

## QUALIFICATION REQUIREMENTS

FOR

P/N: 4020071  
NSN: 2840-00-337-4257PT  
NOUN: Housing Assy-Gear, Main, Pump

29 May 86

### I. HARDWARE DESCRIPTION

A. Function: This housing is part of the main oil pump housing stack. Pumping gears are housed in the stack.

B. Material Composition: AMS 4121 Al Alloy

C. Critical Life Characteristics: The housing diameters for the bearings have been designated by design to be life limiting characteristics.

### II. DATA/DOCUMENTATION REQUIREMENTS

A. The DCAS or other government representative must provide written verification that the proposed vendor has all of the following data available:

1. Drawing No. 4020071
2. QAD No. 4020071
3. All applicable process specifications

B. The DCAS or other government representative must provide written verification that the proposed vendor's quality control program meets or exceeds the requirements of MIL-I-45208.

C. The vendor must submit a copy of the proposed manufacturing process sheets for the item, or the similar item in the event that approval is requested on the basis of IIIB below, and process sheets for the actual item with the first article.

### III. SUBSTANTIATION OF MANUFACTURING CAPABILITY

A. A vendor who has manufactured the item for the prime contractor or for other users of the F100 engine may be approved as a source for the part.

B. Other vendors will be considered for approval on the basis of their ability to manufacture a similar item for the prime contractor, U.S. government, or an ally of the U.S. government. The following conditions must be met for approval by similarity:

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1. Submit evidence of the successful manufacture and sales of the similar item.

2. Submit data on the similar item to show that the material is the same or an alloy of equal manufacturing properties, and provide specific similarities and differences between the subject and the similar parts. The data must also show that the manufacturing processes are of equal or greater magnitude than those required for the subject part.

3. A first article requirement will be included in any contract resulting from approval based on similarity.

C. Any vendor that cannot meet the criteria in either paragraph A or B above must submit three (3) samples of the subject part for analysis prior to any contract award. The samples will be used to substantiate the vendor's ability to manufacture the item.

#### IV. QUALITY CONTROL

The subject part will require 100% inspection.

*Clarence W. Miller*

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F100 Engine Mgt Branch  
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The following paragraphs document the actions required for completing the first article requirement identified on the AFLC Form 761 for this item.

1. Location of testing:

The first article testing will be performed at the vendor's plant or at an approved laboratory and witnessed by a government inspector or engineering representative.

2. Engineering Data Required:

a. A proposed test plan must be submitted for approval prior to commencement of testing. Request 'Acceptance Test Procedures' (DI-T-3714, see DD Form 1423) be procured and submitted to SA-ALC/MMFR for approval. The evaluation and approval of the test plan will require 45 days.

b. A report of the test results must be submitted for approval. Request 'Acceptance Test Report' (DI-T-3721, see DD Form 1423) be procured and submitted to SA-ALC/MMFR for approval. The evaluation and approval of the test report will require 60 days.

3. Test Requirements:

a. Three first articles shall be required for testing to verify a vendor's capability to manufacture the subject item.

b. The testing shall consist of, but not be limited to the following:

(1). Dimensional conformance to the drawing

(2). Material properties (\_\_\_ part(s) will be destroyed in testing)

(3). Finish requirements

(4). Conformance/compliance with other required processes as specified on the drawing

4. Disposition of First Articles After Testing:

a. Disapproved first article(s) shall be retained at the contractor's plant, unless specified otherwise by the contracting officer.

b. Approved first article(s) will be retained at contractor's plant for reconditioning (if necessary) with final acceptance the same as for production items. If a first article is expended in testing, then approval of the first article will constitute acceptance. Under no circumstances will the approved first article be used as a prototype or manufacturing standard.

5. Conditions for Waiver of First Article Requirement:

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a. If a bidder meets any of the following criteria, then the requirement to submit a first article is waived.

(1). Bidders who have previously furnished production quantities of the identical item to the prime contractor for delivery to the Air Force, provided that not more than 24 months have elapsed since completion of the contract.

(2). Bidders currently in production of the identical article on an Air Force contract who have received first article approval under existing contract.

(3). Bidders who have previously furnished production quantities of the identical item to the Air Force providing articles thus furnished have exhibited satisfactory performance in service, in the opinion of the Air Force, and provided that not more than 24 months have elapsed since completion of the previous contract.

b. NOTE TO BUYER: In paragraph 5.a.(3), SA-ALC/MMFR shall make the decision as to whether 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 (i.e., both with and without requirement for first article approval) and will furnish SA-ALC/MMFR the following information on the previously supplied item:

- (1). Procuring Office
- (2). Contract Number
- (3). Date of Contract
- (4). Part Number
- (5). NSN

6. These requirements have been developed by SA-ALC/MMFR and shall not be changed by any other office.