the product.
- Has determined from actual tests (within the limits of test equipment commonly available, unless otherwise specified) that the product conforms to the applicable CIPRD. (Test reports and data should be furnished with the application.)
- When requested, will supply products for test which are samples from the manufacturer's normal production.
- Will supply products that meet the requirements of the specification in every respect.
- Will overcome deficiencies disclosed by qualification testing.
- Will not apply for a retest of the product until satisfactory evidence is furnished that any defects disclosed by previous tests have been corrected. (Test reports may be required as evidence.)
- Will notify the qualifying activity of any change in design, material, manufacturing processes (including quality control), or plant location after qualification approval. As part of the notification the applicant will state whether he believes the change will prejudice the capability of the product to meet the qualification test requirements and state whether they intend to submit new samples for testing or desire to be removed as a qualified source.
- Will, when requested by the qualifying activity, submit a certification signed by a responsible official attesting that the applicable product is still available from the listed plant, can be produced under the same conditions as originally qualified and meets the requirements of the current issue of the CIPRD.
- Will, include provisions for self-audit of the processing, fabrication, assembly, inspection, and testing of the product. The results of the self-audit program, which promptly reports nonconformance (deviations) and corrective action to management, will be made available upon request.
- Has maintained, and will continue to maintain, effective management for quality, clearly prescribed and documented by the manufacturer. Manufacturer personnel performing quality functions will have sufficient, well-defined responsibility, authority, and the organizational freedom to identify and evaluate product quality problems and to initiate, recommend, and enforce solutions. Management will periodically review the status of the quality program for effectiveness.
- Agrees to provide the government access, upon request, to technical records, personnel, and facilities pertaining to manufacturing, processing, inspection, and testing to assure compliance with all the specification requirements.

In certain cases the government may find the information required above insufficient to justify an authorization for qualification testing. In those cases the preparing activity may request the following information, which is to be provided at no cost to the government:

- The rate at which the applicant can produce the product with his present plant facilities.

- Sketches, photographs, descriptive booklets, or other technical literature bearing upon the product that will assist the government in obtaining a clear conception of the product or process the applicant is offering.
- Such additional information as is required by the applicable specification.

Data

When requested by the qualifying activity, the applicant will furnish, at no cost to the government for test record purposes, copies of any detailed plans, specification test results, or other data required (number required and the media will be specified by the qualifying activity). If such data includes information which the applicant has determined is proprietary and does not wish disclosed to the public or used by the government for any purpose other than testing the product or process for which qualification is desired, the applicant will identify and mark the data which he considers to be proprietary. He will insert the following legend on each sheet containing proprietary data:

"These data are considered by the supplier to be submitted in confidence and furnished for the purpose of facilitating qualification testing and are not to be disclosed outside the Government nor to be duplicated, used, or disclosed in whole or in part, for any purpose other than to evaluate the product submitted for qualification testing. This restriction does not limit the Government's right to use information contained in such data if it is obtained from another source."

AAJF	THREAD DIRECTION	RIGHT-HAND
AASA	THREAD LENGTH	0.311 INCHES MINIMUM AND 0.378 INCHES MAXIMUM
AASB	FASTENER LENGTH	1.790 INCHES MINIMUM AND 1.810 INCHES MAXIMUM
AASK	HEAD STYLE	C3 DISHED HEXAGON
AASU	HEAD HEIGHT	0.157 INCHES MINIMUM AND 0.172 INCHES MAXIMUM
AATB	WIDTH BETWEEN FLATS	0.492 INCHES MINIMUM AND 0.502 INCHES MAXIMUM
AAUR	GRIP DIAMETER	0.3108 INCHES MINIMUM AND 0.3117 INCHES MAXIMUM
AAWB	SHANK UNTHREADED HOLE DIAMETER	0.076 INCHES MINIMUM AND 0.086 INCHES MAXIMUM FIRST HOLE
AHYM	NOMINAL THREAD DIAMETER	0.312 INCHES
ANEE	GRIP LENGTH	1.312 INCHES MINIMUM AND 1.328 INCHES MAXIMUM
CMLP	THREAD QUANTITY PER INCH	24
CQFM	HARDNESS RATING	36.0 ROCKWELL C MINIMUM AND 41.0 ROCKWELL C MAXIMUM OVERALL
CRZS	DISTANCE FROM HEAD LARGEST BEARING SURFACE TO SHANK HOLE CENTER	1.605 INCHES MINIMUM AND 1.705 INCHES MAXIMUM FIRST HOLE
CSYM	SURFACE FINISH	63.0 MICROINCHES BEARING SURFACE OF HEAD
CSYM	SURFACE FINISH	63.0 MICROINCHES GRIP
FEAT	SPECIAL FEATURES	W/RETAINING ELEMENT ON SHANK
MATT	MATERIAL	STEEL OVERALL
MDCL	MATERIAL DOCUMENT AND CLASSIFICATION	MIL-B-83050 MIL SPEC SINGLE MATERIAL RESPONSE OVERALL
SFTT	SURFACE TREATMENT	CADMIUM AND CHROMATE OVERALL
STDC	SURFACE TREATMENT DOCUMENT AND CLASSIFICATION	QQ-P-416 TY 2 CL 2 FED SPEC ALL TREATMENT RESPONSES OVERALL
THSD	THREAD SERIES DESIGNATOR	UNJF

Current Procurement History Information 5306-00-003-4156

AwardDate	Contract_No	ContractX	SOS	Qty	Price	Total	UI	cage	Vendor Name
12/16/2004	SP054005M4975	MODF0001	S9I	1000	10.22	10,220.00	EA	<u>0UCY9</u>	M.S. AEROSPACE
10/14/2003	SP054004M0939	MODF0001	S9I	350	8.49	2,971.50	EA	5R386	TPS AVIATION INC
5/17/2002	SP054002MQ1SU	MODF0001	S9I	370	8.49	3,141.30	EA	5R386	TPS AVIATION INC
1/23/2001	SP054001MQY08	MODF0002	S9I	202	8.49	1,714.98		<u>5R386</u>	TPS AVIATION INC
1/23/2001	SP054001MQY08	MODF0001	S9I	208	8.49	1,765.92		<u>5R386</u>	TPS AVIATION INC

Contract Technical Data File: Weapon Systems 5306-00-003-4156

Src	wsdc	crit	ricfm	Definition
S9I	24F	A	OO-ALC	AIRCRAFT, THUNDERBOLT II, A-10
S9I	05A	A	AMCOM	HELICOPTER, CHINOOK, CH-47
S9I	DUF	A	WR-ALC	HELICOPTER, SOF / HH-53J/M PAVE LOW
S9I	15F	C	WR-ALC	HELICOPTER, GREEN GIANT H-3

S9I 56F A OC-ALC AIRCRAFT, B-1B
 S9I YYA C AMCOM AIRCRAFT MH-47E SPECIAL OPERATIONS AIRCRAFT

VENDOR INFORMATION CAGE:80539

Co.Name SPS TECHNOLOGIES INC
 DIV AEROSPACE - SANTA ANA
Address 2701 S HARBOR BLVD
City /State /Zip SANTA ANA, CA 92704-5803
Country UNITED STATES
Phone 714-850-3609
SIC 3452
FLIS Hits 22286
ProcHist Hits 337

Type AAffil DSize APri. Bus. JWoman NType Bus N

Replaced CAGE: Assoc. CAGE: 0EXY1OE Status ACAO S0513AADPP HQ0339

VENDOR INFORMATION CAGE:84256

Co.Name AVIBANK MFG INC
Address 11500 SHERMAN WAY
City /State /Zip NORTH HOLLYWOOD, CA 91605-5582
Country UNITED STATES
Phone 818-392-2152
Fax 818-255-2094
SIC 3728
FLIS Hits 7978
ProcHist Hits 3969

Type AAffil Size BPri. Bus. JWoman NType Bus N

Replaced CAGE: Assoc. CAGE: OE Status ACAO S0512AADPP HQ0339

VENDOR INFORMATION CAGE:29372

Co.Name ALCOA GLOBAL FASTENERS INC.
 DBA ALCOA FASTENING SYSTEMS DIV TRIDAIR PRODUCTS
Address 3000 W. LOMITA BLVD.
City /State /Zip TORRANCE, CA 90505-5103
Country UNITED STATES
Phone 805-991-1270
Fax 805-991-1479
SIC 3965
FLIS Hits 6788
ProcHist Hits 63

Type AAffil SSize EPri. Bus. JWoman NType Bus N

Replaced CAGE: Assoc. CAGE: 1CML2OE Status ACAO S0513AADPP HQ0339