



## FIRST ARTICLE TEST REQUIREMENTS (GOVERNMENT TESTING)

P/N: (78286) S6137-91502-101

NSN: 1560-00-012-6096

NOMEN: H-53 FLANGE, INPUT, CLUTCH, AUX. POWER PLANT

CRITICALITY (CSI/CAI/Non-critical): CRITICAL SAFETY ITEM

DATE OF DETERMINATION: 27 JUNE 2000

### I. First Article Inspection/Test Criteria:

The tests to be performed under the First Article approval clause of the contract are:

A. Compliance with (78286) S6137-91502 Revision W and parts list revision W and all details and specifications referenced therein.

B. Identification: Verification and certification that the parts are identified per the requirements of (78286) S6137-91502 Revision W and parts list revision W and all details and specifications referenced therein.

C. Packaging and Preservation: Verification that the parts have been packaged and preserved per the requirements of the contract.

D. Visual: Verification and certification of the overall workmanship of the First Article Sample(s).

E. Dimensional: Verification and certification of 100% dimension check of finished First Article Sample(s).

F. Non-Destructive Inspection: Magnetic Particle Inspection per ASTM E 1444

G. Fit/Form/Function: **To Next Higher Assembly**

H. Material Analysis of the First Article Sample:

(1) 4130 Steel Forging (Review of Certificate of Compliance)

(2) FORGING TO BE FURNISHED HEAT TREATED TO 125,000 PSI MIN. TS ROCKWELL C 26-33 Per MIL-H-6875. (Review of Certificate of Compliance.)

(3) Cadmium Plate per QQ-P-416 (Review of Certificate of Compliance.)

OR destructive material analysis on one First Article Sample:

(3) 4130 STEEL BAR PER MIL-S-6758 COND C OR 4340 STEEL BAR PER MIL-S-5000 COND C.

(4) AFTER ROUGH MACHINING HEAT TREAT TO 125,000 PSI MIN. T.S. ROCKWELL C 26-33 PER MIL-H-6875.

(5) Cadmium Plate per QQ-P-416

## **FIRST ARTICLE TESTS REQUIREMENTS (GOVERNMENT TESTING) continued**

I. Review of documentation as provided under DD 1423 requirements.

In addition to the above tests, the First Article(s) to be delivered hereunder shall also be subjected to those tests that will demonstrate that the articles comply with contract requirements. The contractor shall be responsible for providing necessary parts and repair of the First Article(s) during testing.

II. Samples to be submitted for testing:

A. Quantity 2 each.

B. Estimated Cost: To be determined.

POC for estimates at NADEP CP is Mr. Harold Hardison, AIR-6.1.1.1, (252) 464-7228 or [hardisonHL@navair.navy.mil](mailto:hardisonHL@navair.navy.mil).

III. Special Instructions:

A. Upon successful first article inspection all processes are to be frozen.

B. One sample will be destroyed during testing and will not be returned to the contractor if alternate material used per Drawing Note 6. One sample may be considered as production items under the contract provided the sample could be refurbished to ready for issue (RFI) condition and provided the sample has inspection approval of the cognizant QAR. Sample(s) may be shipped as production items only after all other units required under the contract have been produced and are ready for shipment.

C. Waiver of the destruction of the First Article test piece may be granted if the contractor provides a certified test coupon that is of the same material and has undergone the same special processes as the First Article test piece.

D. One sample is to be unpainted and all corrosive areas are to be coated with a light preservative on both samples.

### **Notification of Shipment of Material for Government Testing**

A. Fourteen (14) days prior to shipment of the First Article Sample(s) the contractor shall notify the designated test facility, in writing of the anticipated shipping date, with an information copy to the PCC, ACO, and QAR. The contractor shall also arrange for preliminary inspection of test sample(s) by the CAO/QAR. The First Article Sample(s) shall be forwarded to the following First Article point of contact at the designated test facility:

**FIRST ARTICLE TESTS REQUIREMENTS (GOVERNMENT TESTING) continued**

**Commanding Officer  
Naval Air Depot  
First Article Test – Sta. 31B  
Attn: AIR-3.3.2 (252) 464-7748  
Bldg. 154B Cleveland Drive  
MCAS Cherry Point, NC 28533**

B. Upon shipment of First Article Sample(s), two (2) copies of the Material Inspection and Receiving Report (DD Form 250), bearing the QAR's signature and indication of preliminary inspection, shall be forwarded to the PCO/ACO DSCR Code DSCR-VGC, and the designated test facility. In addition, the contractor must supply all detailed process/operation sheets, Inspection Method Sheets, First Article Test Report (Signed by the QAR), and all Certificates of Compliance for material (including chemical analysis), Magnetic Particle Inspection and any out-sourced process conducted on the First Article Sample(s). These forms and documentation may either be placed in the shipping container with the sample(s) or sent separately, however the envelopes shall be clearly marked, "DO NOT OPEN IN MAILROOM." These forms and documentation shall be sent to the following point of contact:

**Commanding Officer  
Naval Air Depot  
First Article Test – Sta. 31B  
Attn: AIR-3.3.2 (252) 464-7748  
Bldg. 154B Cleveland Drive  
MCAS Cherry Point, NC 28533**

Within 120 days after receipt of the sample(s) the test site shall complete testing/evaluation and submit a copy of their test report with conclusions and recommendations to DSCR-VGC.

**FIRST ARTICLE APPROVAL (GOVERNMENT TESTING)**

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**NSN: 1560-00-012-6096**

**NOMEN: H-53 FLANGE, INPUT, CLUTCH, AUX. POWER PLANT**

**CRITICALITY (CSI/CAI/Non-critical): CRITICAL SAFETY ITEM**

**DATE OF DETERMINATION: 27 JUNE 2000**

**APPLICABLE CLAUSES:**

A. The contractor shall deliver unit(s) of lot/item within 180 calendar days from the date of this contract to the activity listed below for the purpose of partial inspection/testing and preparation of test report per the requirements specified in MIL-HDBK-831 prior to forwarding sample(s) with report to the Government designated test facility listed below:

**Commanding Officer  
Naval Air Depot  
First Article Test – Sta. 31B  
Attn: AIR-3.3.2 (252) 464-7748  
Bldg. 154B Cleveland Drive  
MCAS Cherry Point, NC 28533**

B. The contractor shall deliver two unit(s) of lot/item within 180 calendar days from the date of this contract to the Government Marking of test sample(s) shipping container: "FOR FIRST ARTICLE TESTING. NOT RFI MATERIAL. DO NOT TAKE UP IN STOCK. CONTRACT NUMBER: \_\_\_\_\_". For First Article Test, the shipping documentation shall contain this contract number and the lot/item identification. The characteristics that the First Article must meet the testing requirements are specified elsewhere in this contract.

C. Within 120 calendar days after the Government testing facility receives the First Article Sample(s), the QAR's signed Material Inspection and Receiving Report, DD Form 250 and all detailed Process/Operation Sheets, Inspection Method Sheets, First Article Test Report (Signed by the QAR), and all Certificates of Compliance for material (including chemical analysis), Fluorescent Penetrant Inspection, any out-sourced process conducted on the First Article Sample(s) and all technical data used to manufacture the First Article Sample(s), the contracting officer shall notify the contractor, in writing, of the conditional approval, approval or disapproval of the First Article. The notice of conditional approval or approval shall not relieve the contractor from complying with all requirements of the specifications and all other terms and conditions of this contract. A notice of conditional approval shall state any further action required of the contractor. A notice of disapproval shall cite reasons for the disapproval.

D. If the First Article is disapproved, the contractor, upon Government request, shall submit an additional First Article for testing. After each request, the contractor shall make any necessary changes, modification, or repairs to the First Article or select another First Article for testing. All costs related to these tests are to be borne by the contractor, including any and all costs for

## **FIRST ARTICLE APPROVAL (GOVERNMENT TESTING) continued**

additional tests following disapproval. The contractor shall furnish any additional First Article to the Government under the terms and conditions and within the time specified by the Government. The Government shall act on this First Article within the time limit specified in paragraph B above. The Government reserves the right to require an equitable adjustment of the contract price for any extension of the delivery schedule or for any additional costs to the Government related to these tests.

E. If the contractor fails to deliver any First Article on time, or the contracting officer disapproves any First Article, the contractor shall be deemed to have failed to make delivery within the meaning of the default clause of this contract.

F. Unless otherwise provided in the contract, the contractor

1) May deliver the approved First Article as a part of the contract quantity, provided it meets all contract requirements for acceptance and was not consumed or destroyed in testing and;

2) Shall remove and dispose of any First Article from the Government test facility at the contractor's expense.

G. If the Government does not act within the time specified in paragraph B or C above, the contracting officer shall, upon timely written request from the contractor, equitably adjust under the changes clause of this contract the delivery or performance dates and/or the contract price, and any other contractual term affected by the delay.

H. The contractor is responsible for providing operating and maintenance instructions, spare parts support, and repair of the First Article during any First Article Test.

I. Before First Article approval, the acquisition of materials or components for, or the commencement of production of, the balance of the contract quantity is at the sole risk of the contractor. Before First Article approval, the costs thereof shall not be allocable to this contract for

1) progress payments, or

2) termination settlements if the contract is terminated for the convenience of the Government.

J. The contractor shall produce both the First Article and the production quantity at the same facility and shall submit a certification to this effect with each First Article and production lot.

K. The contractor shall provide specific written notification to the procuring contracting officer informing him of the shipment of any; article(s) furnished in accordance with this clause. Such notification must be addressed to the attention of the ACO with copies to DSCR-VGC and to the testing activity. Failure to provide such notification shall excuse the Government from any delay in performing First Article Testing and informing the contractor of the results thereof.

## **PRODUCTION LOT TESTING REQUIREMENTS (GOVERNMENT TESTING)**

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**CRITICALITY (CSI/CAI/Non-critical): CRITICAL SAFETY ITEM**

**DATE OF DETERMINATION: 27 JUNE 2000**

The material produced under contract shall be accepted by the cognizant CAO/QAR upon the successful completion of these requirements.

### **I. Production Lot Test Requirements**

A. The cognizant CAO/QAR shall select the applicable number of items at random from the production lot per the ANSI/ASQC Z1.4 Sampling Procedures and Tables for Inspection by Attributes. In addition the QAR shall select the applicable number of items at random from each successive lot or portion thereof per the ANSI/ASQC Z1.4 Sampling Procedures and Tables for Inspection by Attributes.

B. Production Lot Testing to be completed during production after First Article Approval.

C. Sample(s) are to be unpainted. Corrosive areas to be coated with a light preservative.

D. If sample(s) are not destroyed during testing and are in RFI condition, they will be put into Defense Logistic Agency stock. All other samples will be returned to the contractor.

### **II. The tests to be performed under the Production Lot Sample testing provisions of the contract are:**

A. Compliance with (78286) S6137-91502 Revision W and parts list revision W and all details and specifications referenced therein.

B. Identification: Verification and certification that the parts are identified per the requirements of (78286) S6137-91502 Revision W and parts list revision W and all details and specifications referenced therein.

C. Packaging and Preservation: Verification that the parts have been packaged and preserved per the requirements of the contract.

D. Visual: Verification and certification of the overall workmanship of the Production Lot Sample(s).

E. Dimensional: Verification and certification of 100% dimension check of finished Production Lot Sample(s).

PRODUCTION LOT TESTING REQUIREMENTS (GOVERNMENT TESTING) continued

F. Non-Destructive Inspection: Magnetic Particle Inspection per ASTM E 1444.

G. Fit/Form/Function: To Next Higher Assembly.

H. Material Analysis of the Production Lot Sample(s): NOTE: A destructive material analysis can be waived ONLY if a destructive material analysis was conducted by the Engineering Support Activity (ESA), H-53FST.2, Naval Air Depot, Cherry Point, NC during a successful First Article Inspection. However, all applicable material certificates of compliance will have to be provided for the production lot for verification of the material.

(1) 4130 Steel Forging (Review of Certificate of Compliance)

(2) FORGING TO BE FURNISHED HEAT TREATED TO 125,000 PSI MIN.

TS ROCKWELL C 26-33 Per MIL-H-6875. (Review of Certificate of Compliance.)

(3) Cadmium Plate per QQ-P-416 (Review of Certificate of Compliance.)

OR destructive material analysis on one First Article Sample:

(3) 4130 STEEL BAR PER MIL-S-6758 COND C OR 4340 STEEL BAR PER MIL-S-5000 COND C.

(4) AFTER ROUGH MACHINING HEAT TREAT TO 125,000 PSI MIN. T.S. ROCKWELL C 26-33 PER MIL-H-6875.

(5) Cadmium Plate per QQ-P-416

I. Review of documentation as provided under DD 1423 requirements.

In addition to the above tests, the Product Lot Sample(s) to be delivered hereunder shall also be subjected to those tests, which will demonstrate that the sample(s) comply with contract requirements.

### III. Testing Location

A. The contractor is to ship sample(s) and all required documentation and technical data to:

**Commanding Officer  
Naval Air Depot  
First Article Test – Sta. 31B  
Attn: AIR-3.3.2 (252) 464-7748  
Bldg. 154B Cleveland Drive  
MCAS Cherry Point, NC 28533**

B. The shipping container marking: "FOR PRODUCTION LOT TESTING. NON RFI MATERIAL. DO NOT TAKE UP IN STOCK. CONTRACT NUMBER \_\_\_\_\_."

## PRODUCTION LOT TESTING REQUIREMENTS (GOVERNMENT TESTING) continued

Within fifteen (15) days of completion of Production Lot Testing the CAO/QAR shall prepare and submit two (2) copies of their test report with conclusions and recommendations to the Contracting Officer.

### **Shipment and Distribution of Sample(s):**

A. Fourteen (14) days prior to shipment of Production Lot Sample(s) the contractor shall notify the designated test facility, in writing of the anticipated shipping date, with an information copy to the PCO, ACO and the QAR. The contractor shall also arrange for preliminary inspection of test samples by the CAO/QAR.

B. Upon shipment of the Production Lot Sample(s), two (2) copies of the Material Inspection and Receiving Report (DD Form 250), bearing the QAR's signature and indication of preliminary inspection, shall be forwarded to the PCO/ACO DSCR (Code DSCR-VGC), and the testing facility. In addition, the contractor shall provide all detailed Process/Operation Sheets, Inspection Method Sheets, First Article Test Report (Signed by the QAR), and all Certificates of Compliance for material (including chemical analysis), Magnetic Particle Inspection, any out-sourced process conducted on the Production Lot Sample(s) and all technical data used to manufacture the Production Lot Sample(s) to the testing facility. The envelopes shall be clearly marked, "DO NOT OPEN IN MAILROOM".

C. Production Lot Sample(s) may be considered as production items under the contract provided the sample(s) can be refurbished to Ready for Issue (RFI) condition and provided sample(s) have inspection approval from the cognizant DCMAO and the ESA engineer (H-53FST.2, Naval Air Depot, Cherry Point, NC). Sample(s) may be shipped as production items ONLY after all other units required under contract have been produced and are ready for shipment.

D. Sample(s) will be returned to the contractor. The contractor must provide material disposition instructions to:

**Commanding Officer  
Naval Air Depot  
First Article Test – Sta. 31B  
Attn: AIR-3.3.2 (252) 464-7748  
Bldg. 154B Cleveland Drive  
MCAS Cherry Point, NC 28533**

E. The designated test facility and the contracting officer shall be notified as to all shipping data applicable to the sample(s), such as bill of lading number, method of shipment, etc. within fourteen (14) days prior to shipping.

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**DATE OF DETERMINATION: 27 JUNE 2000**

A. The Production Lot Samples shall be:

1. Selected at random by the cognizant government QAR. Such samples shall be submitted via the cognizant government inspector, and all transportation charges prepaid by the contractor to:

**Commanding Officer  
Naval Air Depot  
First Article Test – Sta. 31B  
Attn: AIR-3.3.2 (252) 464-7748  
Bldg. 154B Cleveland Drive  
MCAS Cherry Point, NC 28533**

2. The samples shipping container and samples shall be identified by contract number, lot number and be clearly marked as follows:

**PRODUCTION LOT TEST SAMPLES  
NON-RFI MATERIAL  
DO NOT TAKE UP IN STOCK**

B. Such samples shall be delivered to the testing facility in sufficient time prior to the delivery date of the production articles to allow a 90 day period for testing and written notification by the contracting officer of the approval or disapproval of the samples. Within 120 days of the receipt of the samples, the testing facility shall notify the contracting officer, PCO/ACO of the results of the testing, together with the recommendation for approval or disapproval.

C. In the event the contractor does not receive written notification of approval or disapproval of the samples for a particular lot within 120 days from their submission for such testing, the contract delivery schedule shall be equitably adjusted as necessary.

D. If the contractor fails to deliver any Production Lot Samples for testing within the time or times specified, or if the contracting officer disapproves any Production Lot Samples, the contractor shall be deemed to have failed to make delivery within the meaning of the default clause of this contract, and this contract shall be subject to termination for default.

E. In order for a Production Lot to be acceptable, all samples representative of the lot must pass all the contract requirements. In the event a sample fails to pass such requirements, the lot will

**PRODUCTION LOT TESTING APPROVAL (GOVERNMENT TESTING) continued**

be rejected. In such event, the government may, at its option and at no additional cost to the government, (I) terminated all or any portion of this contract for default, (II) require the manufacture of a new Production Lot, or a rework of the rejected Production Lot if the means and procedures by the contractor for rework are acceptable to the government, or (III) require the submission of additional samples for test. The foregoing procedures shall apply to new or reworked Production Lots in the same way as they did to the original Production Lot.

F. For each additional sample or each resubmission of a modified sample which the contractor is required to submit for approval hereunder as a result of a failure of a previous sample to conform to the requirements of the specification, the contractor shall pay to the government the costs of reinspection, examination and retesting and the contractor and his sureties (if any) shall be liable for the amount of such costs.

G. The contractor must provide material disposition instructions to the First Article Coordinator at the POC and address below for the return of the production lot samples.

**Commanding Officer  
Naval Air Depot  
First Article Test – Sta. 31B  
Attn: AIR-3.3.2 (252) 464-7748  
Bldg. 154B Cleveland Drive  
MCAS Cherry Point, NC 28533**

H. Nothing contained in the foregoing provisions of this clause, and not action of the government in accordance herewith, shall in any way prejudice the right of the government under this clause of this contract entitled default.



## DEPARTMENT OF THE NAVY

NAVAL AIR DEPOT  
PSC BOX 8021  
CHERRY POINT, NC 28535-8021

GENERAL INQUIRY

4408

Ser H-53ISST.8-TLB/04467

2 SEP 2004

From: Commanding Officer  
To: Commanding Officer, Naval Inventory Control Point (Code 073.12), 700 Robbins Avenue, Philadelphia PA 19111-5098

Subj: REQUEST FOR ENGINEERING SOURCE APPROVAL FOR ALTERNATE SOURCE QUALIFICATION (ASQ) TECHNICAL DATA PACKAGE (TDP) 04467, H-53, CLUTCH INPUT FLANGE, P/N (78286) S6137-91502-101, NSN 1615-00-915-7142; AS FURNISHED BY PRECISION GEAR INCORPORATED (21540)

Ref: (a) 339 DSC-R-JA-03-11714 of 22 Aug 03  
(b) Critical Item Management Desktop Guide of 23 Apr 04  
(c) NAVAIRINST 4200.25D

Encl: (1) ASQ TDP H-53 04467  
(2) ASQ TDP Technical Review Checklist  
(3) Quality Assurance Provisions  
(4) First Article Testing Requirements (Government Testing)  
(5) First Article Approval (Government Testing)  
(6) Production Lot Testing Requirements (Government Testing)  
(7) Production Lot Testing (Government Testing)  
(8) Contract Data Requirements List (CDRL)  
(9) NAVICP-P Site Survey Report of Precision Gear Incorporated of 15 Mar 01

1. Reference (a) requested the Naval Air Depot, Cherry Point, North Carolina, perform a final engineering review per the requirements of references (b) and (c) on the subject ASQ TDP, forwarded as enclosure (1). Precision Gear Incorporated of College Park, New York, has requested source approval under Category I on the basis of having previously manufactured the same item for the Defense Supply Center Richmond of Richmond, Virginia, per drawing (78286) S61357-91502. This facility was unable to locate a record of an ASQ TDP being submitted by Precision Gear Incorporated previously for the subject clutch input flange.

2. Enclosure (2) identifies our findings/concerns resulting from a review of enclosure (1). The Quality Assurance Provisions, First Article Inspection, Production Lot Inspection, and CDRL have been forwarded as enclosures (3) through (8). Enclosure (9) is forwarded for your information.

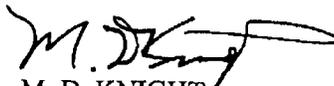
Subj: REQUEST FOR ENGINEERING SOURCE APPROVAL FOR ALTERNATE SOURCE  
QUALIFICATION (ASQ) TECHNICAL DATA PACKAGE (TDP) 04467, H-53,  
CLUTCH INPUT FLANGE, P/N (78286) S6137-91502-101, NSN 1615-00-915-7142;  
AS FURNISHED BY PRECISION GEAR INCORPORATED (21540)

3. This ASQ TDP is conditionally accepted pending the inclusion of the following requirements:

a. Precision Gear Incorporated shall only use Sikorsky approved sub-vendors.

b. Enclosures (3) through (8) shall be included in any resulting contract.

4. The points of contact for this ASQ TDP is Mr. Timothy L. Bennett (H53ISST.8), DSN 451-8968 or (252) 464-8968, and Mr. Jonathan L. Duke (H53ISST.2), DSN 451-5654 or (252) 464-5654.



M. D. KNIGHT

By direction

Copy to:

COMNAVAIRSYSCOM Patuxent River MD (AIR-4.1C) (w/o encls)