

14153 QAP-CSI012537112
DTD 7 NOV 08

DEFENSE SUPPLY CENTER PHILADELPHIA
QUALITY ASSURANCE PROVISION

NSN: 5306-01-253-7112
P/N: 68A410768-2005

This Quality Assurance Provision (**QAP**) is to be used in conjunction with any orders/contracts for the cited NSN

FIRST ARTICLE REQUIREMENTS

(AFMCI 64-110, AFMCI 23-102 and FAR Part 9, Sub Part 9.3) (Additional Instructions on Page 3)

1. DATE

15 OCT 2008

2. PR/MIPR NUMBER

3. PART NUMBER

68A410768-2005

4. NSN

53060125371121E

5. FIRST ARTICLE QUANTITY

THE FIRST ARTICLE IS 1 UNIT(S) OF LOT/ITEM EA

AND WILL BE: PART OF PRODUCTION QUANTITY IN ADDITION TO PRODUCTION QUANTITY

6. ARTICLES

WILL WILL NOT

SERVE AS A
MANUFACTURING

7. LONG LEAD TIME ITEMS

REQUIRED NOT REQUIRED
(See FAR 52.209-3 OR -4, alternate II)

8. SPECIAL REQUIREMENT/PRODUCTION FACILITIES *(See FAR 52.209-3 OR -4 Alternate I)*

REQUIRED NOT REQUIRED

"The First Article offered must be manufactured at the facilities in which that item is to be produced under the contract, or if the First Article is a component not manufactured by the contractor, such component must be manufactured at the facilities in which the component is to be produced for the contract. A certification to this effect must accompany each First Article which is offered."

9. TEST/INSPECTION REQUIREMENTS

A. CONTRACTOR TESTING

GOVERNMENT TESTING

Performance or other characteristics which the First Articles must meet are

CONFORMANCE WITH ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT

B. The detailed technical requirements for First Article approval tests are contained in

ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT.

(Cite Spec and Para number)

C. TEST PLAN REQUIRED

(1) DD Form 1423 ELIN

(2) Delivery due _____ calendar days from date of contract.

(3) Number of days for government approval/disapproval _____ days.

D. Contractor's notification to ACO and

N/A

(Requesting Activity)

of test time and location due _____ days prior to start of testing.

E. TEST REPORT REQUIRED

(1) DD Form 1423 ELIN

(2) Due _____ calendar days from date of contract.

(3) Forwarded to

(4) Government written notice of approval/disapproval due _____ days after receipt of contractor's report.

F. FIRST ARTICLE DELIVERY

FURNISH THE COGNIZANT ENGINEERING ACTIVITY WITH THE FOLLOWING INFORMATION ON THE PREVIOUSLY SUPPLIED ARTICLE:

A. PROCURING OFFICE B. CONTRACT NUMBER C. DATE OF CONTRACT D. SPECIFICATION NUMBER AND REVISION

12. REMARKS

NAME Christensen, Tonya M DATE 15 OCT 2008
Cognizant Engineering Organization:
Name: TONYA M. CHRISTENSEN
Organization: 417 SCMS/GUEB
Phone: DSN 586-0083

The critical nature of the part requires a First Article from a contractor who has never produced the item or has not produced the item for an extended period of time. The Government reserves the right to assure all materials and process certifications are correct and to test the item to any or all drawings, specifications and other contract requirements. A vendor will normally be allowed only one attempt to receive full or conditional approval. Failure to receive approval of First Article inspection will, at the discretion of the Government, result in termination of the contract. The contractor shall produce a report on the subject item with all dimensions and tolerances specified on the manufacturing data listed in one column and the actual corresponding reading obtained from the inspection of the part listed in another column. Materials utilized in the manufacture of First Article items shall be identified and certified along with a copy of material purchase requests as conforming to applicable data requirements. Material processing, including finish requirements-plating, casting, forging, heat treatment, welding, inspecting, anodize, painting, etc-utilized in the manufacture of First Article items shall be identified and certified along with a copy of material purchase requests as conforming to applicable data requirements. A copy of the purchase order certifying the process accomplished at other than the contractor's facility shall be included.

First Article waiver approvals as well as similar item determination are solely the responsibility of the Cognizant Engineering Organization.

The Cognizant Engineering Organization shall determine First Article testing requirements based on component criticality and complexity, regardless of PR value.

13. COGNIZANT ENG ORGANIZATION RESPONSIBLE FOR CONDUCTING AND/OR APPROVING TEST (Name, Organization, Phone)

14. PR INITIATOR (Name, Organization, Phone)

REV:	ENGINEERING DATA REQUIREMENTS (ATTACHMENT "A")	
NOTE: MILITARY SPECIFICATIONS / STANDARDS WILL NOT BE FURNISHED IN THE BID SET.		
1. THE FOLLOWING INSTRUCTIONS ARE FURNISHED FOR THE MANUFACTURE OF: BOLT, RETRACT ACTUATOR - MLG		
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4. THE FOLLOWING SPECIFICATIONS/STANDARDS, ETC., WILL BE USED IN LIEU OF THE DATA INDICATED. THE SUPERSEDED DATA WILL NOT BE FURNISHED UNLESS SO INDICATED.

5. 417 SCMS/GUEB RETAINS ALL RIGHTS TO REVIEW AND ACCEPT MATERIAL REVIEW BOARD (MRB) DISPOSITIONS PRIOR TO SHIPMENT OF DISCREPANT ITEM. ALL DEVIATIONS, MINOR AND MAJOR, FROM THE ENGINEERING DRAWING PACKAGE SHALL BE SUBMITTED FOR MRB DISPOSITION.

6. PRIOR TO CONTRACT AWARD, THE CONTRACTOR SHALL CERTIFY TO THE GOVERNMENT IN WRITING FULL COMPLIANCE WITH MANUALS, SPECIFICATIONS AND STANDARDS CALLED OUT AND REQUIRED FOR THE MANUFACTURE OF THIS CONTRACTED LANDING GEAR COMPONENT/ASSEMBLY. CONTRACTOR IS RESPONSIBLE TO COMPLETELY SEARCH THESE MANUALS, SPECIFICATIONS AND STANDARDS AND FULLY UNDERSTAND THE REQUIREMENTS NECESSARY TO MANUFACTURE LANDING GEAR COMPONENTS. ANY QUESTIONS CAN BE FORWARDED TO 417 SCMS/GUEB.

7. UNIQUE IDENTIFICATION (UID) SHALL BE APPLIED TO EACH PART PER MIL-STD-130 IN LIEU OF PS16001. THE UID SHALL BE BOTH HUMAN READABLE INFORMATION (HRI) MARKINGS AND MACHINE-READABLE INFORMATION (MRI) MARKS. THE MRI SHALL BE ACCOMPANIED BY A HRI. BOTH MARKS WILL BE LIMITED TO 16 ALPHANUMERIC CHARACTERS INCLUDING THE VENDOR CAGE (FSCM) OF THE CONTRACTOR NAMED ON THE CONTRACT, DATE OF MANUFACTURE IN THE FORMAT MMY, AND A UNIQUE 4-DIGIT NUMBER STARTING WITH 0001 IN NUMERICAL ORDER OF MANUFACTURE. THE HRI APPEAR AS "SN 9874701040001". THE HEIGHT OF EACH ALPHANUMERIC CHARACTER IN THE HRI SHALL BE A MAXIMUM OF .125 INCHES. MARKINGS FOR BOTH THE MRI AND HRI SHALL BE TO SAE AS9132. THE LOCATION OF THE UID SHALL BE THE SAME LOCATION AS IDENTIFIED ON THE DRAWING. THE METHOD OF MARKING FOR THE HRI SHALL BE LIMITED TO ELECTRO-CHEMICAL ETCHING, DOT PEEN, VIBRO PEEN, OR MICRO-MILL. THE DEPTH OF EACH MARK SHALL BE FROM .003 - .005 INCHES UNLESS OTHERWISE SPECIFIED ON THE ORIGINAL DRAWING. THE METHOD OF MARKING FOR THE MRI SHALL BE LIMITED TO TESA BRAND SECURE 6973 BLACK UID LASER ETCHED MARKING TAPE (FOR MORE INFORMATION, REFER TO WWW.TESATAPE.COM/PROFESSIONAL/INDUSTRY/APPLICATIONS/UIDDOD) AND SHALL ONLY BE PLACED ON THE TOP COAT OF THE PAINTED COMPONENTS. THE MRI MARK ON THE TESA TAPE SHALL CONTAIN HRI EQUIVALENT INFORMATION IN BOTH 2D MATRIX FORM AND IN HUMAN READABLE FORM. WHEN ITEMS CANNOT BE FULLY MARKED OR TAGGED DUE TO LACK OF MARKING SPACE OR BECAUSE MARKING OR TAGGING WOULD HAVE A DELETERIOUS EFFECT, THE FULL DETAILED UID MARKING REQUIREMENTS SHALL BE APPLIED TO A SUPPLEMENTAL BAG OR OTHER PACKAGE THAT ENCLOSES THE INDIVIDUAL ITEM.

8. PERFORM MAGNETIC PARTICLE INSPECTION PER ASTM E 1444 IN LIEU OF PS21201. USE FLUORESCENT TYPE, FULL WAVE DIRECT CURRENT (FWDC), AND WET CONTINUOUS METHOD WITH THE FOLLOWING ACCEPTANCE/REJECTION CRITERIA: NO RELEVANT DEFECTS ALLOWED. THE INTENT OF NO RELEVANT DEFECTS ALLOWED IS THAT THE INSPECTION IS CONDUCTED AT THE REQUIRED SENSITIVITY LEVEL AND THERE SHALL BE NO RELEVANT INDICATIONS ALLOWED. THE INSPECTOR PERFORMING THE INSPECTIONS SHALL BE CERTIFIED TO LEVEL II WITH THE INSPECTION PROCEDURE DEVELOPED BY A LEVEL III AS SPECIFIED IN AIA/NAS NAS 410.

9. SHOT PEEN PER SAE AMS 2430 IN LIEU OF PS14023. SHOT NUMBER PER SAE J444 IN LIEU OF MMS-224.

10. GLASS BEAD PEEN PER SAE AMS 2431 AND SAE AMS 2431/5 IN LIEU OF PS14023.

11. HEAT TREAT PER SAE AMS-H-6875 IN LIEU OF PS15238 AND PS15296.

12. ON PARTS HEAT TREATED 180 KSI AND ABOVE, ANY SURFACES GROUND/MACHINED AFTER HEAT TREAT WILL BE INSPECTED FOR BURNS PER MIL-STD-867 IN LIEU OF PS21205. NO MORE THAN THREE SUCCESSIVE INSPECTIONS SHALL BE PERFORMED WITHOUT A WAIVER FROM 417 SCMS/GUEB. GRINDING WILL BE PER MIL-STD-866.

PREPARED BY: TONYA M. CHRISTENSEN	OFFICE SYMBOL: 417 SCMS/GUEB	DATE: 20081015
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13. STRESS RELIEF PER SAE AMS 2759 IN LIEU OF PS15063.

14. ALTERNATE MATERIAL PER SAE AMS 5629 IN LIEU OF AMS 5629 OR SAE AMS 6419 IN LIEU OF AMS 6419.

15. MATERIAL CLEANLINESS PER SAE AMS 2300 IN LIEU OF AMS 2300.

16. PASSIVATE PER SAE AMS-QQ-P-35, ASTM A976 IN LIEU OF PS13001.

17. THREADS PER SAE AS 8879 IN LIEU OF MIL-S-8879 (SAFETY CRITICAL).

18. FINISH ASSEMBLY PER THE FOLLOWING IN LIEU OF 68A900000 AND DRAWING NOTE 14:

A. APPLY ONE COAT EPOXY WATERBORNE PRIMER PER MIL-PRF-85582 TYPE I CLASS C2 OR N. ALTERNATE ONE COAT OF EPOXY POLYAMIDE PRIMER PER MIL-PRF-23377 TYPE I CLASS C2 OR N.

B. APPLY TWO TOPCOATS POLYURETHANE PER MIL-PRF-85285 TYPE I CLASS H COLOR NUMBER 17925 (WHITE) PER FED-STD-595 IN LIEU OF MMS-420 AND PS13646.

19. LOW EMBRITTLEMENT CADMIUM PLATE PER MIL-STD-870, TYPE I, CLASS 2 IN LIEU OF PS13144.

20. THE MAXIMUM ALLOWABLE DELAY FOR THE 4-HOUR BAKE BETWEEN CHROMIUM PLATE AND CADMIUM PLATE OPERATIONS AS REFERENCED IN MIL-STD-1501 SHALL BE 4 HOURS.

21. CHROMIUM PLATE PER MIL-STD-1501, TYPE II, CLASS 2 IN LIEU OF PS13102.

22. BREAK SHARP EDGES .005-.003 (NO BURRS) USING BEST INDUSTRY STANDARDS IN LIEU OF PS23041.

23. DRILLING, REAMING, AND HONING TO MEET DRAWING SPECIFICATIONS, USING BEST AIRCRAFT INDUSTRY STANDARDS AND THE FOLLOWING IN LIEU OF PS20018:

A. HIGH SPEED STEEL (HSS) DRILLS SHALL BE USED TO DRILL CORROSION RESISTANT STEELS.

B. HSS REAMS WILL BE USED FOR ROUGH REAMING AND FINAL REAMING OF STEELS HEAT TREATED BELOW 200 KSI. CARBIDE OR PREMIUM GRADE HIGH-SPEED STEEL TIPPED REAMERS WILL BE USED FOR ROUGH REAMING OF STEELS HEAT TREATED ABOVE 200 KSI.

C. HONING STONES SHALL BE OF 150 TO 500 ALUMINUM OXIDE GRIT WITH A MEDIUM-HARD BOND AND PREFERABLY A MULTI-HEAD STONE.

D. DRILLING SHALL NEVER BE USED AS A FINAL MACHINING OPERATION. A MINIMUM OF 0.015 INCH ON DIAMETER SHALL BE LEFT FOR FINAL REAMING. HOLES SHALL BE FINISHED BY REAMING OR BORING. WHEN JIGS, FIXTURES, OR BUSHINGS ARE NOT USED FOR DRILLING HOLES LARGER THAN 1/4 INCH, THE HOLES WILL BE PILOTTED WITH A CENTER DRILL. CHEMICAL, ELECTRICAL, OR ELECTROCHEMICAL HOLE PRODUCING METHODS SHALL NOT BE USED AS A FINAL SURFACE PRODUCING METHOD WITHOUT PRIOR APPROVAL FROM 417 SCMS/GUEB.

D. ROUGH REAMING, THE REAMER LENGTH SHALL BE AS SHORT AS CONSISTENT WITH REQUIRED PENETRATION. FINAL REAMING, THE DIAMETRICAL CUT SHALL PRODUCE A HOLE THAT MEETS THE REQUIREMENTS OF THE ENGINEERING DRAWING.

PREPARED BY: TONYA M. CHRISTENSEN	OFFICE SYMBOL: 417 SCMS/GUEB	DATE: 20081015
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E. HONING SHALL BE USED AS A FINAL OPERATION WHERE A SURFACE FINISH BETTER THAN 125 ROUGHNESS HEIGHT RATIO IS REQUIRED AND CANNOT BE PRODUCED BY OTHER MEANS.

F. CARBIDE DRILLS CAN BE OPERATED AT HIGHER SPEEDS THAN HSS DRILLS, BUT MUST BE USED WITH CAUTION. THEY MUST NOT BE USED IN A DULL OR CHIPPED CONDITION.

24. SECTION AND ETCH FOR GRAIN FLOW PER SAE AMS-A-22771 IN LIEU OF PS23006.

25. SUBJECT COMPONENT HAS BEEN DESIGNATED AS A CRITICAL SAFETY ITEM (CSI):

CSI HEAT TREAT PER SAE AMS-H-6875
 CSI MATERIAL PER SAE AMS 5629 OR SAE AMS 6419
 CSI GRIND PER MIL-STD-866
 CSI INSPECT FOR ABUSIVE GRINDING PER MIL-STD-867
 CSI SHOT PEEN PER SAE AMS 2430
 CSI CADMIUM PLATE PER MIL-STD-870
 CSI CHROMIUM PLATE PER MIL-STD-1501
 CSI SAFETY CRITICAL THREADS PER SAE AS 8879

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REVISION: 3										ENGINEERING DATA LIST										*HISTORY*									
DATE:			DATA TECH:			ORGANIZATION/OFFICE SYMBOL:			END ITEM:			PAGE																	
15 OCT 2008			Villagomez, Vincent M			418 SCMS / GULABB			F-15			1 OF 1																	
CAGE:		MANUFACTURER NAME:		REFERENCE NUMBER:		NOUN:		NSN:																					
76301		MCDONNELL DOUGLAS CORPORATION A WHO		68A410768-2005		BOLT.SHOULDER		5306012537112LE																					
LINE /SUB	CAGE	ENG DRAWING NUM / ACCOMP DOC NUM	REV	NR SHEETS	FURN CODE	DIST CODE	NOUN	REMARKS	NAME:	DATE:																			
L	76301	68A410768	D	S			BOLT, RETRACTABLE ACTUATOR - MLG		Villagomez, Vincent M	15 OCT 2008																			
L	98747	HILL AFB FORM 462		X			ENGR DATA RQMTS (ATTACHMENT A)																						
STANDARD ENGINEERING TEXT																													
FURNISHED METHOD CODE LEGEND:																													
C - CLASSIFIED DOCUMENT. S - FURNISHED WITH SOLICITATION. M - STABLE BASE DRAWING REQUIRED; FURNISHED WITH CONTRACT AWARD.																													
X - DATA SUPPLIED (NOT IN JEDMICS). R - FURNISHED BY PCO UPON REQUEST. P - PARTIAL DOCUMENT FURNISHED. V - VENDOR DRAWING; (NOT PROVIDED).																													
G - GOVT DOCUMENT. O - OTHERS, CONTRACTOR MUST ACQUIRE. A - DATA NOT AVAILABLE.																													