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**DEFENSE SUPPLY CENTER PHILADELPHIA  
QUALITY ASSURANCE PROVISION**

**NSN: 5315-01-268-8442  
P/N 4G53606-103A**

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

<b>FIRST ARTICLE REQUIREMENTS</b> <i>(AFMCI 64-110, AFMCI 23-102 and FAR Part 9, Sub Part 9.3) (Additional Instructions on Page 3)</i>		I. DATE 22 JUL 2009
2. PR/MIPR NUMBER	3. CAGE / REFERENCE NUMBER 98897 / 4G53606-103A	4. NSN 5315012688442LE
5. FIRST ARTICLE QUANTITY THE FIRST ARTICLE IS <u>1</u> UNIT(S) OF LOT/ITEM <u>EA</u> AND WILL BE: <input type="checkbox"/> PART OF PRODUCTION QUANTITY <input checked="" type="checkbox"/> IN ADDITION TO PRODUCTION QUANTITY		
6. ARTICLES <input type="checkbox"/> WILL <input checked="" type="checkbox"/> WILL NOT SERVE AS A MANUFACTURING STANDARD		7. LONG LEAD TIME ITEMS <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED <i>(See FAR 52.209-3 OR -4, alternate II)</i>
8. SPECIAL REQUIREMENT/PRODUCTION FACILITIES <i>(See FAR 52.209-3 OR -4 Alternate I)</i> <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> 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. <input type="checkbox"/> CONTRACTOR TESTING <input checked="" type="checkbox"/> GOVERNMENT TESTING Performance or other characteristics which the First Articles must meet are <u>include conformance with all drawings, specifications, and engineering data requirements.</u> B. The detailed technical requirements for First Article approval tests are contained in <u>the specifications included in this contract.</u> <i>(Cite Spec and Para number)</i> C. <input type="checkbox"/> TEST PLAN REQUIRED Number of days for government approval/disapproval _____ days. D. Contractor's notification to ACO and <u>NA</u> <i>(Requesting Activity)</i> of test time and location due _____ days prior to start of testing. E. <input type="checkbox"/> TEST REPORT REQUIRED (1) Forwarded to _____ _____ _____ (2) Government written notice of approval/disapproval due _____ days after receipt of contractor's report. F. FIRST ARTICLE DELIVERY (1) Due within <u>90</u> calendar days from date contract. (2) Notify <u>15</u> calendar days prior to shipment. (3) Delivered to government at <u>OO-ALC/809 MXSS/MXDEB</u> <u>Bldg 849 Attn: Non-Accountable Bay (Dear John Bay)</u> <u>Transportation Office</u> <u>Hill Air Force Base, UT 84056-5713 USA</u> <i>(Set Forth Consignee and Address)</i> (4) Government written notice of approval/disapproval within <u>120</u> days after receipt of first article package.		

G. Estimated cost of government testing/inspection evaluation.

\$1,800.0000

10. DISPOSITION OF FIRST ARTICLES

- Approved First Articles will be forwarded to  
Supply
- \_\_\_\_\_ (insert quantity) First Articles will be expended in testing. Residual components of disapproved First Articles
- will be returned to the contractor
- will be retained by \_\_\_\_\_  
pending disposition instructions from the contractor.
- First Articles will be installed on aircraft/equipment to determine proper fit/function. Approved article will remain on the aircraft/equipment and will not be forwarded to USAF Supply, but will be considered part of the contract quantity.
- Disapproved First Articles
- will be returned to the contractor
- will be retained by 809 MXSS/MXDEB  
pending disposition instructions from the contractor.
- On purchase requests designated as direct shipments the following disposition will apply. (NOTE: Always applicable on Foreign Military Sales (FMS)).
- a. Approved First Articles will be returned to the contractor for shipment with production item.  
b. Disposition of disapproved First Articles will remain the same as marked above.
- Other Disposition:  
\_\_\_\_\_

11. CONDITION(S) FOR WAIVER OF FIRST ARTICLE APPROVAL

- a.  Offerors who have previously furnished production quantities of the same or similar article to the prime contractor for delivery to the  
 Government,  DoD,  Air Force.
- b.  Offerors currently in production of the same or similar article for a  Government,  DoD,  
 Air Force contract and who have received First Article approval under the existing contract.
- c.  Offerors who have previously furnished production quantities of the same or similar articles to the  
 Government,  DoD,  
 Air Force, provided articles thus furnished, have exhibited satisfactory performance in service in the opinion of the Air Force.
- d.  Provided not more than 36 months have elapsed since completion of the contract.
- e.  First Article testing will not be waived.
- f.  See Remarks in block 12 below.

NOTE TO BUYER: UNDER CONDITIONS A AND C ABOVE, THE COGNIZANT ENGINEERING ACTIVITY WILL DECIDE WHETHER OR NOT THE ITEM HAS EXHIBITED SATISFACTORY PERFORMANCE IN SERVICE AND PREPARE AND RETAIN SUPPORTING DOCUMENTATION TO FULLY JUSTIFY THIS DECISION. THE BUYER MUST SOLICIT DUAL PRICES (That is, both with and without requirement for first article approval) AND MUST 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

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12. REMARKS

NAME      Thorne, Steven D      DATE      22 JUL 2009  
Cognizant Engineering Organization:  
Name: Steve Thorne  
Organization: 417 SCMS/GUEB  
Phone: (801) 777-5039

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 APPROVING TEST *(Name, Organization, Phone)*

Steven D Thorne  
417 SCMS  
801-777-5039  
777-5039

14. COGNIZANT ENG ORGANIZATION RESPONSIBLE FOR CONDUCTING TEST *(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: KEY MACHINE		
2. PART NUMBER: 4G53606-103A	3. NATIONAL STOCK NUMBER: 5315-01-268-8442LE	

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. MATERIAL REVIEW BOARD (MRB) DISPOSITION:

- A. 417 SCMS/GUEB RETAINS ALL RIGHTS TO REVIEW AND ACCEPT MATERIAL REVIEW BOARD (MRB'S) DISPOSITIONS PRIOR TO SHIPMENT OF DISCREPANT ITEM. ALL DEVIATIONS, MINOR AND MAJOR, FROM THE ENGINEERING DRAWING PACKAGE SHALL BE SUBMITTED FOR MRB DISPOSITION.
- B. PRIOR TO CONTRACT AWARD, THE CONTRACTOR SHALL CERTIFY TO THE GOVERNMENT 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.

**6. DRAWING 4G53606:**

6.1. MACHINE TO BEST INDUSTRY STANDARDS, IN LIEU OF DS30003.

6.2. MARKING AND IDENTIFICATION PER MIL-STD-130 IN LIEU OF STP 63-001. IMPRESSION STAMPING NOT PERMISSIBLE.

6.3. HEAT TREAT PER AMS-H-6875 IN LIEU OF STP 54-006.

6.4. PERFORM MAGNETIC PARTICLE INSPECTION PER ASTM E 1444 IN LIEU OF MIL-I-6868. 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 THE AIA/NAS-410.

6.5. APPLY RUST PREVENTATIVE OIL PER QPL-32033-4 IN LIEU OF DS 3000, FINISH CODEH.

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

6.7. DRILLING, REAMING, AND HONING TO MEET DRAWING SPECIFICATIONS, USING BEST AIRCRAFT INDUSTRY STANDARDS AND THE FOLLOWING:

- 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.

PREPARED BY: STEVEN THORNE	OFFICE SYMBOL: 417 SCMS/GUEB	DATE: 22 JULY 2009
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- 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 ¼ INCH, THE HOLES WILL BE PILOTED 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.
- E. 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.
- F. 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.
- G. 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.
- 6.8. DS5025, X995, AND X999 ARE NOT REQUIRED FOR MANUFACTURE OF THIS ITEM AND WILL NOT BE PROVIDED.
- 6.9. MATERIAL: 4330 PER SAE AMS-6411 IN LIEU OF AMS-6411.

PREPARED BY: STEVEN THORNE	OFFICE SYMBOL: 417 SCMS/GUEB	DATE: 22 JULY 2009
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