**Source Approval Request (SAR)**

**Preparation & Submittal Guidance**

**For**

**Restricted Source AMCOM Spare Parts Manufacturers and Distributors**

****

Photo Courtesy of the U.S. Army

**TABLE OF CONTENTS**

1. [**The AMCOM Spares SAR Process**](#Overview)

[1.1 Why You Need a SAR](#Why_you_need_a_SAR)

[1.2 Preparing and Submitting a SAR Package](#Preparing_and_submitting_a_SAR_Package)

[1.3 What Happens After SAR Submission](#What_happens_after_SAR_Submission)

[1.4 Helpful Suggestions for SAR Preparation](#Helpful_suggestions_for_SAR_Preparation)

[**2.0 Detailed Manufacturer SAR Preparation Guidance for Parts Manufacturers**](#Detailed_SAR_PREP)

[2.1 Determining Who Manages the Part](#Determining_who_manages)

[2.2 Determining Whether You Need a SAR](#Determining_whether_you)

[2.3 Determining the SAR Documentation You Must Submit With a SAR Package](#Determining_SAR_Documentation)

[2.4 SAR Category Definitions](#SAR_Category_Definitions)

[2.5 SAR Documentation Descriptions and Guidance](#SAR_Documentation_Descriptions)

[**3.0 Distributor SAR Guidance for Non-manufacturers**](#SAR_Guidance_Distributors)

[**4.0 Obtaining Government Technical Data**](#Obtaining_Gov_Tech_Data)

[**5.0 Non-Disclosure Agreement Recommendation**](#Non_Disclosure_Agreement)

[**6.0 Appendices**](#Appendices)

[A. General Notes](#Appendix_A)

[B. QE-STD-1](#Appendix_B)

[C. CAST-STD-1](#Appendix_C)

[D. FORG-STD-1](#Appendix_D)

[E. TEST-STD-1](#Appendix_E)

1. [SARs for FAA/PMA Parts](#Appendix_F)
2. [Distribution Statements for Technical Documents](#Appendix_G)
3. [SAR TYPES](#Appendix_H)
4. [Acquisition Method Reason Code (AMRC) Definitions](#Appendix_I)
5. [Repair Parts Purchase or Borrow (RPPOB) Program](#Appendix_J)

**1.0 The AMCOM Spares SAR Process**

**1.1 Why You Need a SAR**

All prospective manufacturers, or distributors, seeking to compete for a solicitation for Aviation and Missile Life Cycle Management Command (AMCOM) Spares, for any restricted source parts, are required to be an AMCOM approved source. To obtain approval, vendors must submit a SAR package, for review and approval, to the Engineering Directorate (ED), Quality Engineering Division. Source approval must be obtained prior to being considered for contract award. Approvals are made on an individual part number basis for a specific manufacturing location (CAGE).

A manufacturer Source Approval Request (SAR) is a technical capability proposal, from an alternate supplier seeking to gain source approval for the manufacture of a specific **restricted source** part that is managed by AMCOM. Once source approval is granted to a supplier, they are considered an approved source and can bid on AMCOM solicitations for restricted source spare parts. A SAR is one of the key means by which a prospective supplier demonstrates their capability to manufacture a part that meets or exceeds the original design requirements and is required by the ED to analyze the technical risk of direct procurement from a source other than the prime contractor. The SAR process also establishes Army quality oversight of new sources and reduces the risk of premature component failures. In addition, requirements of Section 802, Public Law No. 108-136 and DFARS 209.270 require CSIs (Critical Safety Items) only be bought from approved sources. Note: A CSI was formerly referred to as a Flight Safety Part (FSP).

Once a SAR has been submitted, the SAR review process is conducted to evaluate a prospective vendor’s ability to provide an aircraft part that meets the standards set forth by the U.S. Army. These standards encompass drawings, specifications, Spares Technical Data Packages, and testing requirements. The SAR review is both administrative and technical. Subject matter experts perform an evaluation of a prospective vendor’s SAR from many different viewpoints such as manufacturing planning, proper materials identification, traceability, proper process specification use (i.e., Heat Treatment, Magnetic Particle Inspection, Fluorescent Penetrant Inspection, Cadmium Plating, Shot Peening, etc), proprietary information rights, traceability, engineering testing, etc. The desired result of the SAR review is to qualify additional sources of supply with the confidence that the vendor will provide the highest quality parts, with safety of our equipment and Warfighter as the main focus.

Questions concerning SAR submissions can be directed to the ED SAR Team at [usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil](mailto:usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil) or call the SAR Team at 256-313-8978, 256-313-6389 or 256-313-8975.

**1.2 Preparing and Submitting a SAR Package (follow Steps 1 through 4 below)**

STEP 1 - Prospective manufacturers should first verify the following: 1) That the part they are considering submitting a SAR for is actually an AMCOM managed part (see [Section 2.1 Determining Who Manages a Part](#Determining_who_manages)) and 2) That the part actually requires a SAR submittal (see [Section 2.2 Determining Whether You Need a SAR](#Determining_whether_you)). Parts which are not “restricted source” parts do not require a SAR.

STEP 2 - Once you have confirmed that a SAR is required, e-mail the ED SAR Team ([usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil](mailto:usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil)) a signed letter, on company letterhead, requesting to submit a SAR for a specific part. Non-manufacturers (Distributors) see [Section 3.0, Distributor SAR Guidance for Non-manufacturers](#SAR_Guidance_Distributors). The SAR request letter (also referred to in this document as a cover letter) must include:

* + The Part Number (and dash number, if applicable), NSN, and nomenclature
  + Your firm's name, address, CAGE Code, telephone number, and FAX number
  + A description of your quality program (i.e., MIL-I-45208, MIL-Q-9858, ISO-9000, etc.) to include copies of the quality program certifications (if applicable)
  + A synopsis outlining your firm's manufacturing capabilities, facilities, experience, and equipment.
  + A knowledgeable point of contact, their job title, E-mail, and telephone number
  + Signed and dated

Click on the icon below to see an example cover letter. You can use this as a guide or template and customize it to your specific situation.



The Army will evaluate its current and projected needs for the specific part and you will be notified of the decision as to whether a SAR will be accepted (note: submit only one part number for each SAR request). SARs for parts which are not of sufficient priority will not be processed and the SAR submitter will be notified accordingly. However, the SAR request may be resubmitted at a later time to take advantage of ongoing changes in the Army’s spares procurement priorities.

STEP 3 – If your request to submit a SAR is approved, then prepare the SAR package in accordance with [Section 2.0 Detailed Manufacturer SAR Preparation Guidance for Parts Manufacturers](#Detailed_SAR_PREP) (Distributors use [Section 3.0, Distributor SAR Guidance for Non-manufacturers](#SAR_Guidance_Distributors)).

STEP 4 - Submit the completed SAR package to the ED for review.

**\*\* The preferred and most expeditious method of SAR document submittal is through secure electronic file submission (PDF format ) via the Web. \*\***

For instructions on submitting your SAR documents securely, via the web, click on the icon below:



SARs on CD or DVD can be mailed to the following address:

AMRDEC, Quality Engineering Division

Aviation Sustainment Branch

Attn: FCDD-AME-U, Mr. Lee Drake

5400 Fowler Road

Redstone Arsenal

Huntsville, AL 35898-5000

**1.3 What Happens After SAR Submission**

After your company’s letter requesting to submit a SAR (for a specific part) has been approved, you will be requested to send the SAR package, in its entirety, to the ED. Once received by the ED, the SAR package will first be logged into the ED SAR database. SARs will be processed in accordance with other competing requirements and workload constraints. Processing time for SAR packages varies greatly and is dependent on many variables such as SAR complexity, vendor response time, competing priorities, workload constraints, and testing requirements. **Due to time constraints and lead times involved, the Government cannot guarantee expedited processing of SARs submitted in response to a solicitation announcement in the FedBizOpps.** Once a solicitation appears in the FedBizOpps, it is very unlikely that there is enough time to process a SAR for the current solicitation. Pursuant to Federal Acquisition Regulations **(FAR) 9.202(e) - The contracting officer need not delay a proposed award in order to provide a potential offeror with an opportunity to demonstrate its ability to meet the standards specified for qualification. In addition, when approved by the head of an agency or designee, a procurement need not be delayed in order to comply with 9.202(a).**

During the ED review of a prospective vendor’s SAR package, corrections and updates to deficient documentation will be requested as required. Any missing documentation will also be identified and requested. The vendor is responsible for providing all of the requested documentation within 60 days after notification. Failure to provide the requested documentation, within the specified timeframe, may result in closure of the SAR. If there is any testing required, all testing must be completed by the prospective vendor, and the results approved by the ED. Once the SAR is approved, the vendor (and their CAGE) will be added as an AMCOM approved source for the specific part number and NSN and they will be notified of their approval status. However, source approval only grants sources the opportunity to compete for procurement of the specific part; it does not guarantee award of a contract.Should the approved source be awarded a contract, updated manufacturing planning, which includes the current revision of the drawing and STDPs, may be required in accordance with contract requirements.

**1.4 Helpful Suggestions for SAR Preparation**

1. This document contains guidance for submission of **Manufacturer SARs** and **Distributor SARs**. Note: Novation and M&O (Maintenance and Overhaul) SARs are not covered in this guidance but can be found under separate guidance at <https://www.avmc.army.mil/Directorates/ED/SAR/>. A description of the AMCOM SAR types is contained in [Appendix H](#Appendix_H).
2. Click on the icon below and make sure to consider the following key points during SAR document preparation:

****

**2.0** **Detailed Manufacturer SAR Preparation Guidance for Parts Manufacturers**

Note: This section is for parts Manufacturers. If you are a Distributor (non-manufacturer) see [Section 3.0 SAR Guidance for Distributors (Non-manufacturers)](#SAR_Guidance_Distributors).

**2.1** **Determining Who Manages a Part**

Prospective vendors/manufacturers who are planning to submit a SAR for an AMCOM managed part should first verify that their part is actually an AMCOM managed part. In order to do this, click on the guidance below and follow the instructions to install DLA’s FLIS software. Run the application shown in Figure 2.0. Then enter the part’s NIIN or part number and select “Search”.

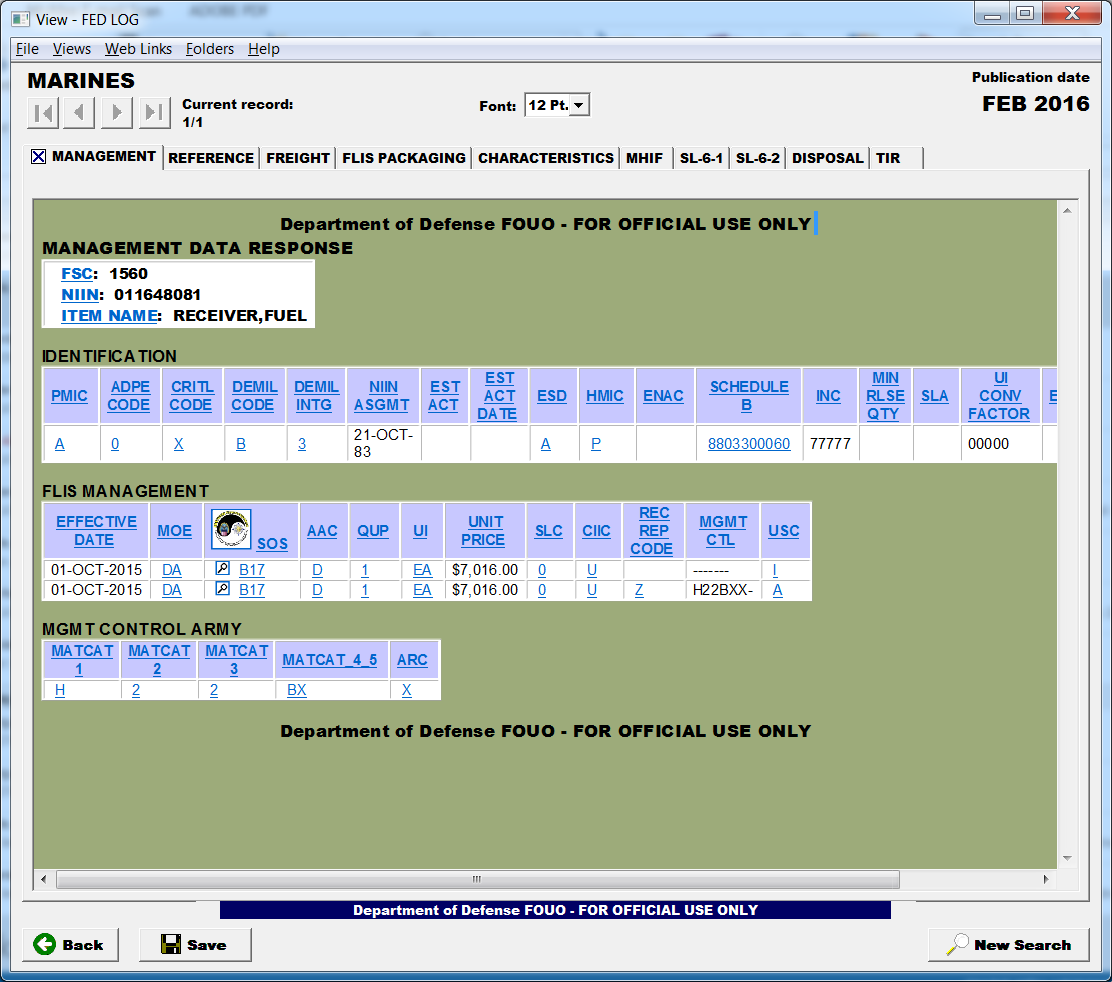


****

Enter the NIIN or Part Number and select “SEARCH”

**Figure 2.0 DLA’s FLIS Search Page**

FLIS will display the part information shown in Figure 2.1. If you look under the “FLIS Management” tab, an “SOS” (Source of Supply) will be listed. AMCOM managed parts will be indicated by an SOS value of “B17.” A DLA managed part will have an SOS code of “SMS” and, if a restricted source part, a Source Approval Request must be submitted through DLA’s source approval process. DLA’s SAR guide is located at <http://www.dla.mil/portals/104/documents/aviation/source%20approval%20handbook.pdf> . Additional questions concerning submission of SARs for DLA managed parts can be directed to the **DLA Competition Advocate at 804-279-4085**.



SOS (Source of Supply) will be **B17** for AMCOM managed parts.

**Figure 2.1 DLA’s FLIS Search Page**

**2.2**  **Determining Whether You Need a SAR**

Each AMCOM managed part is assigned an Acquisition Method Reason Code (AMRC) – (see Appendix I. Acquisition Method Reason Code Definitions. An AMRC of “1G” or” 2G” means the part is fully competitive, is not a restricted source part, and no SAR is required. You can “mouse over” the AMRC codes to see a pop-up box containing a definition. Any AMRC value other than “1G or 2G” means the part is restricted source. AMRC codes of “1C, 2C 3C, or 4C” indicate that technical data may be available from the Government and a SAR request can be submitted. All other AMRC codes indicate that a part is most likely unsuitable for SAR submission due to the Government not having proprietary rights to the data, missing or incomplete technical data, an unstable design, or some other issue restricting the Government’s ability to process a SAR. If a part is not listed, contact the SAR Team at [usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil](mailto:usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil) and provide the part number (P/N) and National Stock Number (NSN) with a request for AMRC determination. Parts that you believe should be fully competitive, but which do not have an AMRC code of 1G or 2G, should be brought to the Government's attention by contacting the SAR Team at [usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil](mailto:usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil).

Prospective vendors should also be aware that, in order to propose to any FEDBIZOPS (<https://www.fbo.gov/>) solicitation, a CAGE code is required. Therefore, all contractors must register with the System for Award Management (SAM), which is accessible from the website <https://www.sam.gov/portal/public/SAM/>. Also, the SAM Quick Guide is a helpful reference.



**2.3** **Determining the SAR Documentation You Must Submit With a Manufacturer SAR Package**

In order to determine the required documentation that must be submitted with a Manufacturer SAR package, first determine the appropriate SAR category for a specific part using Table 2.0 below. There are four possible source approval categories from which to select (**CATEGORY 1 through CATEGORY 4**). Choose the category which accurately describes the part for which you wish to become an approved source. A detailed description of each SAR category is provided in Section 2.5 below. Once you have determined the appropriate SAR category, use Table 2.1 to determine the mandatory documents which must be submitted. During review of the SAR package, the ED will verify that the correct SAR category was selected and that all mandatory documents have been submitted. If an incomplete SAR is submitted, you will be notified by letter and will be given 60 *days* to respond. If the remainder of the mandatory documentation requested is not received within 60 *days*, the SAR may be closed.



**Table 2.0 Manufacturer SAR Category Determination**

REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK

**Table 2.1 Manufacturer SAR Documentation Required**

If required, you may request assistance in determining the proper Manufacturer SAR category for a part by e-mailing [usarmy.redstone.rdecom-amrdec.mbx.ed-sar@mail.mil](mailto:usarmy.redstone.rdecom-amrdec.mbx.ed-sar@mail.mil).

REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK

**2.4** **Manufacturer SAR Category Definitions**

The following paragraphs define, and provide detailed information, for each of the four Manufacturer SAR categories listed in Table 2.0 and Table 2.1.

1. CATEGORY 1 – Actual Part Manufacturer: You are the actual manufacturer of a part which you presently manufacture, or have satisfactorily manufactured in production quantities, in the **last three years** for: the Original Equipment Manufacturer (OEM), one of its subcontractors, another Department of Defense (DOD) agency, or a civil sector under FAA PMA Identicality; where FAA PMA Identicality does not apply to CSI parts (formerly referred to as Flight Safety Parts (FSP), see Appendix 6.F for more information on FAA/PMA parts). You have legal data rights to possess all of the OEM's Technical Data Package for the Actual Part.

The ED will evaluate the part’s design, qualification, durability, and fatigue/life limiting factors and determine the extent of qualification testing that may be required. When applicable, testing will be used to verify that the part produced by the prospective new source will provide equal or greater life and performance as compared to OEM parts currently operating in the field. Test results submitted to the ED for approval must include resubmission of all Table 2.1 documentation that was updated to reflect the part’s final post-test configuration.

1. CATEGORY 2 – Similar Part Manufacturer: You have not previously manufactured the actual part, however, in the **last three years**, you are the manufacturer of a similar part(s) for: the Original Equipment Manufacturer (OEM), one of its subcontractors, another Department of Defense (DOD) agency, or a civil sector under FAA PMA Identicality; where FAA PMA Identicality does not apply to CSI Parts (formerly referred to as Flight Safety Parts (FSP), see Appendix 6.F for more information on FAA/PMA parts). You have legal data rights to possess all of the OEM's Technical Data Package for the Actual Part. You will need to substantiate your manufacturing capabilities, or verify that you have manufactured production quantities of acceptable similar parts. It is acceptable to submit multiple similar parts to substantiate manufacture by similarity, since a single part may not be sufficient. Similar part(s) must be similar in complexity, design, criticality, materials, and application. In order to prove similarity, a detailed comparative analysis of the differences and similarities between the similar part(s) and the actual part is required. This analysis should include materials, configuration, tolerances, processes, testing, part function, dimensions, etc. The ED will determine if similarity is applicable based upon evaluation of the SAR. ([Figure 2.5 Example Detailed Comparative Analysis of Actual vs. Similar Part](#Comp_anal_2)).

The ED will evaluate the part’s design, qualification, durability, and fatigue/life limiting factors and determine if qualification testing is required. When required, testing will be used to verify that the part produced by the prospective new source will provide equal or greater life and performance as compared to OEM parts currently operating in the field. Test results submitted to the ED for approval must include resubmission of all Table 2.1 documentation that was updated to reflect the part’s final post-test configuration.

1. CATEGORY 3 – New Manufacturer of a Part: You are a new manufacturer, or new prospective source, which does not meet Category 1 or 2 criteria, but legally possesses the OEM’s technical data and intends to manufacture the part using the AMCOM approved technical data package. The ED will determine if the SAR adequately describes all essential manufacturing processes required to produce the part. This includes, but is not limited to:
2. The prospective supplier’s capabilities to perform and/or control the processes needed to produce the part (e.g., equipment lists, qualified subcontractors, and qualified personnel).
3. The prospective supplier’s ability to produce the parts with acceptable quality and demonstrate the ability to produce the part to specifications without compromise of the design intent.

The ED will evaluate the part’s design, qualification, durability, and fatigue/life limiting factors and determine the extent of qualification testing that may be required. When applicable, testing will be used to verify that the part produced by the prospective new source will provide equal or greater life and performance as compared to OEM parts currently operating in the field. Test results submitted to the ED for approval must include resubmission of all Table 2.1 documentation that was updated to reflect the part’s final post-test configuration.

1. CATEGORY 4 – Alternate Part Manufacturer (Reverse Engineering): In this case, you are a manufacturer who does not meet Category 1, 2, or 3 criteria, do not possess all of the Original Equipment Manufacturer’s (OEM) technical data, and wish to reverse engineer the part at your own expense. Reverse engineering is the process of replicating a part, functionally and dimensionally, by physically examining and measuring already existing parts to develop the technical data (physical and material characteristics) required for competitive procurement. For some parts, it may be possible to borrow an existing part from the Government to support the reverse engineering effort (see [Appendix J - Repair Parts Purchase or Borrow (RPPOB) Program](#Appendix_J). Reverse engineering is only allowed for Non-CSI parts. **A manufacturer’s SAR, for a Category 4 part, will not be approved until after successful completion of all required testing. Only after successful completion of all testing (as determined by the ED), will the manufacturer be allowed to bid on solicitations for the respective part.** Note: Your reverse engineering activity may be illegal if you have, or have had access to, any proprietary data for which you do not have adequate legal rights and which would aid reverse engineering, manufacture, or testing of the part.
2. **Test Requirements for Category 4 (Reverse Engineered) Parts:** Category 4 parts are parts for which AMCOM does not possess sufficient technical data, or data rights, to create a competitive Spares Technical Data Package (STDP) and for which you do not have sufficient data rights for direct sales to the Government, or sufficient data rights to manufacture and test to OEM specifications. In this case, the manufacturer must achieve source approval through demonstrated engineering and manufacturing capabilities (engineering testing), which includes successful manufacture and testing of the part, prior to a contract award. FAA PMA parts approved under “test & computation” fall under this category since the new design must be verified. When a part is developed through reverse engineering, a new part number and/or NSN may be required.
   1. As a potential new source, you will demonstrate, prior to becoming approved as a source, that you and your vendors, subcontractors, etc., have adequate engineering expertise and manufacturing/production capabilities to successfully manufacture, inspect, and test the component or part in accordance with all applicable drawings, process specifications, and test specifications. The Government may require inspection of these elements on site. Your entire reverse engineering effort, including all testing, must generally be accomplished at your expense.
   2. The vendor must prepare and submit, for ED review, comment, and approval, a test plan with accept/reject criteria as well as all documentation listed in Table 2.1 (i.e. drawings, manufacturing planning, Reverse Engineering Management Planning, etc.). Once approval is given by the ED, testing can be performed. The testing will be used to verify that the part produced by the prospective new source will provide equal or greater life and performance as compared to OEM parts currently operating in the field. Testing may include form, fit, and function checks, endurance testing, and/or performance testing, and may require destructively testing and evaluating each part. When required, you must provide the ED samples of the part (manufactured at your expense).
   3. Upon completion of testing, the ED must be in possession of sufficient data, or be provided sufficient data, to perform a detailed risk assessment on the reverse engineered design. Prior to source approval, The ED may also require resubmission of Table 2.1 documentation in order to verify that the documentation has been properly updated to reflect the part’s final post-test configuration.
3. **Reverse Engineering Management Planning:**. A reverse engineered part must have the same form, fit, and function as the original part. The SAR submission must include Reverse Engineering Management Planning which describes the approach used to develop all applicable drawings, process specifications, and test specifications. The planning must describe all aspects of the proposed reverse engineered design, to include:
4. Materials, critical characteristics, critical inspection processes, and critical manufacturing processes and how these were derived.
5. All detailed information about creation of the drawings and the methods used to reverse engineer the part (i.e. what tools were used to determine dimensions, materials, and manufacturing processes) must be submitted for review, comment, and approval prior to any manufacturing.
6. Photographs should be taken of the individual parts with the part number visible (whenever possible) and submitted with the vendor’s Reverse Engineering Management Plan/SAR.

**2.5** **- Manufacturer SAR Documentation Descriptions and Guidance**

The following is a description of the documentation requirements listed in Table 3.0 - SAR DOCUMENTATION REQUIRED FOR AMCOM SPARES MANUFACTURING CATEGORIES. The following requirements do not apply to every category; so refer to Table 3.0 to determine which apply for a specific category.

1. Table of Contents: Provide a listing of your submitted SAR package documents as required by Table 2.1. This will assist the ED in making certain that all of your documents are accounted for and entered into our database.
2. Cover Letter: Provide a cover letter stating that you wish to become an approved source under the appropriate Category ([see Table 2.0](#Category_Determination)) for a particular part number. The letter should include:
   1. The Part Number (and dash number, if applicable), NSN, and nomenclature
   2. Your firm's name, address, CAGE Code, telephone number, and FAX number
   3. A description of your quality program (i.e., MIL-I-45208, MIL-Q-9858, ISO-9000, etc.) to include copies of the quality program certifications (if applicable)
   4. Point of contact, their job title, E-mail, and telephone number
   5. Quality Manual (as an attachment): Provide a current copy of your quality control manual must be submitted initially (pdf file format is preferred); subsequently, if any major changes occur, a current quality control manual should be resubmitted
   6. Company Brochures (as an attachment): Brochures should be sent with first SAR submission only. These should include a synopsis outlining your firm's capabilities, facilities, experience, and equipment list. All equipment used in the manufacture of the actual part, with accuracy, size, capability, and precision of the outlined equipment. If any major changes occur in your firm's capabilities, facilities, experience, or equipment list, submit the changes or the new brochure
3. Actual Part TDP (Technical Data Package): Provide a complete and current copy of the technical data package required to manufacture the part. Note: Some technical data might be available through the Government’s EDMS system (see Section [4.0 Obtaining Government Technical Data](#Obtaining_Gov_Tech_Data)).
4. The **Technical Data Package** for a part includes, but is not limited to, the following documentation:
5. **Drawings**: Provide copies of drawings, Spares Technical Data Package (STDP), Source of Supply (SS) drawings/documents, Parts List (PL), etc., for the part’s most current configuration. Note: Not all parts will have all of these document types.
6. **Specifications**: Provide copies of the top sheet of all applicable specifications necessary to completely manufacture the actual (OEM) part (SAE, AMS, MIL Standards, NAS, MS, NASM documents, etc.). Also provide a full copy of any of your company’s internal specifications (i.e. specifications created and controlled by your company) that are referenced in the part’s manufacturing planning (traveler, operations sheets, inspection sheets, technique sheets, etc.).
7. Actual Part Detailed Manufacturing Planning – Provide a copy of your manufacturing panning for the part. For the purpose of this guidance, the term “**manufacturing planning**” is the complete set of technical documents, utilized by a vendor’s manufacturing and inspection personnel, to completely produce a part or assembly. Review of a part’s manufacturing planning is required for source approval. In addition, a key component of the manufacturing planning is the part’s “manufacturing process plan”, referred to in this guidance as the “**manufacturing plan**.”
8. **Manufacturing planning** for a part includes, but is not limited to, the following documentation:
9. **Manufacturing Plan**: A part’s manufacturing process plan (i.e. traveler, router, shop order, work instruction, operations sheet, process sheet, etc.) is referred to as the “manufacturing plan.” A part’s manufacturing plan is a key component of the part’s “manufacturing planning” documentation and must contain all manufacturing and inspection processes in a step-by-step sequence. For detailed manufacturing plan requirements, see [Section 2.6.D.2 Detailed manufacturing plan requirements](#detailed_mfg_plan_requirements).
10. **Technique Sheets or Process Control Documents**: Provides detailed information for in-house processes such as heat treat, shot peen, magnetic particle inspection (MPI), fluorescent particle inspection (FPI), etc.
11. **Inspection sheets or quality control verification sheets:** Inspection documentation associated with the part’s manufacturing process.
12. **Subcontractor manufacturing plan:** When applicable (such as for CSI subcomponents with CC’s), (i.e. traveler, router, shop order, work instruction, process sheet). This could apply to Magnetic Particle Inspection (MPI), Fluorescent Particle Inspection (FPI), hat treat, shot peen, etc.
13. **Sketches, photographs, and/or charts:** When applicable, the submitted planning should include sketches, photographs, and/or charts to increase clarity.
14. **Bill of Material (BOM)** **or Parts List (PL)** must be current, complete, and accurate and identify all proposed vendors of restricted source subcomponents (for an assembly). The BOM could be in the form of a separate Approved Vendor List (AVL) or equivalent documentation. Additional traceability and document control data demonstrating how the manufacturer controls their suppliers may be required during the ED planning review. All proposed suppliers of restricted source subcomponents must be AMCOM approved.
15. **Castings and Forgings:**  If a part requires a casting or forging, the casting or forging must be obtained from an AMCOM approved source. Approved sources are specified in the appropriate STDP. If an additional source wishes to be approved, it must be done in accordance with FORG-STD-1 for forgings or in accordance with CAST-STD-1 for castings. This qualification must be completed prior to contract award. (See [Appendix C. CAST-STD-1](#CAST_STD_1) and [Appendix D. FORG-STD-1](#FORG_STD_1)).
16. **Spiral Bevel Gears:** Spiral bevel gears require that sources must have in their possession the required working and silver control master gears necessary for acceptance of production spiral bevel gears, or written documentation giving them access to those master gears. Development of "equivalent" master gears that are not coordinated/calibrated to the golden master gear held by the prime contractor is not allowed. This is necessary to ensure interchangeability with all mating gears.
17. **Acceptance Test Plan (ATP):** If an acceptance test plan is used in the manufacture of the part, this must be provided along with any other documents referenced in the ATP.
18. **Manufacturing Plan detailed requirements**: The manufacturing plan (i.e. traveler/shop router, etc.) must contain all manufacturing and inspection processes in a step-by-step sequence. This must be the actual documentation used by the company’s manufacturing and inspection personnel during the production of the part.
    1. To see a summary of the key items looked for during ED’s manufacturing plan review, click on the icon below:



* 1. To see an example of a CSI or Non-CSI manufacturing plan, click either of the icons below:

1. The manufacturing plan must have the company’s name, address, and CAGE code at the top of the first page (preferably every page), as well as revision identifier with revision date. There must be enough space to allow the inspection personnel to record the dimensions, serial numbers, and/or any other applicable information such as acceptability limits, special instructions, inspection tooling, frequency, and the inspector’s stamp. Your plan must clearly show which parts are being manufactured in-house and which are being purchased, including from whom the parts will be purchased. Processes performed by outside vendors must be clearly identified. Also, for purchased subcomponents, or outside processes, the vendor must be identified in the applicable operational steps by Name, address, and CAGE code.
2. The manufacturing plan must provide a complete description of all manufacturing processes, materials, tolerances, testing, part function, overall dimensions, and detailed inspection criteria utilized to manufacture the part. The plan must also provide clear definition of operating parameters with tolerances of any processes not verified by subsequent non-destructive inspection, such as:
   * 1. Exposures to heat, such as stress relief, hydrogen embrittlement bake relief, use of heat lamps, drying ovens, etc. shall be identified in separate operational steps.
     2. Surface treatments, such as shot peening, plating, painting, etc. shall also be identified in separate operational steps.
     3. De-burring and breaking sharp edges shall be identified in separate operational steps.
3. Processes that require unique “process/technique” sheets shall reflect the requirements in the applicable process specifications. For example, stating "shot peening per SAE AMS 2430" is not considered a detailed procedure and shall be further elaborated upon with process/technique sheets showing set-up and control requirements.
4. The plan shall identify, where applicable, the revision(s) of the Spares Technical Data Packages (STDP), engineering drawing(s), parts list(s), and any Engineering Orders or Advanced Drawing Change Notices, etc. used in its generation.
5. Documentation from the subcontractor(s) must be included which indicates a willingness to perform the identified tasks. This information is required for the actual part and, if you apply under Category 2 (similarity), it is also required for the similar part.
6. For all serialized items, in-process and final inspections must be traceable to specific serial numbers (S/N). The inspection sheets/plans/ records etc., must contain sufficient space to accommodate the necessary serial numbers.
7. Manufacturing plans for parts that are classified as **CSI**s must also include the following:
8. For parts that are CSIs, the top page of the manufacturing plan must provide a statement very similar to, and containing all key elements of, the following example statement: “This part is a Critical Safety Item (CSI) manufactured in accordance with QE-STD-1. Critical Characteristics (CC) must be 100% inspected and AMCOM/Engineering Support Activity (ESA) approval must be granted prior to implementing any change that would affect a Critical Characteristic.” Although it is required that you place this statement on the first page of your plan, it is preferred that you provide this statement on all pages. This statement is also required on any subcontractor planning that affects a Critical Characteristic (CC). (See [Appendix B. QE-STD-1](#QE_STD_1)).
9. Clear identification within the plan of all CCs so as to draw attention to them (i.e. <<C>>, \*\*CC\*\*, ★, etc.) and a statement requiring 100% inspection of all CCs.
10. A location on the manufacturing plan to document the measured/inspected value of each CC by S/N; e.g., hardness, critical dimension, torque, and the S/N of tool, machine, or fixture used must be included.If CCs are recorded on separate inspection method sheets, those sheets shall be included with the planning and conform to all CSI (formerly referred to as Flight Safety Parts) planning requirements.
11. Subcontractors performing CSI critical characteristic processes must be AMCOM approved sources. In addition, the source of any subcontracted special process (i.e. Heat Treat, Shot Peening, Cad Plating, etc.) that affects a CC must be identified by CAGE Code, name, address and phone number. Only one special process subcontractor shall be listed per outsourced operation unless otherwise approved by the Government. If CCs or some process that affects a CC are being performed by an outside vendor, then that subcontractor planning is considered part of the manufacturing plan and must be submitted for review. In addition, this planning must meet the requirements of paragraphs 8b and 8c above.
12. Frozen Planning – An approved CSI part manufacturer has submitted their manufacturing planning to the AMCOM/Engineering Support Activity (ESA) and received approval. Once an approved manufacturer has been awarded a contract for a CSI part, their manufacturing planning is “frozen” in accordance with QE-STD-1 (See [Appendix B. QE-STD-1](#QE_STD_1)). As a condition of contract award, the approved manufacturer will be required to resubmit their planning. This requires a copy of the frozen planning be maintained onsite with the ED. From this point forward, it is the approved source’s responsibility to notify AMCOM, and obtain approval, for any intended changes to the manufacturing planning that affect a critical characteristic. This will require resubmission of the frozen planning containing the proposed changes. Submit the planning update to the DoD SAFE site (click the icon below to open the instructions):



1. Sixty (60) Day On-hold Letter – During the SAR process, if required, the ED will request additional information and/or corrections by sending a 60 day on-hold letter containing a description of the additional information and/or corrections required to continue the SAR process. If the prospective manufacturer or distributor does not respond within 60 days, the SAR may be closed due to non-compliance with the SAR process. However, dependent upon the Army’s current and projected needs for the specific part, the ED may restart the SAR process if the prospective manufacturer provides the required information at a later time.
2. Master Tooling Certification: Provide certification of possession of, or access to, any required master tooling, master gears, proof of calibration, and/or special tooling/test equipment current to latest drawing revision. Please state if no master tooling is required. This certification must be on company letterhead, signed by a company officer, and dated.
3. Technical Data Rights Certification Letter: Certification of rights to use technical data must be presented in the format provided below (see Figure 2.4), signed by someone within the company who has the appropriate signature authority to sign a legally binding document. If proprietary data is involved, you must supply a statement from the owner of that data that gives you the legal rights to use that specific data. NOTE: This also applies to the use of data the Government possesses but does not have the right to use in competitive manufacturing. The format provided in Figure 2.4 below has been approved by the AMCOM legal department. Any changes to the format or language will need to be approved by AMCOM legal.

YOUR COMPANY’S LETTER HEAD

**TECHNICAL DATA RIGHTS CERTIFICATION**

I am an officer and employee of the above named legal entity with the responsibility for investigating the facts upon which this certification is made. To the best of my knowledge and information obtained from my recent investigation:

1. I believe and certify that the technical data (hereinafter to include software) submitted to the U.S. Army Aviation and Missile Command (AMCOM), Huntsville, Alabama, as a part of my company's request for approval as a potential source for the purpose of obtaining a contract, was obtained by legal means by my company, its current or recent employees; and
2. I believe and certify that my company, its current or recent employees, did not obtain or receive any technical data marked with a company's proprietary rights legend or a government limited/restricted rights legend from any U.S. Government agency or employee or other third parties that were used in the preparation of or incorporated into the request for source approval or its supporting technical data other than as described herein; and
3. I certify that my company has the legal right to use said technical data to manufacture the below identified part for the United States Government. To the extent that said technical data are marked with a company's proprietary rights or a Government limited/restricted rights legend or are otherwise believed to be or have in the past been the proprietary data of another company, the following documents which are attached hereto and made a part of this certification form the basis for my company’s claim to use said technical data. Such documentation must show an unbroken chain of authorization from the owner of the proprietary or limited/restricted rights data to the certifying company and must clearly cover the data necessary for source approval.

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER TITLE 18, UNITED STATES CODE, SECTION 1001.

THIS CERTIFICATION APPLIES TO

NSN\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ P/N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(for multiple parts attach NSN / P/N list)

(Signature)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (typed or printed name & title)

(Date)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Figure 2.4 Technical Data Rights Certification Letter**

1. TECHNICAL DATA RIGHTS CERTIFICATION INSTRUCTIONS:
2. Place certification on company stationery.
3. List and attach documents pertaining to certification.
4. Date, sign, and state signer's title.
5. POLICY CONCERNING USE OF TECHNICAL DATA BY CONTRACTORS
6. It is U.S. Department of Defense (DOD) policy that limited/restricted rights technical data or a company's proprietary data generally should not be released outside the Government without the written consent of the owner.
7. If a potential source submits technical data to AMCOM for source approval purposes, or to an AMCOM contracting officer for the purposes of meeting responsibility, qualification, or performance requirements, the technical data will be reviewed for ownership and the right to use as set forth below.
8. The Technical Data Rights Certification must be executed prior to source approval. The ED Source Approval Office has the responsibility to review the certification and ensure that the certification and any documents attached thereto support the contractor's legal right to use all technical data required.

1. Actual Part Subcontractor/Vendor List: A list must be provided containing full company names, telephone numbers, CAGE codes, and addresses of all subcontractors/vendors to be used, as well as the subcontractor/vendor part numbers being procured. Note: Subcontractors/vendors used for castings, forgings, machining, and exotic materials, as well as for special processes/operations designated as critical characteristics, must be AMCOM approved sources. See Figure 2.5 Example Subcontractor/Vendor List.

REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK

** Figure 2.5 Example Subcontractor/Vendor List**

1. Actual Part Shipping & Acceptance Documents: Provide copies of Purchase Orders or shipping documents, and proof of acceptance of production quantities for the actual part(s) from the AMCOM or another DOD agency in the last three years.
2. Similar Part TDP (Technical Data Package): Provide a complete copy of the technical data package required to manufacture the part(s). Note: multiple parts can be submitted to demonstrate and provide evidence of similar part manufacturing capability.
3. The **Technical Data Package** for a part includes, but is not limited to, the following documentation:
4. **Drawings**: Provide copies of drawings, Spares Technical Data Package (STDP), Source of Supply (SS) drawings/documents, Parts List (PL), etc., for the part’s most current configuration. Note: Not all parts will have all of these document types.
5. **Specifications**: Provide copies of the top sheet of all applicable specifications necessary to completely manufacture the similar part (SAE, AMS, MIL Standards, NAS, MS, NASM documents, etc.). Also provide a full copy of any of your company’s internal specifications (i.e. specifications created and controlled by your company) that are referenced in the part’s manufacturing planning (traveler, operations sheets, inspection sheets, technique sheets, etc.).
6. Similar Part Shipping & Acceptance Documents: Provide copies of Purchase Orders or shipping documents and proof of acceptance of production quantities for the similar part(s) from the OEM or another DOD agency in the last three years must be submitted.
7. Comparative Analysis: Provide a detailed comparative analysis of the differences and similarities between your similar part, and the actual part for which you are requesting approval, must be submitted (see Figure 2.6). Note: Your similar part must be a part that you have manufactured within the last three years for: the Original Equipment Manufacturer (OEM), one of its subcontractors, another Department of Defense (DOD) agency, or a civil sector under FAA PMA Identicality. It is acceptable to submit multiple similar parts to substantiate manufacture by similarity, since a single part may not be sufficient. In order to prove similarity, a detailed comparative analysis of the differences and similarities between your similar part(s) and the actual part is required. This analysis should include materials, configuration, tolerances, processes, testing, part function, dimensions, etc. A vague analysis is not adequate.

REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK



Note: The “Similar Part” must be a part which you have manufactured during the last three years.

Note: The “Actual Part” is the OEM part.

**Figure 2.6 Detailed Comparative Analysis of Actual vs. Similar Part**

1. Similar Part Detailed Manufacturing Planning: Provide detailed manufacturing planning for the similar part, including processes, materials, configuration, tolerances, testing, part function, and overall dimensions, must be submitted. This should include an existing stamped off manufacturing plan used to produce the similar part. Manufacturing plans must list all processes in the proper sequence.
2. Similar Part Subcontractor/Vendor List: Provide a subcontractor/vendor list which contains names, telephone numbers, CAGE codes, and addresses of all subcontractors/vendors used (including castings, forgings, exotic materials, machining, special processes, etc.), and subcontractor/vendor part numbers, if applicable.
3. Reverse Engineering Management Planning: Provide reverse engineering management planning which describes all aspects of the proposed reverse engineered design, specifications, materials, critical characteristics, critical inspection processes, and critical manufacturing processes to satisfy requirements and how these were derived. Photographs should be taken of the individual parts with the part number visible (whenever possible) and submitted with the vendor’s SAR. All detailed information about creation of the drawings and the methods used to reverse engineer the part (i.e. what tools were used to determine dimensions, materials, and manufacturing processes) must be submitted for review, comment, and approval.
4. Test Plans: All proposed test plans must be submitted for ED approval prior to beginning testing.
5. FAA/PMA Certification: Provide an FAA/PMA Certification, based upon Identicality, for the part that you have received from the FAA/PMA (see Appendix 6.F).
6. Test Data to Validate Performance: Provide test data to validate the performance of the part. Testing is done to validate the performance of the part after the test plans have been approved. Test requirements are part specific and are included in the Spares Technical Data Package (STDP) and/or provided by the ED who will evaluate part design, qualification, durability, and fatigue/life limiting factors and determine the extent of qualification testing that may be required. Testing will be used to verify that the part manufactured by the prospective new source will provide equal or greater life and performance as compared to the OEM parts currently operating in the field.

Once test requirements/parameters have been determined, you will develop the test plan and submit it to ED for review and approval. Once the test plan is approved, you will demonstrate that you and your vendors, subcontractors, etc., have adequate engineering expertise and manufacturing or production capabilities to manufacture, inspect, and test the component or part in accordance with all applicable drawings, process specifications, and test specifications. The Government may require inspection of these elements on site. Testing must generally be accomplished at your expense.

The U.S. Army's policy is to procure CSI parts requiring engineering testing only from sources whose parts have satisfied the engineering test requirement. To become an eligible source for a CSI part requiring engineering testing, a vendor must provide written documentation that it has met the engineering test requirement.



Photo Courtesy of the U.S. Army

**3.0** **Distributor SAR Guidance for Non-manufacturers**

1. If you would like to become an AMCOM approved distributor for a restricted source part (or parts) currently being manufactured by an AMCOM approved source, you must first submit a Distributor SAR, consisting of two letters, to the ED for review and approval: 1) a letter from the prospective distributor (you) and 2) a letter from the AMCOM approved manufacturer (see Section 3.D below). The letters must be written on company letterhead, signed by an officer of the company, and dated. An “officer of the company” could be anyone employed within the company who has the appropriate signature authority to sign a legally binding document.
2. Should you wish to become a distributor for a manufacturer of a part for which the manufacturer is not an AMCOM approved source, a Manufacturer SAR package must be submitted for each part (See Section 3.B below). It is preferable to receive the Manufacturer SAR package directly from the part(s) manufacturer. However, a prospective distributor may submit the Manufacturer SAR package on behalf of the unapproved manufacturer provided they have an agreement in place to do so.

1. Due to time constraints and lead times involved, the Government cannot guarantee expedited processing of SARs submitted in response to a solicitation announcement in the FedBizOpps. Once a solicitation appears in the FedBizOpps, there is not normally enough time to process a SAR for the current solicitation. **Pursuant to Federal Acquisition Regulations (FAR) 9.202(e) - The contracting officer need not delay a proposed award in order to provide a potential offeror with an opportunity to demonstrate its ability to meet the standards specified for qualification. In addition, when approved by the head of an agency or designee, a procurement need not be delayed in order to comply with 9.202(a).**
2. How to Become a Distributor for an AMCOM approved manufacturer: Submit the following two letters to the ED for review and approval:
   1. **A** **letter from the distributor -** written on company letterhead, signed by an officer of the company ([Example Letter from the Prospective Distributor](#Example_Distributor_Letter)), which includes the following:
      * 1. The manufacturer and distributor name, address, and CAGE code.

* + - 1. A statement requesting to become an AMCOM approved distributor for a restricted source part, or list of parts (including NSNs), which identifies your company as an authorized distributor of the AMCOM approved manufacturer.
      2. A statement that the restricted source part(s) are certified as new (never used), and meet all technical data requirements.

1. A statement that the parts will only be received directly from the AMCOM approved manufacturer and will not be removed from their packaging. It is highly preferred that parts are not removed from the AMCOM approved manufacturer’s packaging. However, if parts need to be removed from the approved manufacturer’s packaging, provide an explanation justifying the removal, describe any actions performed on the parts after removal (measurements, weighing, visual inspection, cleaning, etc.), and provide a detailed description of the repackaging process. The ED will review distributor requests to repackage parts on a case by case basis.
2. A statement that the part(s) are not surplus parts and the manufacturer’s parts will not be delivered from a source other than the AMCOM approved manufacturer (i.e. Magnificent Manufacturing).
3. The original documentation, from the AMCOM approved manufacturer, will be delivered with the restricted source parts and will not, in any way, be altered by the distributor.
4. A statement identifying which party (either the distributor or the AMCOM approved manufacturer) is responsible for final packaging to the specific contract requirements. In addition to all other marking requirements, the packaging for each individual part must include contract number, distributor’s CAGE Code, manufacturer’s CAGE Code and any serial number (if applicable).
5. In the case of CSIs, a statement that all CSI Requirements (QE-STD-1, etc.) will be (or have been) flowed down to the actual manufacturer of the part.
6. A statement providing a telephone number with a point of contact to resolve any discrepancies found with any distributor delivered parts.

2) **A** **letter from the AMCOM approved manufacturer** -written on company letterhead, signed by an officer of the company ([Example Letter from the AMCOM Approved Manufacturer](#Example_Manufacturers_Letter)) which includes the following:

1. The manufacturer and distributor name, address, and CAGE code.
2. A statement identifying the authorized distributor for the part (or list of parts).
3. A statement regarding any limitation of the distributor, if applicable (for example, “Use distributor for all procurements less than $XX”, etc.).
4. A statement that all parts are certified as new (never-used) and that they meet all technical data requirements.
5. A statement providing a telephone number with a point of contact to resolve any discrepancies found with any distributor delivered parts.
6. In the case of CSIs, a statement that the part (or list of parts) will be manufactured to all CSI Requirements (QE-STD-1, etc.) applicable to these parts.
   1. How to Become a Distributor for an Unapproved Manufacturer:
   2. An unapproved manufacturer is a manufacturer that is not an AMCOM approved source for the restricted source part (or parts) for which you wish to become a distributor. If a distributor wishes to represent a manufacturer who is not an approved source for the restricted source part (or parts), the following documentation is required and must be submitted:
7. A complete Manufacturer SAR package for each of the manufacturer’s restricted source parts must be submitted to the ED for review and approval (see Section 2.0 Detailed SAR Preparation Guidance for Parts Manufacturers). It is preferable to receive the Manufacturer SAR package directly from the part manufacturer; however, a prospective distributor may submit a Manufacturer SAR package on behalf of the unapproved manufacturer, provided they have an agreement in place to do so. In this case, the manufacturer must provide a letter to the ED which clearly explains the intent of the proposed manufacturer to be represented by the proposed distributor and should describe the manufacturer/distributor business relationship.
8. The Manufacturer SAR package must first be approved by the ED before the distributor can be approved to supply the manufacturer's part. After the manufacturer becomes an AMCOM approved source for the restricted source part(s), the prospective distributor must then submit a Distributor SAR, as required by Section 3.A above. Any questions you may have regarding submission of a SAR may be e-mailed to [usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil](mailto:usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil) or call the SAR Team at 256-313-8978, 256-313-6389 or 256-313-8975.
9. More stringent Distributor SAR requirements may be levied at ED's discretion depending on part complexity, application, or criticality (i.e. Critical Safety Items [CSIs], etc.). Any questions you may have regarding submission of a SAR may be e-mailed to [usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil](mailto:usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil) or call the SAR Team at 256-313-8978, 256-313-6389 or 256-313-8975. Distributor SAR submissions can be e-mailed to [usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil](mailto:usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil).

Example Letter from the Prospective Distributor

**YOUR COMPANY LETTERHEAD Four Corners Distributing**

|  |  |  |
| --- | --- | --- |
|  |  | 123 Anywhere Boulevard  Anytown, State 12345  Phone: (123) 456-7890  Fax: (123) 456-7891 |

AMRDEC, Quality Engineering Division

Aviation Sustainment Branch

Attn: RDMR-SEU, Mr. Lee Drake

5400 Fowler Road

Redstone Arsenal

Huntsville, AL 35898-5000

To Whom It May Concern:

Four Corners Distributing, CAGE 6YXXX, is requesting to become an AMCOM approved distributor of NSN 1680-01-563-XXXX, Part Number 111abc-1XXX for Magnificent Manufacturing, CAGE 9TXXX, located at 456 Somewhere Drive, Somecity, State 98765.

All parts delivered by Four Corners Distributing are new (never used) and meet all technical requirements for Part Number 111abc-1. The parts have been received directly from Magnificent Manufacturing and have not been removed from their packaging. These parts are not surplus parts and will not be delivered from a source other than Magnificent Manufacturing.

This part is a Critical Safety Item and all Critical Safety Items requirements have been flowed down to Magnificent Manufacturing (Note: \*\*use this statement only if the part(s) is a Critical Safety Item (CSI) \*\* - if you do not know whether the part(s) is a CSI, email [usarmy.redstone.rdecom-amrdec.mbx.ed-sar@mail.mil](mailto:usarmy.redstone.rdecom-amrdec.mbx.ed-sar@mail.mil) and request this information).

The original documentation from Magnificent Manufacturing will be delivered with the parts and will not be altered in any way by Four Corners Distributing. Magnificent Manufacturing will be responsible for the final packaging of the parts and will adhere to all required part marking requirements.

If you need to resolve any discrepancies or issues with our delivered parts, please contact:

John Doe

Four Corners Distributing Government Contracts Team

Phone: (123) 456-7877

Fax: (123) 456-7895

John.doe@fourcorners.com

Sincerely,

Jane Smith

Contracts

[Example Letter from the AMCOM Approved](file:///\\\\ae-ss1\\aek_share\\SAR%20memos\\Dave%20Christy%20Letters\\02_SAR_FILES\\%23%23%23%20!%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20CMO%20SAR%20Guidance%20Rewrite\\AMCOM%20Spares%20Example%20Distributor%20Letter%202.pdf) Manufacturer

**YOUR COMPANY LETTERHEAD** **Magnificent Manufacturing**

456 Somewhere Dr

Somecity, State 98765  
 Phone: (789) 333-1234

Fax: (789) 333-1235

|  |  |  |
| --- | --- | --- |
|  |  |  |

AMRDEC, Quality Engineering Division

Aviation Sustainment Branch

Attn: RDMR-SEU, Mr. Lee Drake

5400 Fowler Road

Redstone Arsenal

Huntsville, AL 35898-5000

To Whom It May Concern:

Magnificent Manufacturing, CAGE 9TXXX, has designated Four Corners Distributing, CAGE 6YXXX, 123 Anywhere Boulevard, Anytown, State, 12345, as its distributor for NSN 1680-01-563-XXXX, Part Number 111abc-1XXX.

All parts delivered to Four Corners Distributing are new (never used) and meet all technical requirements for Part Number 111abc-1.

Magnificent Manufacturing is responsible for the manufacturing, quality, and performance of their parts delivered by Four Corners Distributing to the Government.

This part is a Critical Safety Item and all Critical Safety Items requirements have been flowed down to Magnificent Manufacturing (Note: \*\*use this statement only if the part(s) is a Critical Safety Item (CSI) \*\* - if you do not know whether the part(s) is a CSI, email [usarmy.redstone.rdecom-amrdec.mbx.ed-sar@mail.mil](mailto:usarmy.redstone.rdecom-amrdec.mbx.ed-sar@mail.mil) and request this information).

For questions regarding this distributor/manufacturer relationship, please contact:

David Smith

Magnificent Manufacturing Customer Team

Phone: (789) 333-1237

Fax: (789) 333-1239

David.smith@magnificient.mfg.com

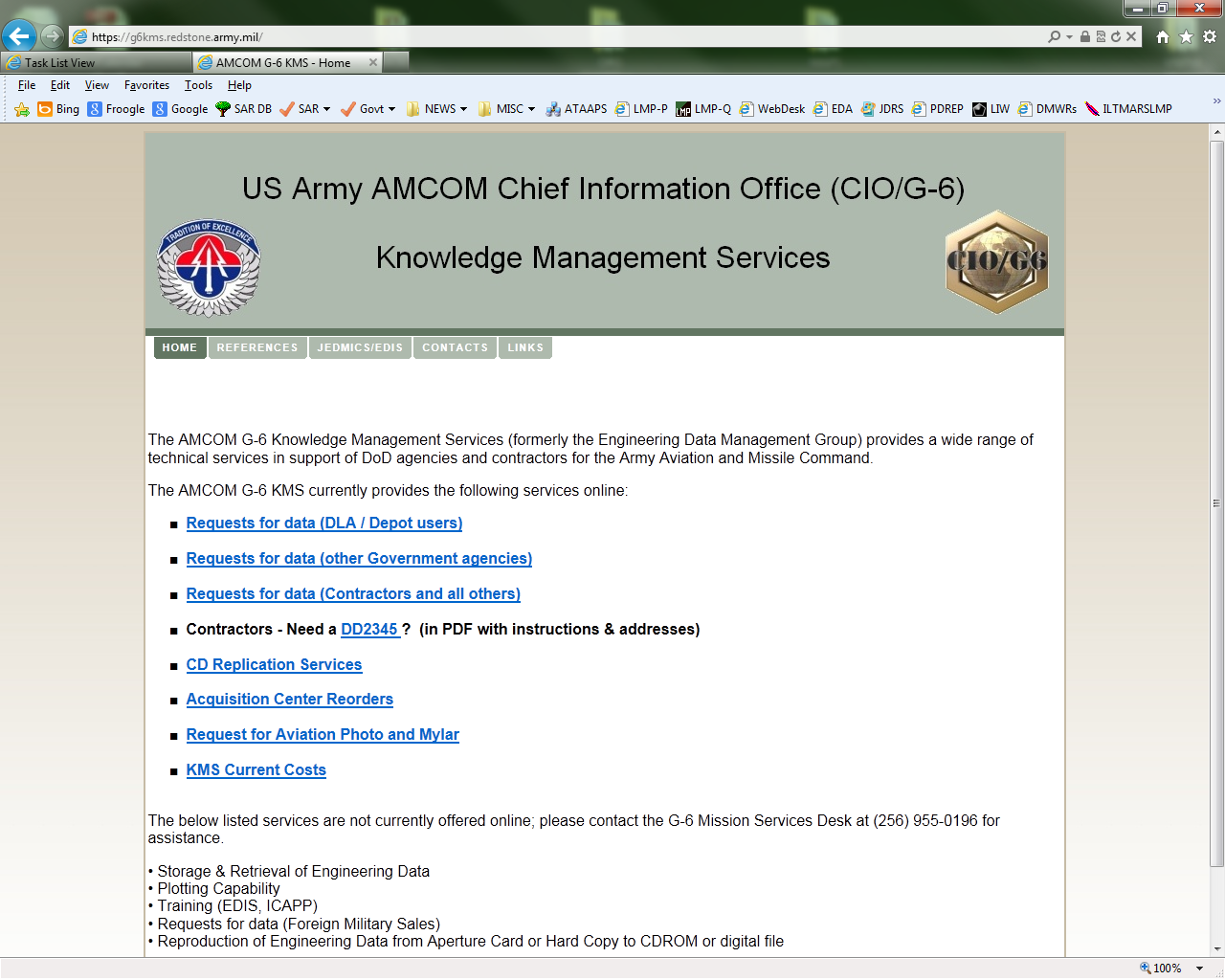
Sincerely,

John Conners

President

**4.0** **Obtaining Government Technical Data**

All prospective vendors seeking source approval for AMCOM Spares must provide their manufacturing planning to the latest available technical data (drawings, specifications, spares technical data package, etc.). It is the prospective vendor’s responsibility to obtain this technical data, to include the legal right to use it. Technical data, which the Government has the legal right to distribute, is sometimes available through the Government’s **Knowledge Management Services**  repository at the following website: <https://g6kms.redstone.army.mil/>.



First, fill in and submit the DD2345 form to obtain a Department of Defense (DoD) Certification / Registration Number. After you receive your number (≈30 days), click on *“Requests for data (Contractors and all others).”* Complete the online input forms and, if approved, and the data is available, it will be sent to you.

1. After submission of your DD2345 aplication, to inquire about status you may contact the **U.S./Canada Joint Certification Office at** Phone: (800) 352-3572 or E-mail: [JCP-Admin@DLA.MIL](mailto:JCP-Admin@DLA.MIL).
2. Inquiries related to obtaining permission to access Government owned drawings not available through EDMS can be addressed to **AMCOM’s Competition Representative at 256-876-4711**.

**5. 0** **Non-Disclosure Agreement Recommendation**

**NOTE: Since a government contractor may have access to your company’s data, the following example Non-Disclosure agreement (NDA) should be used as guidance in order to complete and submit an NDA for your company as part of the SAR Package:**

## AGREEMENT

Exchange of Proprietary/Limited Rights Data

Between

«Company»

## And

AnyCompany, Incorporated

AnyCompany, Inc., operating as a contractor to the U.S. Army Aviation and Missile Command, may require access to data in the possession of «Company» or information that is considered to be proprietary. It is agreed:

«Company» has no obligation to supply proprietary information under this agreement. For data that is provided, AnyCompany, Inc. shall take all necessary steps to preserve proprietary information in confidence. Access to proprietary information shall be restricted to only those employees that have a need to know and who have been advised of all restrictions regarding disclosure and use.

AnyCompany, Inc shall use the proprietary information for the sole purpose of providing support to the U.S. Army Aviation and Missile Command relative to the Critical Safety Items Program/testing and inspection of critical parts and technical review of Source Approval Requests. All information received shall remain the property of «Company» and shall be returned to «Company» upon request.

AnyCompany, Inc. will not disclose technical data to any country, foreign national, or firm (foreign or domestic).

No classified data will be requested by AnyCompany, Inc. or provided by «Company» under the terms of this agreement.

This agreement will be effective upon the date of signature by «Company» and shall extend for a three-year period from that date.

|  |  |
| --- | --- |
| AnyCompany, Inc. | «Company» |
| Signature: | Signature: |
| Typed or Printed Name: | Typed or Printed Name: |
| Title: | Title: |
| Date: | Date: |

Figure 5.0 Example Non-Disclosure Agreement

**** Photo Courtesy of the U.S. Army Photo Credit: Staff Sgt. Kyle Richardson, 41st Fires Brigade, PAO

**6.0 APPENDICES:**

**APPENDIX A. - General Notes:**

1. Surplus Material. This guidance does not apply to surplus offers. Surplus offers may only be quoted when authorized in response to a specific government solicitation. A link to the DRMS website is http://www.dispositionservices.dla.mil/.
2. Reengineering is the process of examining and measuring an existing part to develop a new design that is identical in fit, but allows the form to be modified to result in equivalent or improved overall functionality of the part or other quantifiable benefit (e.g., reduced cost, ease of maintenance, improved supply base, etc.) Because reengineering is the process of establishing a new design, it does not fall under the source approval process. The new design must instead be qualified under the *engineering change proposal* process (ECP). For AMCOM managed parts, this requires submission of an unsolicited proposal to:

U.S. Army Aviation and Missile Life Cycle Management Command

Building 5303

ATTN: CCAM-BM-P

Redstone Arsenal, Alabama 35898-5000

Note: Submission of an unsolicited proposal does not guarantee acceptance. For questions related to unsolicited proposals contact 256-842-7407.

1. Reverse engineering is the process of replicating an item in all respects (i.e., functionally, dimensionally, materials, and processes) by physically examining and measuring existing items to develop the technical data (physical and material characteristics) required for competitive procurement. Normally, as part of a product development plan, reverse engineering will not be cost effective unless the items under consideration are urgently needed to maintain operational readiness, are of a high dollar value, or are procured in large quantities. The decision to pursue a government funded reverse engineering effort must be authorized by both the head of the contracting activity and the cognizant Service ESA, following the direction issued by DFARS, Part 217.7504, Acquisition of Parts When Data Is Not Available. Coordination among the Services is required when reverse engineering common use items. Reverse engineering may be considered if the following criteria are met:
2. There is an overwhelming readiness need and all other methods of support are unavailable or prohibitive.
3. A Business Case Analysis demonstrates cost savings commensurate with potential safety or performance risk.
4. The government must be in possession of sufficient data or be provided sufficient data to perform a risk assessment or assess the reverse engineered design.

A review by the appropriate engineering personnel is required when considering reverse engineering. Representatives from the impacted program office and/or the procuring activity may also be necessary for configuration and funding concerns when conducting the above analysis.

REMAINDER OF PAGE INTENTIONALL LEFT BLANK

**APPENDIX B. -** **QE-STD-1 – New Manufacture of CSI Parts:**

CRITICAL SAFETY ITEMS  
CRITICAL CHARACTERISTICS  
NEW MANUFACTURE  
QE-STD 1  
REVISION E – 19 JUN 2017

1.0 PURPOSE: To establish the minimum level of activity that is required for the manufacturing of Critical Safety Items (CSI) wherein the manufacturing process involves CSIs, parts designated by Aviation Engineering Directorate (AED) as containing CSIs, or involves the Critical Characteristics (CC) associated with the CSI. Requirements established herein are intended to establish and maintain the integrity of all CCs throughout the manufacturing process. For the purpose of this standard, the AED is also the Engineering Support Activity (ESA) and the Design Control Activity (DCA).

2.0 SCOPE: This standard is intended to be used in conjunction with other contractually specified quality requirements and is intended to define the quality requirements for CSIs in addition to a higher level quality program (i.e., ISO 9001, AS9100). This standard shall apply to all aspects involved in the manufacturing of CSIs; however, this standard does not apply to CSIs without defined manufacturing CCs. In case of conflicts between standards, the more stringent requirements shall apply.

3.0 REFERENCES:

a. ISO 10012, Measurement management systems - Requirements for measurement processes and measuring equipment

b. AMCOM Regulation 702-7, Aviation Critical Safety Items, Critical Application Items, and New Source Testing Program Management)

c. DA Pam 95-9, Management of Aviation Critical Safety Items

d. JACG Aviation Critical Safety Item Management Handbook

e. Joint Publication 1-02, Department of Defense Military and Associated Terms

f. AMRDEC Policy 06-04, Product Verification Audit

g. Public Law 108-136, Section 802, Quality Control in Procurement of Aviation Critical Safety Items and Related Services

h. ISO 9001, Quality Management Systems - Requirements

i. Competition Advocate’s Shopping List (CASL)

j. AS9100, Quality Management Systems

k. NATO-AQAP-110, NATO Quality Assurance Requirements for Design, Development, and Production

4.0 DEFINITIONS: The following definitions should be used for REFERENCE ONLY and are provided as a guideline for clarification purposes. The terms defined below are intended to aid in the understanding and interpretation of CSI management described in this standard. The roles of the contractor, ESA, and others are specified in some of the definitions, but primarily in the sections that follow.

a. Administrative Contracting Officer (ACO) - A contracting officer that administers the contract after award. See Contracting Officer.

b. Approved Source - A contractor or vendor who has satisfied, prior to contract award, all AMCOM/DLA source approval requirements as set forth in the Competition Management Office website (http://amcomdmz.redstone.army.mil/casl\_cmo/casldba.casl\_cmo\_samsar) to include, if applicable, engineering testing requirements (fatigue, endurance, and/or interchangeability). CSIs shall only be purchased from or manufactured by sources approved by the ESA in accordance with United States Code Title 10, Section 2319. The objective is to achieve competition among approved CSI suppliers and their products and to ensure that potentially new CSI suppliers and their products are effectively evaluated prior to delivery of CSIs to the Services.

c. Commercial Items - Articles of supply readily available from established commercial distribution services which the Department of Defense or inventory managers in the Military Services have designated to be obtained directly or indirectly from such sources.

d. Common Use Item - A common use item may be a standard part or one that is utilized by multiple aviation systems and/or Military Services. The term “common use item” refers to a part, assembly, subsystem, or store that is used in:

(1) multiple aviation systems/platforms (e.g., the same item used in an H-60 and an H-47);

(2) across multiple Military Services (e.g., Army, Navy, and Air Force H-60s; Air Force and Marine Corps C-130s);

(3) or both.

e. Contractor - Any company or Government owned and operated facility manufacturing CSIs for AMCOM, DLA, or any other DoD organization.

f. Contracting Officer - The Service member or Department of Defense civilian with the legal authority to enter into, administer, modify, and/or terminate contracts.

g. Critical Application Item (CAI) - An item that is essential to weapon system performance or operation, or the preservation of life or safety of operating personnel, as determined by the military services. The subset of CAIs whose failure could have catastrophic or critical safety consequences (Category I or II as defined by MIL-STD-882) is called CSIs.

h. Critical Characteristic (CC) - Any feature throughout the life cycle of a CSI, such as dimension, finish, material or assembly, manufacturing or inspection process, installation, operation, field maintenance, or depot overhaul requirement which if nonconforming, missing or degraded could cause the failure or malfunction of the CSI. Critical Characteristics are further sub-divided into manufacturing, depot, or installation critical, as follows:

(1) Manufacturing Critical Characteristic - Any feature established at new manufacture, such as dimension, finish, material or assembly, manufacturing or inspection process, special process (i.e., heat treat, brazing/welding, plasma, shot peening, non-destructive testing, chemical cleaning, grit blast, plating, and paint), assembly, or operation (acceptance test), which if nonconforming, missing or degraded, could cause the failure or malfunction of the CSI.

(2) Depot Critical Characteristic - Any feature during maintenance/overhaul/repair such as dimension, finish, material, assembly, inspection process, special process (i.e., heat treat, brazing/welding, plasma, shot peening, non-destructive testing, chemical cleaning, grit blast, plating and paint), assembly, operation (acceptance test), or depot overhaul/repair requirement which, if nonconforming, missing or degraded during maintenance/overhaul/repair could cause the failure or malfunction of the CSI.

(3) Installation Critical Characteristics - Any feature such as proper assembly, installation sequence or technique, use of special tools/fixtures, hardware, safety wire, orientation, or torque which if nonconforming, missing or degraded could cause the failure or malfunction of the CSI. Installation Critical does not imply that the part simply must be installed.

i. Critical Safety Item (CSI) -A part, assembly, installation equipment, launch equipment, recovery equipment, or support equipment for an aircraft or aviation weapon system that contains a characteristic any failure, malfunction, or absence of which could cause a catastrophic or critical failure resulting in loss or serious damage to the aircraft or weapons system, an unacceptable risk of personal injury or loss of life, or an un-commanded engine shutdown that jeopardizes safety. (Note: For the purpose of this standard “Critical Safety Item,” “Flight Safety Critical Aircraft Part,” “Flight Safety Part,” “Safety of Flight Item,” and similar terms are synonymous. The term Critical Safety Item shall be the encompassing term used throughout this standard.)

j. Deviation - A written authorization to depart from or make a change to a drawing, specification, or other ESA manufacturing requirement. Deviations are intended only as one-time departures from established requirements for specified items and are not intended to be repeatedly used in place of formal engineering process changes.

k. Engineering Support Activity (ESA) - The Military Service organization assigned responsibility and authority to perform and approve engineering and quality assurance actions necessary to evolve detail design disclosures for systems, subsystems, equipment, and components exhibiting attributes essential for products to meet specific military requirements. During the operational phase, it includes any engineering activity, the results of which would add or alter the design of equipment in such a manner, or to such an extent, as to change its operational capabilities or its design attributes of performance, reliability, maintainability and parts interchangeability, or to render it capable of alternative or additional use. For the purpose of this standard, the ESA is the Service’s Aircraft Airworthiness Authority and Design Control Activity, which for the Army is the Aviation and Missile Research Development and Engineering Center (AMRDEC) Aviation Engineering Directorate (AED).

l. First Article Test (FAT) - Contractually required testing and inspection of a supplier’s pre-production, production, or “productionrepresentative” specimens to evaluate whether the supplier can manufacture fully conforming products prior to the Government’s commitment to receive subsequent production items. First Article Testing does not necessarily assess manufacturing processes and controls nor does it assure the effectiveness of a supplier’s quality system. First Article Testing is not synonymous with qualification testing.

m. Flight Safety Critical Aircraft Part (FSCAP) - Refer to definition of “Critical Safety Item.” For the purpose of this instruction “Critical Safety Item, “Flight Safety Critical Aircraft Part”, “Flight Safety Part”, “Safety of Flight Item”, and similar terms are synonymous. The term Critical Safety Item shall be the encompassing term used throughout this instruction.

n. Frozen Process Plan - The documentation, such as a shop traveler or router, by which contractors will control manufacturing, repair, and/or overhaul processes to achieve consistent quality results in the processing of CSI designated features/characteristics of parts and assemblies.

o. Materiel Review Board (MRB) - The formal contractor-government board established for the purpose of reviewing, evaluating, and dispositioning of specific nonconforming supplies or services, and for assuring the initiation and accomplishment of corrective action to preclude recurrence.

p. Mishap Severity Category I, Catastrophic - A mishap that could result in one or more of the following: death, permanent total disability, irreversible significant environmental impact, or monetary loss equal to or exceeding $10M.

q. Mishap Severity Category II, Critical - A mishap that could result in one or more of the following: permanent partial disability, injuries or occupational illness that may result in hospitalization of at least 3 personnel, reversible significant environmental impact, or monetary loss equal to or exceeding $1M but less than $10M.

r. Nonconformance - The failure of an item to meet a defined characteristic or process parameter or a programmatic failure that could lead to this type of failure of an item.

(1) Nonconformance, Critical - A nonconformance that is likely to result in hazardous or unsafe conditions for individuals using, maintaining, or depending upon the supplies or services or one that is likely to prevent performance of a vital agency mission. Critical nonconformance includes departures from specified requirements in any critical characteristic or process or departures from unspecified requirements where the consequences would be catastrophic or critical.

(2) Nonconformance, Major - A nonconformance, other than critical, that is likely to result in failure or to materially reduce the usability of the supplies or services for their intended purpose. Major nonconformances involve items which depart from contract requirements and typically affect one or more of the following major areas: performance, durability, interchangeability, effective use or operations, weight or appearance (where a factor), health or safety.

(3) Nonconformance, Minor - A nonconformance that is not likely to materially reduce the usability of the supplies or services for their intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the supplies or services. Minor nonconformances are departures from contract requirements and do not affect any of the criteria specified as major Nonconformances.

s. Organic - Assigned to and forming an essential part of the military organization. Organic parts of a unit are those listed in its table of organization for the Army, Air Force, and Marine Corps, and are assigned to the administrative organizations of the operating forces for the Navy. Organic facilities are government owned facilities.

t. Original Equipment Manufacturer (OEM) - An OEM is the individual activity or organization that performs the physical fabrication processes that produce the deliverable part or other items of supply for the prime contractor. The OEM is granted design responsibility by the prime contractor for preparation and updates to drawings and technical data.

u. Overhaul - The process of disassembly sufficient to inspect all the operating components and the basic end article. It includes the repair, replacement, or servicing as necessary, followed by the reassembly and bench check or flight test. Upon completion of the overhaul process, the component or end article will be capable of performing its intended service life or service tour.

v. Process Planning Control Board (PPCB) - A high level control board composed of personnel from quality, manufacturing, field service, engineering, safety, and other appropriate departments. This board is responsible for controlling the contractor’s CSI program. This board will formulate CSI requirements, review, and formally approve all aspects of the CSI program. The responsibilities of the board shall be clearly defined and a single organizational element shall be assigned overall responsibility for the program. This can also be known as a Contractor’s Control Board (CCB) for commercial vendors.

w. Procurement Contracting Officer (PCO) - A contracting officer who initiates and signs the contract. See Contracting Officer.

x. Restricted Source Subcomponent – Subcomponents to an assembly that must be purchased from ESA approved sources.

y. Waiver - A written authorization granted after contract award to accept an item, that during production, or after having been submitted for inspection or acceptance, is found to depart from contract or specified configuration requirements. Waivers are intended only as one-time departures from an established configuration for specified items or lots and are not intended to be repeatedly used in place of formal engineering changes.

5.0 POLICY: U.S. Army will only procure CSI from approved sources, per Public Law 108-136 and DoD policy. To maintain the integrity and quality of these critical spare parts, manufacturers of CSI components, subassemblies, and assemblies are required to adhere to the requirements of this document in its entirety. If a contractor has difficulty in maintaining process control as evident through such things as adverse internal management audits, customer audits, the receipt of quality deficiency reports or other findings, then the contractor shall take immediate corrective action for the current contract(commercial) or statement of work or equivalent (organic). Failure to take effective corrective action could affect future awards to that contractor.

5.1 CRITICAL SAFETY ITEM DETERMINATION: The AED, as the ESA for the US Army Aviation, is sole authority for determining CSIs and their associated CCs. This standard applies to CSIs and CCs identified by the ESA and as flowed down to the contractor via contract

6.0 REQUIREMENTS: All requirements of this document shall be complied with by a contractor receiving a contract or statement of work for manufacture of a CSI. If the process or processes that involve a CC is subcontracted, this document must be imposed, in its entirety, on the subcontractor performing the work. All requests by the contractor for ESA approval, when required by this standard, shall be submitted and received through the Contracting Officer, if the contractor is on an active contract.

6.1 MANUFACTURING PLANNING:

6.1.1 GENERAL REQUIREMENTS: All CSI assemblies, CSI components, and non-CSI subcomponents shall have revision controlled planning. Any manufacturing process that has the potential to directly affect CCs must be controlled by detailed procedures. These procedures shall outline each step or parameter of the process along with any required materials, tooling, equipment, or operator certification. CCs are identified on the drawing, technical data package (TDP), or other ESA authorized documents. When a current pre-existing industry specification is called out on the drawing, applicable portions of that specification may be referenced. Any deviations shall be annotated in the plan. Plans shall clearly identify all CCs and will include identification of the plan's revision, in accordance with contractor procedures. All procedures shall be clearly defined and the values of characteristics recorded as applicable per drawing or ESA authorized procedure. Values may be recorded on process sheets, routers, or separate inspection sheets. Process plans shall clearly identify any subcontractors that perform critical processes, clearly define sequence of operation, define machine type needed to execute the process or operation, identify the specific machine or test measurement and diagnostic equipment (serial number) used to execute process or operation (must be recorded in the operation affected in order to maintain traceability), and define accept/reject limits for the specific process or operation. Critical processes that cannot be objectively verified (e.g., disassembly or destructive testing is required to verify the process) shall clearly define process-operating parameters with tolerances. Plans shall also reference process sheets/technique sheets (for processes such as shot peening and NDI). Frozen planning includes all subassembly parts and all process sheets/technique sheets used to manufacture a part.

6.1.2 PLAN CONTENT REQUIREMENTS:

a. Sequential operations. All manufacturing, assembly, and inspection points shall be controlled by detailed sequential procedures outlining each step or parameter of the process along with any materials, tooling, computer numeric controlled software or tape numbers, equipment, machine type, environmental control, operator certification required that leads to the specific production of an end item.

b. Location specific. Identify the place of manufacture at the top of every page, preferably, or at a minimum on the first page of the planning. The identification shall include the contractor’s name, address, and Commercial and Government Entity (CAGE) code.

c. Detailed procedures. Clearly define operating parameters with tolerances of any processes not verified by subsequent nondestructive inspection. Exposures to heat, such as stress relief, hydrogen embrittlement bake relief, cure cycles, use of heat lamps, drying ovens, etc., shall be identified as separate operations. Surface treatments, such as shot peening, plating, painting, bond surface preparation, etc., shall also be identified as separate operations. Processes that require unique “process/technique” sheets shall reflect the requirements in the applicable process specifications. For example, stating "shot peening per SAE AMS 2430" is not considered a detailed procedure and shall be further elaborated upon with process/technique sheets showing set-up and control requirements. Deburring and breaking sharp edges shall be identified as separate operations. In addition, the accept/reject limits for the specific process, operation, and/or inspection should be clearly defined.

d. Traceable inspections. In-process and final inspections shall be traceable to specific serial numbers (S/N) or lot numbers when authorized by the ESA.

e. Identification of critical characteristics. Clearly identify all CCs so as to draw attention to them (any method is acceptable, but stars are preferred) and inspect/verify all CCs prior to moving to a subsequent operation.

f. Actual critical characteristic values measured. A location shall be included on the planning router/traveler to document the measured/inspected value of each CC by S/N (or lot number); e.g., hardness, critical dimension, torque, and the S/N of tool, machine, or fixture used. If CCs are recorded on separate inspection method sheets, those sheets shall be included with the planning and conform to all CSI planning requirements. Measurement values of “pass/fail” for CCs are not permitted, unless authorized by the ESA.

g. Subcontracted special process affecting critical characteristics. The source and planning of any subcontracted special process that affects a CC shall be included. Outside sources performing any operations shall be identified by CAGE Code, name and address. The supplier of any process outsourced by the contractor that affects a CC shall be approved by the ESA. Only one subcontractor shall be listed per outsourced operation unless otherwise approved by the ESA. If operations affecting CCs are being performed by an outside vendor, then the subcontractor planning is considered part of the manufacturing plan that must be approved by the ESA prior to FAT, PVA, or start of production, as applicable.

h. Planning revision. Planning date and planning revision shall be listed on every page of Contractor’s planning, preferably, or at a minimum on the first page of the planning. In addition, the planning shall identify, where applicable, the revision(s) of the Spares Technical Data Packages (STDP), engineering drawing(s), parts list(s), and any Engineering Orders or Advanced Drawing Change Notices, etc. used in its generation. The planning shall clearly show on each page a sequential page number, and state that the item is a CSI and reference QE-STD-1 or an ESA approved equivalent CSI program if approved by the ESA.

i. Purchased subcomponents. List all the manufacturing sources by CAGE code for restricted source subcomponents not manufactured in-house as part of the planning package in the form of a Bill of Material (BOM), a separate Approved Vendors List (AVL) or equivalent documentation, or listed in the applicable operational step where the subcomponent is incorporated into the assembly. If a separate AVL or an equivalent type of list is provided, then additional traceability and document control data demonstrating how the contractor controls the suppliers on the list may be required during Government planning reviews. All restricted source parts must be purchased from ESA approved sources. If there are CSI subcomponents purchased to manufacture an assembly, then the planning shall have a place to record the S/N and CAGE code for the purchased CSI(s). If the CSI is not serialized, then lot number is required in lieu of S/N. Where New Source Testing (NST) is required for a part, only approved and tested sources may be used.

j. Revision history. All changes to the planning since original Government approval shall be documented in a Revision Block which shall clearly state the reason for revision, date of revision, and what operations or steps were affected.

k. Approved process sources. The supplier of any process outsourced by the Contractor that affects a CC shall be approved by the ESA.

l. Subcontractor/subvendor planning. Any subcontracted suppliers shall meet the planning requirements listed above.

6.1.3 FROZEN PLANNING REQUIREMENTS:

a. Management Of Frozen Planning. The contractor is responsible for developing manufacturing planning. Effective management of frozen planning revisions assures process traceability and validity. Revision controls, enabled by frozen planning, allow the identification of manufacturing methods in effect during a specific period of time. Review and control of these plans will be the responsibility of the PPCB composed of personnel from quality, manufacturing, field service, engineering, safety, and other appropriate departments, and equipped with adequate resources to assure development of complete, reliable, and traceable documentation. All processes shall have written process sheets approved through the contractor’s PPCB.

b. When Planning is Considered Frozen. Parts manufactured utilizing these plans shall meet all contractual requirements. Plans developed for the manufacture of a CSI shall be approved by the ESA, and shall be frozen at the time the FAT is approved by the Government if the item does not require engineering testing. If the item requires engineering testing, the plan is frozen at the time manufactured articles successfully meet the engineering test requirements. If the ESA elects to waive the FAT requirement, the plan is frozen prior to induction of the first asset. Process sheets/technique sheets affecting a CC also require ESA approval.

c. Continuity of Frozen Planning. Once frozen, plans shall remain frozen throughout the existing contract and all subsequent contracts for manufacture of the item unless changes to the planning are made in accordance with this standard. In addition, all plans shall be made available to the Government at any time upon request. For future contracts, verification of the currency of this planning will also be required at the time of bid submission by resubmitting the plan through the PCO or designated representative.

6.1.4 CHANGES TO FROZEN PLANNING: Any changes to a frozen manufacturing plan require approval from the contractor’s PPCB. Changes to or affecting a CC shall also be approved by the ESA through the PCO prior to implementation. Changes that do not affect a CC may be implemented by the PPCB without ESA approval. All changes to frozen planning affecting CCs will be reviewed by the PPCB and evaluated for potential risks or impact to upstream and downstream manufacturing processes. The justification and impact analysis for any changes proposed shall be described in the change order. If a subcontractor makes a change to a frozen manufacturing plan, the recommended change shall be reviewed as described above and forwarded to the contractor’s PPCB.

6.1.4.1 CHANGES AFFECTING A CRITICAL CHARACTERISTIC: Changes affecting a CC are changes to the Frozen Planning that may negatively alter the characteristic or affect the ability to inspect that characteristic. The changes may be to upstream and downstream processes, in addition to changes to the critical characteristic itself. If it is unclear whether a change will affect a CC, the plan shall be submitted for ESA review. The following are examples of processes that if changed, could affect a CC:

a. Grinding processes performed after a critical heat treat, including changes to wheel speed and type, feed rates, etc.

b. Sequence of operation, where changing the sequence affects the ability of an inspection to detect nonconforming characteristics.

c. Shot peening shot size, coverage area, spray angle, feed rate, intensity, post cleaning, etc.

d. Change of location or facility where the operation is performed.

e. Change of machinery, tooling, or equipment used to perform the CC operation.

6.1.4.2 CHANGES IN COMPANY STATUS: Changes in company status, including name changes, CAGE changes, location changes, quality program changes, and changes in ownership, shall be submitted to the ESA so that the ESA can verify the changes will not affect the contractor’s source approval or the quality and conformance of the parts produced. Note: When a contractor changes subcontractors, it is considered a change to frozen planning, even if the processes performed by both subcontractors are identical..

6.2 AUDITS:

a. Contractor Self-Audits. Contractors shall perform self-audits of their frozen manufacturing planning and their quality program for compliance to QE-STD-1 requirements. At a minimum, audits shall be performed annually on the contractor’s quality program. Audits on individual aspects of compliance to QE-STD-1 (i.e., record keeping, calibration, etc.) may be performed at different points throughout the calendar year. Audits of frozen manufacturing planning shall be performed at the start of each contract or when process changes occur, whichever occurs first. The contractor shall also at minimum perform an annual audit of all current frozen manufacturing plans. A representative sample may be used, but only plans for parts in current production (within the last year) shall be used for sampling. Samples must be chosen such that a company has complete coverage of all current production planning over 5 years. All audit findings shall be recorded and corrective actions shall be documented.

b. Audits of Subcontractors and Subcontractor Self-Audits. Subcontractors performing work that affects a CC shall conduct internal audits as described above. Contractors shall audit subcontractors annually to verify the effectiveness of the subcontractor’s internal audit process and compliance to QE-STD-1 and maintain records verifying their vendors are in full compliance with the audit requirement. On-site audits shall be performed at minimum every 3 years or when a subcontractor’s quality processes change, whichever occurs first..

6.3 CRITICAL CHARACTERISTICS:

6.3.1 INSPECTION OF CRITICAL CHARACTERISTICS: All CCs which can be nondestructively inspected and/or tested shall be subjected to 100 percent inspection by the contractor or subcontractor. All completed work instructions shall identify the CSI part number, serial or lot number, and characteristic inspected. Critical characteristics shall be identified on the work instructions in such a manner as to draw attention to them. Inspection of critical characteristics must be performed by certified personnel who have completed a training/certification program required to perform such inspections as outlined in section 6.5. Quality Control (QC) personnel shall verify that the recorded values meet any tolerance requirements in addition to verifying that the inspection was performed. All inspections of CCs shall be recorded by S/N (or lot number, if serialization is not required), part number, characteristic inspected, actual reading or dimension observed, date of inspection, identity of inspector, calibrated tooling, and all required inspection certifications. Several factors influence decisions regarding contract quality assurance, such as production volume, quality history, stability of the production process, confidence in effectiveness of Statistical Process Control (SPC) practices, etc. When CCs are identified in drawings, STDPs, or by contractual requirements, all CCs will be 100 percent inspected, unless approval to use sampling or SPC has been authorized by the ESA. In cases where the inspection method alone is specified as the CC, the requirement is to meet the acceptance criteria specified in the drawing, STDP, or other technical data, not simply to perform the inspection. An example of a critical inspection method is Fluorescent Penetrant Inspection (FPI). FPI is often defined as a CC, but absence of cracks, inclusions, etc. beyond specified limits would be the acceptance criteria required to meet the CC

6.3.2 VARIABILITY REDUCTION METHODS: Once the program demonstrates that the critical processes are statistically in control, stable, and capable, the contractor may submit to the ESA through the PCO for approval its documentation with a request to implement a SPC program in lieu of 100 percent inspection. At the ESA’s or the Defense Contract Management Agency’s (DCMA) discretion, 100 percent inspection may be reinstated if the process controls prove inadequate.

6.3.3 NONCONFORMING CRITICAL CHARACTERISTICS: Nonconformances of CCs shall not be dispositioned “use as is” or “repair” through contractor action, rework to print is acceptable. Waivers or deviations may be requested as specified in the contract. Request for waivers or deviations of CCs shall be classified as critical and will be forwarded to the ESA through the PCO for approval/disapproval. Nonconformances to processes that measure or inspect CCs or processes that are used to establish a CC may be submitted to the ESA through DCMA by the MRB if the actual CC is conforming (e.g., nonconforming hardness results when tensile strength is the CC).

6.3.3.1 MATERIEL REVIEW BOARD (MRB):

a. Evaluation Of Nonconformances/Planning Changes. A MRB is a formal contractor-Government board established for the purpose of reviewing, evaluating, and dispositioning of specific nonconforming materials or processes and for assuring the initiation and accomplishment of corrective action to preclude recurrence. The Government is not required to be a formal member of a commercial vendor’s MRB unless specifically directed by contract. MRBs are responsible for categorizing Nonconformances as “critical”, “major”, or “minor” and ensuring they are dispositioned accordingly. All MRB decisions resulting in any CSI Nonconformance, to include Nonconformances that do not affect a CC, must be approved or disapproved by the Government. The ESA will make the determination to accept or reject minor Nonconformances. The ESA may delegate that authority to the cognizant DCMA Quality Assurance Representative (QAR).

b. Major And Critical Nonconformances. All major and critical Nonconformances to CSIs (including Nonconformances to CCs) must be reviewed and approved by the ESA. This authority may not be delegated. The ESA also approves all minor Nonconformances unless this authority is delegated to the QAR. Additionally, exceptions to critical characteristics must be approved by the ESA. Where the CSI is used by more than one Service (i.e., the item is a common-use CSI), Nonconformances shall be coordinated through the ESA. Nonconformances to CCs of common-use CSIs must be approved by the ESA.

6.3.4 CONTRADICTORY CRITICAL CHARACTERISTICS: In the event of contradictions within the technical data referenced in the contract, all work pertaining to the CC in question shall be stopped until a written resolution to the contradiction is issued. This contradiction shall be brought to the immediate attention of the ESA through the PCO. Work will resume when the written resolution is received and implemented.

6.3.5 DELIVERED NONCONFORMANCES: Contractors who discover that previously delivered CSIs may contain a nonconformance must immediately notify the PCO. This requirement applies to all potential Nonconformances on a CSI or its subcomponents and is not limited to nonconforming CCs. Notification shall include a description of the suspected nonconformance, contract number, nomenclature, part number, NSN, and

affected S/Ns, or lot number (when applicable). DFARS 252.246–7003, Notification of Potential Safety Issues, requires contractors to promptly notify the Government of all Nonconformances of designated CSIs acquired by the Government and of all Nonconformances or deficiencies (i.e., not limited to critical characteristics) of any part that may result in a safety impact. Contractors shall notify the ACO and the PCO as soon as practicable, (but not later than 72 hours) after discovering or acquiring credible information concerning Nonconformances and deficiencies. The Contractor shall issue a written notification to the ACO and the PCO within 5 working days..

6.4 TRACEABILITY: Documentation is required to demonstrate, to the Government’s satisfaction, the contractor’s ability to provide all information necessary to trace the items back through the manufacturing process in the event of an item failure. The required manufacturing process information includes date and place of manufacture and additional information as appropriate, such as verification of all aspects of government furnished material, manufacturing processes, special processes, personnel certifications, assembly, and inspection. Traceability of an assembly must include traceability through all subassembly CSIs, including the processes described above. Traceability is enabled by effective serialization and/or marking.

6.4.1 FORWARD AND BACKWARD TRACEABILITY: Backward traceability is the ability to trace a Nonconformance back to the process that produced the Nonconformance. Forward traceability is the ability to trace a Nonconformance to all items manufactured to the Nonconforming process. Contractors shall maintain a level of traceability such that they are able to provide both levels of traceability. Contractors shall notify the government in the event of a discovered non-conformance on delivered items in accordance with section 6.3.5 requirements.

6.4.2 SERIALIZATION AND MARKING:

a. Traceability Through Serialization. The ability to trace parts to specific manufacturers and processes/materials used in production/manufacturing is essential. Traceability involves documented evidence that the item to be supplied was/will be manufactured by the contractor is identical to the product that was initially manufactured, and is in full compliance with all specifications, drawings, storage, packaging, and handling requirements, and other associated requirements. Documentation is required to demonstrate, to the Government’s satisfaction, the Government’s ability to obtain all information necessary to trace the items back through the manufacturing and inspection process in the event of the item failure. The manufacturing process information includes, date and place of actual manufacturing and additional information as appropriate, such as verification of all aspects of material, manufacture, special processes, personnel certifications, assembly, inspection, installation, and repair. Traceability is enabled by effective serialization and/or marking.

b. Traceability Through Part Marking. A serial number is a combination of numbers and/or letters assigned to an item that separately identifies one individual item from all others. All CSIs require individual serialization on the part as well as the packaging, unless it is not practical due to size, material property, excessive cost, or other requirements as specified by the ESA. When impractical to establish serial numbers on the item itself, CSIs should have distinguishable marking schemes approved by the ESA. Marking schemes may include color coding, imprinting, or other distinguishing marks that do not affect form, fit, or function. The marking scheme should be reflected in all applicable technical documentation. Serial numbers should be marked in accordance with MIL-STD-130 or other contract requirements. All serialized and lot numbered CSIs should be documented and reported (including material scrapped during manufacturing) to the Contracting Officer, Contracting Officer’s designee (e.g., DCMA), or per contract requirements. Note: Refer to DFARS 252.211-7003, Item Unique Identification (IUID) Requirements, and DFARS 211.274, Item Identification and Valuation, for additional information and guidance regarding IUID.

c. Serial Number Identification. All CSIs require individual serialization or identification by lot number for traceability. The contractor shall request either approval of or assignment of a block of S/N(s) from AMCOM. Serialization shall occur so that any individualized inspection/process that involves a CC is traceable to a specific S/N. All S/N(s) approved for issue or provided by AMCOM shall be accounted for; this includes material scrapped during manufacturing. S/N(s) used in this program shall not be used on any other part manufactured by that contractor. Reporting of the S/N(s) to the PCO shall be in accordance with contractual requirements..

6.4.3 TRACEABILITY OF RECORDS: All records relating to CSI shall be traceable to the date and place of manufacture. Records must provide the degree of traceability required to enable subsequent verification of all aspects of material, manufacture, special process, personnel certification, variability control charts (if applicable), assembly, and inspection of CCs. Special processes include but are not limited to heat treat, shotpeening, and nondestructive testing. For serialized parts requiring traceability from the raw material to the finished product “actual test readings” must be recorded. For parts not individually serialized or assigned serialization upon lot/batch completion, a pass/fail inspection standard is acceptable provided the number of accepted/rejected units is recorded.

6.4.4 RETENTION OF RECORDS: The contractor shall retain copies of all records generated pursuant to this standard and make these records available to the Government upon request. The documents may be retained electronically (i.e., scanned and stored on a database), provided that the information, signatures, stamps, and all other data on the scanned documents are legible. The data must be backed up regularly to a back-up server and a contingency plan and/or data recovery procedure must be in place for transfer of the backed up data to off-site servers in the event of a disaster. Presently, the FAR requires contractors to retain copies of all records generated for a period of 3 years after final payment (FAR 4.703). However, records for CSI manufacture shall be retained at least ten years after the contractor ceases to manufacture the part for which this standard applies. Records shall be maintained in a suitable format, and the medium must be appropriate to ensure durability and readability over the required storage period. Furthermore, at the end of this period, or in the event of relocation or shutdown, all records shall be offered to the PCO prior to disposal.

6.5 PERSONNEL REQUIREMENTS: Personnel performing work affecting conformity to product requirements shall be competent on the basis of appropriate education, training, skills and experience. The contractor shall ensure that its personnel are aware of the relevance and importance of their activities and how they contribute to ensuring the product conformity to CSI requirements.

6.5.1 PERSONNEL TRAINING: The contractor shall establish a training program covering the requirements of this document that apply to personnel performing work or inspections on CSIs. All contractor personnel performing work or inspections on CSIs shall be subject to annual training, and records of that training shall be maintained per section 6.4. The contractor shall establish training programs for processes required to manufacture a CSI and maintain training records for personnel performing the operations or inspections.

6.5.2 CERTIFICATION/QUALIFICATION OF PERSONNEL:

a. Competence Of Personnel. Contractor personnel performing work or having inspection responsibilities pertaining to CCs shall be certified to the appropriate professional level. If an industry standard or any other generally accepted requirement exists, personnel performing the work or having inspection responsibilities shall be certified. Certification may be obtained through an internal or external certification program. When no industry standard, or generally accepted requirement exists, then a re-current qualification training program (demonstrating technical proficiency and competency of inspection/manufacturing personnel) must be developed and managed by the contractor organization. Personnel must be re-certified in accordance with applicable industry standards, or re-certified at a minimum every 3 years if no industry standard exists, in order to ensure personnel competence.

b. Certification Program. All training, qualification, or certification of personnel shall be properly documented and maintained.. The contractor organization is responsible for developing the frequency for re-training or re-certification, depending upon the industry standard requirements or type of skill required to perform a function. A system for tracking personnel certification and qualification shall be an element in the contractor internal audit program to assure all certifications and qualifications are maintained in a current status.

6.6 TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (SYNONYMOUS WITH MEASUREMENT AND TEST EQUIPMENT):

6.6.1 CALIBRATION: Test, measurement, and diagnostic equipment (TMDE) used in a facility to inspect and test a product shall be properly maintained and calibrated according to National Institute of Standards & Technology (NIST) standards or other ESA approved standards. These standards outline requirements for calibration frequency and status, records, environmental controls, adequacy of measurement standards, calibration procedures and corrections for out-of-tolerance conditions. Calibration of inspection equipment shall be in accordance with contractual requirements or statements of work. All aspects of the supplier’s calibration confirmation system shall be subject to Government verification at unscheduled intervals. The supplier’s TMDE shall be made available for use by the Government, as needed. All measuring equipment that is used to measure CCs shall be monitored for accuracyy and reproducibility.

6.6.2 TOLERANCE: TMDE used to inspect CSIs must have discrimination/accuracy to within 10 percent (10:1 Rule) of the total tolerance spread for the feature being inspected except as follows: For total tolerance spreads less than .001, TMDE must be discriminate to 20 percent of the spread. For example, a dimension of 1.05 +/-0.02 has a tolerance spread of 0.04 (1.03-1.07). An acceptable measurement device must have an ability to discriminate to 0.004 or less. A dimension of 1.0005 +/-0.0003 has a tolerance spread of 0.0006 (less than 0.001). An acceptable measurement device must have an ability to discriminate to 0.00012 or less.

6.7 PURCHASING DOCUMENTS: All purchase orders/contracts for subcontracted CSIs must clearly identify the part as a CSI and identify all CCs. Purchase orders for CCs or processes affecting CCs must clearly identify that the work to be performed is a CC or affects a CC. Purchase orders to subcontractors for CSIs and CCs must also contain QE-STD-1. All documents and referenced data for CSIs shall be available for review by the Government to verify compliance. The contractor is responsible for obtaining and maintaining the certificates of conformance (CoC) for items and processes procured from subcontractors.

6.8 HIGHER LEVEL QUALITY: The contractor shall have an acceptable higher level quality program in place. Certification to AS9100, ISO9001, or NATO-AQAP-110 is considered an acceptable higher level quality program. In cases where the contractor is compliant with one of these programs but is not certified, or when the vendor is certified to another quality program, the contractor shall request concurrence from the contracting officer that their quality program is acceptable.

6.9 SCRAP MATERIAL: Nonconforming CSIs that have been dispositioned as scrap material shall be properly segregated and mutilated beyond repair and rendered unusable. This requirement also applies to in-process nonconforming material or fallout. If the contract contains a Serial Number Reporting Requirement (SNRR), the contractor shall report all serial numbers scrapped in addition to the serial numbers delivered to the government

**APPENDIX C. -** [**Qualification Requirements for Castings (CAST-STD-1):**](#Back) Latest revision dated 14 OCT 2016

1. Castings used in Army Aviation parts can only be procured from Government approved sources. Source approvals are made on an individual basis. Any prospective new casting source must meet the qualification requirements as defined by the part’s drawing, associated specifications, and as outlined below.

2. A manufacturer seeking to qualify a new casting source must submit a Source Approval Request (SAR), for review and approval, to the AMRDEC Engineering Directorate (ED), Quality Engineering Division. The SAR will consist of a qualification test plan addressing each of the applicable items in the paragraphs below. To obtain the qualification test plan and specific instructions for submitting a SAR package on a particular part, contact the ED SAR Team at usarmy.redstone.rdecom-amrdec.mbx.ed-sar@mail.mil or call the SAR Team at 256-313-6371, 256-313-8978, or 256-313-8975. SAR submission guidance is also provided on the website <https://www.avmc.army.mil/Directorates/ED/SAR/>. The qualification test plan will include the following requirements which are applicable to all Army Rotary Aircraft Systems utilizing Class 4 castings (Ref. SAE-AMS-2175) which are castings having a “Margin of Safety” of 200% or greater and are NOT used in a “Safety Critical, Controlled, or Tested” application:

a. The prospective source will cast at least three sample castings per the technical drawing and applicable specifications. The castings will be processed through all specified operations except final machining (i.e., heat treatment, cleaning & finishing, etc.). All patterns, tooling, and other equipment will be provided by the contractor.

b. The sample castings must meet dimensional, quality, and other requirements, including mechanical and metallurgical properties (i.e. tensile, stress rupture, microstructure, etc.). The verification of compliance of these requirements will be done as follows:

1) Mechanical and metallurgical tests and dimensional inspection of at least one casting must be done in an independent facility as agreed upon by the contractor and the Government.

2) Perform radiographic testing on at least three castings. Prior to the start of radiographic testing, the radiographic testing procedure must be approved by the Government. If in addition to the casting source qualification, radiographic testing will also be required for part production, the facility used by the contractor for radiographic inspection must be the same facility that will be used for all future inspections during production. Agencies performing Non-destructive Testing shall meet the requirements of ASTM E 543 and personnel performing Non-Destructive Testing shall meet the requirements of NAS 410. The radiographic films must be made available to the Government personnel for quality verification.

c. Any other requirements specified in the drawing or specifications may be performed either at the contractor’s facility or an outside facility. However, these must be preapproved by the Government and properly certified.

3. In addition to the above requirements, castings used on Controlled, Engineering Tested or CSI parts will also require the following:

a. After successful completion of tests and inspections of the sample castings, at least one of the castings must be final machined per the drawing. If the part requires a final heat treatment prior to machining or in-between machining operations, this will be performed accordingly. The machined castings must meet dimensional and nondestructive inspection (NDI) requirements as per drawing and specifications. The dimensional inspection must be done at an independent facility as agreed upon by the contractor and the Government.

b. The engine endurance test of a few machined castings for a Critical Safety Item (CSI) part, or a fatigue test of a machined casting for a dynamic fatigue CSI may be required as part of the qualification test plan. This will require use of a Government approved test plan.

4. The Government reserves the right to witness or reexamine any of the test requirements. A form, fit and function check of the finished machined casting may be requested. The Government may require a facility survey for qualification.

**APPENDIX D. -** **FORG-STD-1 (**[**Qualification Requirements for Forgings):**](#Back) Latest revision dated

14 OCT 2016

1. Forgings used in Army Aviation parts can only be procured from Government-approved sources. Source approvals are made on an individual part number basis. Any prospective new forging source must meet the qualification requirements as defined by the part's drawing, associated specifications, and as outlined below.

2. A manufacturer seeking to qualify a new forging source must submit a Source Approval Request (SAR), for review and approval, to the AMRDEC Engineering Directorate (ED), Quality Engineering Division. The SAR will consist of a qualification test plan addressing each of the applicable items in the paragraphs below. A forged item that has been classified as a Critical Safety Item (CSI) may also require adherence to a separate qualification test plan. To determine if a test plan is required and to obtain specific instructions for submitting a SAR package on a particular part, contact the ED SAR Team at usarmy.redstone.rdecom-amrdec.mbx.ed-sar@mail.mil or call the SAR Team at 256-313-6371, 256-313-8978, or 256-313-8975. SAR submission guidance is also provided on the website

[usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil](mailto:usarmy.redstone.ccdc-avmc.mbx.ame-sar@mail.mil).

3. The prospective forging source will:

a. Forge at least three sample forgings per the drawing and applicable specifications. The forgings will be processed through all specified operations except final machining (i.e. heat treatment, cleaning &finishing, etc.). All dies, tooling, and other equipment will be provided by the contractor.

b. Ensure the sample forgings meet dimensional, quality, and other specified requirements, including mechanical and metallurgical properties (i.e. tensile, fatigue, flow lines, microstructure, etc.). The verification of compliance of these requirements will be done as follows:

1) Perform ultrasonic testing on at least three forgings. Prior to the start of ultrasonic testing, the ultrasonic testing procedure must be approved by the Government. If in addition to the forging source qualification, ultrasonic inspection will also be required for part production, the facility used by the contractor for the ultrasonic inspection must be the same facility that will be used for all future inspections during production. Agencies performing Non-destructive Testing shall meet the requirements of ASTM E 543 and personnel performing Non-Destructive Testing shall meet the requirements of NAS 410. The inspection records must be made available to the Government personnel for quality verification.

2) Mechanical and metallurgical tests and dimensional inspection of at least one forging must be done in an independent facility as agreed upon by the contractor and the Government.

3) Any other requirements specified in the drawing or specifications may be performed either at the contractor’s facility or an outside facility. However, these must be preapproved by the Government and properly certified.

4. After successful completion of tests and inspections of the sample forgings, at least one of the forgings must be final machined per the drawing. If the part requires a final heat treatment prior to machining or in-between machining operations, this will be performed accordingly. The machined forging must meet dimensional and nondestructive inspection (NDI) requirements as per drawing and specifications. The dimensional inspection must be done at an independent facility as agreed upon by the contractor and the Government. An engine endurance test or a fatigue test of the machined forging may be required as part of the Government source approval process. This will require use of a Government approved test plan.

5. The Government reserves the right to witness or reexamine any of the test requirements. A form, fit and function check of the finished machined forging may be required. The Government may require a facility survey prior to qualification.

6. All approval or disapproval notices shall be officially provided to the contractor by the AMRDEC,

Engineering Directorate, Quality Engineering Division.

**APPENDIX E. - TEST-STD-1:** Latest revision dated 19 JUN 2017

1.0 SCOPE: This document establishes the minimum Engineering Test requirements and procedures to be followed for Critical Safety Items (CSI), Critical Application Items (CAI), and items with Engineering Test requirements. This document is applicable to parts requiring engineering testing.

2.0 APPLICABLE DOCUMENTS

2.1 GOVERNMENT DOCUMENTS

a. ISO 10012, Measurement Management Systems -- Requirements for Measurement Processes and Measuring Equipment.

b. ANSI Z540.3, Requirements for Calibration of Measuring and Test Equipment

c. DI-NDTI-80566, Test Plan

d. DI-DRPR-80651, Engineering Drawings

e. DI-NDTI-80809, Test/Inspection Reports

f. ANSI Z540-10002, General Requirements for Calibration Laboratories and Measuring and Test Equipment

3.0 REQUIREMENTS

3.1 TEST PLANS: The test shall be conducted in accordance with an Engineering Support Activity (ESA) approved test plan. The Aviation Engineering Directorate is the ESA for Army Aviation. The test plan shall detail all activities to test the component, including specific test and inspection equipment, pre-test and post-test inspection procedures, and actual test procedures. The test plan shall include drawings of the test fixture and test instrumentation. Where Endurance or Interchangeability testing is required, validated test fixtures will be used. Test fixture drawings may be waived with ESA approval. If there is any variation from an ESA approved test plan, or one does not exist, the contractor or test facility shall submit a test plan prepared in accordance with data item DI-NDTI-80566.

3.1.1 FIXTURE DRAWINGS: Test fixture drawing shall be prepared in accordance with data item DI-DRPR-80651.

3.1.2 INSTRUMENTATION DRAWINGS: Instrumentation drawing shall be prepared in accordance with data item DI-DRPR-80651. The drawing shall call out and locate, by dimensions, all instrumentation devices on the test article. Instrumentation shall be provided that allows determination of the appropriate

load levels to insure that test conditions are maintained within acceptable limits.

3.2 PRE-TEST SETUP: The ESA may audit the test setup and test execution. The tester shall contact the ESA when the test setup and test initiation are to occur. A minimum of 1 week advance notification is required. In any event, the test shall not proceed without approval of the ESA.

3.2.1 INSTRUMENTATION SELECTION: The tester shall select the type and location of instrumentation necessary to monitor test loads and strains. The location of instrumentation for each test specimen shall provide for direct correlation to each part's respective existing serial number or performance curve. The tester shall use test instrumentation that meets or exceeds an accuracy of 1 percent of full scale for both mean and alternating parameters. All crack detection devices shall be considered test instrumentation.

3.2.2 DATA MONITORING AND RECORDING: The tester shall use a feedback control system that maintains test conditions to within 2 percent and is in current calibration in accordance with ISO 10012-1 or ANSI Z540-10002. Both load and stroke control capacity are required. Testing shall be stopped if test constraints are exceeded. The tester shall be capable of providing continuous monitoring of test parameters. Channel sampling rate shall be sufficient to determine the mean and alternating parameters within 1 percent of full scale. Tests that involve spectrum loading will require data to be recorded a minimum of 1 time per each load block of the load spectrum. Load cycles must be counted. Calibration constants and zero offsets shall be recorded prior to the beginning of testing and during the test at an interval sufficient to maintain data integrity. Data for Endurance and Interchangeability such as duration, number of starts/stops, temperatures and other data types defined in the test plan must be recorded from calibrated equipment as defined above. Raw data shall be recorded during the actual test and converted to engineering units by use of appropriate computer software. Data shall be recorded on removable media.

3.2.3 TEST ARTICLES: Each component/assembly test shall require a minimum of 2 specimens to evaluate the component/assembly under test. If the test fixture has not previously been approved by the ESA, the tester shall be required to validate the test fixture utilizing 2 additional specimens from a previously qualified source. In the case where no previously qualified source parts exist, 6 specimens from the alternate source vendor shall be tested to failure. The number of test articles for Endurance and Interchangeability testing will be specified by the ESA.

3.3 TEST: The tester shall conduct the actual testing in accordance with the ESA approved test plan. A failure report in accordance with data item DI-NDTI-80809 shall be submitted to the contracting officer within 24 hours of a test specimen failure. The tester shall conduct a posttest metallurgical analysis to determine cause and mode of failure. The metallurgical analysis shall include determination of fatigue crack initiation sites, description of anomalies, if any, at the crack initiation sites, and fractographic evidence of the fatigue failure.

3.3.4 TEST REPORT: The tester shall submit a test report in accordance with data item DI-NDTI-80809 within 30 days of completion of the test. The test report shall document the actual test procedure utilized and the load levels applied. The test report shall also document the post-test inspections utilized to determine fatigue origin site(s). The test report shall include photographs and/or fractographs of the failure surface for each failed test specimen. Each test specimen shall be photographed at the completion of the test. All photo documentation shall be 7x11 inch prints (no photocopies) and shall be part of the test report. For those photographs and/or fractographs of the failure surface, they shall be of a magnification that clearly identifies the failure origin site.

3.4 TEST ARTICLE DISPOSITION

3.4.1 TEST ARTICLE PASSES TEST: If the part is acceptable, it shall be returned to the contractor if the part has not been procured by the Government. If the part was procured by the Government, disposition of the part shall be in accordance with instructions from the contracting officer. All parts used for fatigue or endurance tests shall be permanently marked as test specimens to prevent their use as replacement spares on aircraft.

3.4.2 TEST ARTICLE FAILS TEST: If the part fails the test and has not been purchased by the Government, it shall be returned to the contractor with an explanation of the failure. If the part has been procured by the Government, disposition of the part shall be in accordance with instructions from the contracting officer. The contractor will be notified of the status of the testing upon completion of all required analysis. If the contractor desires to be retested, it is incumbent on the contractor to revise their tooling, processes, etc., and produce a new part for testing at their expense.

**APPENDIX F. - SARs for FAA/PMA Parts:**

SARs for FAA/PMA parts -- Federal Aviation Administration/Parts Manufacturing Approval (FAA/PMA) Certified Parts are parts for which you have received certification from the Federal Aviation Administration based upon Identicality. The FAA/PMA certification will be reviewed to determine if it meets the requirements for approval. If you have satisfactorily manufactured the PMA part for the civil sector under FAA PMA Identicality, and the part is not a CSI Part (used to be called Flight Safety Part), you can choose to submit a Category 1 (Actual Part) or Category 2 (Similar Part) SAR depending on whether the part can be considered an Actual or Similar part (see Table 2.0). The ED will determine if Category 1 or 2 is applicable based upon evaluation of the SAR. The following types of parts are excluded:

* 1. Critical Safety Items (also called Flight Safety Parts)
  2. Repairable Parts
  3. Surplus Parts
  4. Engineering Testing Parts (PMA approved based upon Test and Computation)

Title 14 of the Code of Federal Regulations (14 CFR) 21.303(a) requires that any person producing replacement parts for sale for installation on a type-certified product must have a PMA. A PMA is a combined design and production approval for replacement parts for FAA certified aircraft.

FAA PMA parts cannot be automatically approved for use in military applications because the Military Services’ operational environment, maintenance procedures, flight envelope, and similar factors may be different from those for the same parts in the civil sector. Therefore, source approval requirements apply to components produced by FAA PMA holders for the government. The FAA approves PMA sources on the basis of one of three principles:

Identicality with a Licensing Agreement - The license agreement is proof that the design of the part is the same in every respect as a part approved under a type certificate.

Identicality without a Licensing Agreement - The source must prove that their part and the data used to manufacture the part are identical to the OEMs part. The source proves identicality by providing the OEMs data, which verifies identicality in dimensional and material characteristics, special processes and coatings, and any other test and acceptance criteria. Identicality to another PMA is not allowed per FAA regulations.

Test and Computation - The source must demonstrate that the functional design of the proposed part is at least equal to that of the original type certified (TC), supplemental type certificate (STC), or technical standard order (TSO) approved original part. The source provides to the FAA part design data, including materials, processes, test specifications, system compatibility, maintenance instructions, and part interchangeability, as well as a test and substantiation plan to show part airworthiness.

**APPENDIX G. – Distribution Statements for Technical Documents**

[1. DISTRIBUTION STATEMENT A.](javascript:collapseA.slideit()) Approved for public release; distribution is unlimited.

a. This statement may be used only on unclassified technical documents that have been cleared for public release by competent authority in accordance with DoD Directive 5230.9. Technical documents resulting from contracted fundamental research efforts will normally be assigned Distribution Statement A, except for those rare and exceptional circumstances where there is a high likelihood of disclosing performance characteristics of military systems, or of manufaturing technologies that are unique and critical to Defense, and agreement on this situation has been recorded in the contract or grant.

b. Technical documents with this statement may be made available or sold to the public and foreign nationals, companies, and governments, including adversary governments, and may be exported.

c. This statement may not be used on technical documents that formerly were classified unless such documents are cleared for public release in accordance with DoD Directive 5230.9.

d. This statement shall not be used on classified technical documents or documents containing export-controlled technical data as provided in DoD Directive 5230.25.

[2. DISTRIBUTION STATEMENT B.](javascript:collapseB.slideit()) Distribution authorized to U.S. Government agencies only (fill in reason) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office)

a. This statement may be used on unclassified and classified technical documents.

b. Reasons for assigning distribution statement B include:

1. Foreign Government Information - To protect and limit distribution in accordance with the desires of the foreign government that furnished the technical information. Information of this type normally is classified at the CONFIDENTIAL level or higher in accordance with DoD 5200.1-R.
2. Proprietary Information - To protect information not owned by the U.S. Government and protected by a contractors "limited rights" statement, or received with the understanding that it not be routinely transmitted outside the U.S. Government.
3. Critical Technology - To protect information and technical data that advance current technology or describe new technology in an area of significant or potentially significant military application or that relate to a specific military deficiency of a potential adversary. Information of this type may be classified or unclassified; when unclassified, it is export-controlled and subject to the provisions of DoD Directive 5230.25.
4. Test and Evaluation - To protect results of test and evaluation of commercial products or military hardware when such disclosure may cause unfair advantage or disadvantage to the manufacturer of the product
5. Contractor Performance Evaluation - To protect information in management reviews, records of contract performance evaluation, or other advisory documents evaluating programs of contractors.
6. Premature Dissemination - To protect patentable information on systems or processes in the developmental or conceptual stage from premature dissemination.
7. Administrative or Operational Use - To protect technical or operational data or information from automatic dissemination under the International Exchange Program or by other means. This protection covers publications required solely for official use or strictly for administrative or operational purposes. This statement may be applied to manuals, pamphlets, technical orders, technical reports, and other publications containing valuable technical or operational data.
8. Software Documentation - Releaseable only in accordance with software license.
9. Specific Authority - To protect information not specifically included in the above reasons and discussions, but which requires protection in accordance with valid documented authority such as Executive Orders, classification guidelines, DoD or DoD Component regulatory documents. When filling in the reason, cite "Specific Authority (identification of valid documented authority)."

[3. DISTRIBUTION STATEMENT C](javascript:collapseC.slideit()). Distribution authorized to U.S. Government Agencies and their contractors (fill in reason) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office)

a. Distribution statement C may be used on unclassified and classified technical documents

b. Reasons for assigning distribution statement C include:

1. Foreign Government Information - Same as distribution statement B.
2. Critical Technology - Same as distribution statement B.
3. Software Documentation - Same as distribution statement B.
4. Administrative or Operational Use - Same as distribution statement B.
5. Specific Authority - Same as distribution statement B.

[4. DISTRIBUTION STATEMENT D.](javascript:collapseD.slideit()) Distribution authorized to the Department of Defense and U.S. DoD contractors only (fill in reason) (date of determination). Other requests shall be referred to (insert controlling DoD office).

a. Distribution statement D may be used on unclassified and classified technical documents.  
  
b. Reasons for assigning distribution statement D include:

1. Foreign Government Information - Same as distribution statement B.
2. Administrative or Operational Use - Same as distribution statement B.
3. Software Documentation - Same as distribution statement B.
4. Critical Technology - Same as distribution statement B.
5. Specific Authority - Same as distribution statement B.

[5. DISTRIBUTION STATEMENT E.](javascript:collapseE.slideit()) Distribution authorized to DoD Components only (fill in reason) (date of determination). Other requests shall be referred to (insert controlling DoD office).

a. Distribution statement E may be used on unclassified and classified technical documents.

b. Reasons for assigning distribution statement E include: Direct Military Support - The document contains export-controlled technical data of such military significance that release for purposes other than direct support of DoD approved activities may jeopardize an important technological or operational military advantage of the United States. Designation of such data is made by competent authority in accordance with DoD Directive 5230.25.

1. Foreign Government Information - Same as distribution statement B.
2. Proprietary Information - Same as distribution statement B.
3. Premature Dissemination - Same as distribution statement B.
4. Test and Evaluation - Same as distribution statement B.
5. Software Documentation - Same as distribution statement B.
6. Contractor Performance Evaluation - Same as distribution statement B.
7. Critical Technology - Same as distribution statement B.
8. Administrative/Operational Use - Same as distribution statement B.
9. Specific Authority - Same as distribution statement B.

[6. DISTRIBUTION STATEMENT F.](javascript:collapseF.slideit()) Further dissemination only as directed by (inserting controlling DoD office) (date of determination) or higher DoD authority.

a. Distribution statement F is normally used only on classified technical documents, but may be used on unclassified technical documents when specific authority exists (e.g., designation as direct military support as in statement E).

b. Distribution statement F is also used when the DoD originator determines that information is subject to special dissemination limitation specified by paragraph 5-208, DoD 5200.1-R.

7[. Export Control Warning.](javascript:collapseW.slideit()) All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING - This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et seq.) or the Export Administration Act of 1979 (Title 50, U.S.C., App. 2401 et seq), as amended. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25." When it is technically not feasible to use the entire statement, an abbreviated marking may be used, and a copy of the full statement added to the "Notice To Accompany Release of Export Controlled Data" required by DoD Directive 5230.25.

**APPENDIX H. – SAR TYPES**

AMCOM SAR types are as follows:

1. Manufacturer SAR - A Manufacturer SAR is a technical capability proposal, from an alternate parts manufacturer, seeking to gain source approval for the manufacture of a specific restricted source part that is managed by AMCOM. A key component of the Manufacturer SAR is an up-to-date and complete technical data package (TDP) which includes the manufacturing planning for the part. See [Section 2.0 Detailed Manufacturer SAR Preparation Guidance for Parts Manufacturers](#Detailed_SAR_PREP).
2. Distributor SAR - A Distributor SAR is a request to become an AMCOM approved distributor for a restricted source part, or list of parts, for which your company is an authorized distributor of the AMCOM approved manufacturer. See [Section 3.0 Distributor SAR Guidance for Non-manufacturers](#SAR_Guidance_Distributors).
3. M&O (Maintenance and Overhaul) SAR – An M&O SAR is a request to become an alternate source for maintenance and overhaul services for AMCOM managed spare parts. M&O requirements are not covered in this guidance but are available at: <https://www.avmc.army.mil/Directorates/ED/SAR/>.
4. Novation SAR - A Novation SAR is required to retain a company’s “approved source” status whenever there has been a change in name, ownership, or geographic location. Novation SAR requirements are not covered in this guidance but are available at: <https://www.avmc.army.mil/Directorates/ED/SAR/>

From the CMO Website, click on SAMSAR and then select the specific Aviation SAR type you wish to see guidance on (Manufacturer/ Distributor, M&O, or Novation)

**APPENDIX I. – Acquisition Method Reason Code (AMRC) Definitions**

**AMRC :** Acquisition Method Reason Code - This code is a two digit alpha-numeric that designates how AMCOM is currently procuring the part. It should be noted that the AMRC code, for a specific part, may be changed by AMCOM whenever necessary.

Each AMCOM managed part is assigned an Acquisition Method Reason Code (AMRC. An AMRC of “1G” or” 2G” means the part is fully competitive, is not a restricted source part, and no SAR is required.

**AMRC Values**

FIRST POSITION

**1**  Suitable for competitive acquisition for the second or subsequent time

(NOTE 1): Potential sources may include dealers/distributors.

(NOTE 2): If sources are limited to the prime contractor and a subcontractor,a competitive code is not assigned unless both sources are expected to compete independently for contracts for the part

**2** Suitable for competitive acquisition for the first time

(NOTE 1): Potential sources may include dealers/distributors.

(NOTE 2): If sources are limited to the prime contractor and a subcontractor, a competitive code is not assigned unless both sources are expected to compete independently for contracts for the part

**3** Acquire, for the second or subsequent time, directly from the actual manufacturer.

**4** Acquire for the first time, directly from the actual manufacturer

**5** Acquire directly from a sole source contractor, which is not the actual manufacturer

SECOND POSITION

**A** The Government´s right to use data in its possession is questionable

**B** This part must be acquired from a manufacturing source(s) specified on a source control or selected item drawing.

**C** This part requires engineering source approval by the design control activity in order to maintain the quality of the part. An alternate source must qualify in accordance with the design control activity´s procedures.

**D** The data needed to procure this part competitively is not physically available, it cannot be obtained economically, nor is it possible to draft adequate specifications or any other adequate, economical description of the material for a competitive solicitation.

**G** Government has rights to the technical data, the data package is complete, and there are no technical data, engineering, tooling or manufacturing restrictions

**H** The Government physically does not have in its possession sufficient, accurate, or legible data to purchase this part from other than the current source(s).

**K** This part must be produced from class 1 castings and similar type forgings as approved (controlled) by procedures contained in the current version of MIL-STD-2175

**L** The annual buy value of this part falls below the screening threshold established by DoD Components and field activities.

**M** Manufacture of this part requires use of master or coordinated tooling. If only one set of tooling exist, it cannot be made available to another source for manufacture of this part.

**N** Manufacture of the part requires special test and/or inspection facilities to determine and maintain ultra-precision quality for its function or system integrity.

**P** The rights to use the data needed to purchase this part from additional source(s) is not owned by the Government and cannot be purchased, developed or otherwise obtained.

**Q** The Government does not have adequate data, lacks rights to data, or both needed to purchase this part from additional source.

**R** The Government does not own the data or the rights to the data needed to purchase this part from additional sources

**S** Acquisition of this item is restricted to Government approved source(s) because The production of this item involves unclassified but military sensitive technology

**T** Acquisition of this part is controlled by Qualified Products List (QPL) procedures.

**U** The cost to the Government to breakout this part and acquire it competitively has been determined to exceed the projected savings over the life span of the part.

**V** This part has been designated a high reliability part under a formal reliability program.

**Y** The design of this part is unstable. Engineering, manufacturing, or performance characteristics indicate that the required design objectives have not been achieved. Major changes are contemplated because the part has a low process yield or has demonstrated marginal performance during tests or service use. These changes will render the present part obsolete and unusable in its present configuration. Limited acquisition from the present source is anticipated pending configuration changes.

**Z** This part is a commercial/non-developmental/off-the-shelf item.

**APPENDIX J. – Repair Parts Purchase or Borrow (RPPOB) Program**

[Repair Parts Purchase or Borrow (RPPOB) Program:](file:///C:\Users\deborah.t.edwards\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.IE5\34R0H19K\General_Info_ED_Rev%5b1%5d.docx#Back) The RPPOB Program is a non-solicited activity in which you are allowed to request and obtain sample parts managed by AMCOM, if available. The sample parts must be used for design replication through Reverse Engineering (RE) methods, with the intent to submit subsequent offers to sell the part to the Government. Parts managed by other agencies are not available through the RPPOB Program. Public Law restricts the RPPOB Program to domestic business concerns. Potential candidates for the RPPOB Program can be identified by the second position of the AMRC. Parts that have proprietary data can be identified by A, D, or P. Parts for which have incomplete manufacturing data or specifications can be identified by H or Q. Items not normally eligible for the RPPOB Program have G, T, Y, or Z in the AMRC. We will review your request and determine if the item is eligible for release under the RPPOB Program and if it is available in the requested quantities. If you wish to participate in the RPPOB Program, submit your request to the following organization:

**Commander  
U.S. Army Aviation and Missile Life Cycle Management Command  
ATTN: AMSAM-CM  
Redstone Arsenal, AL 35898-5000  
(256) 876-2485, Fax: (256) 876-2045**

Your request must include:

a. The minimum and maximum number of samples you desire.

b. The number of spares you expect to destroy.

c. If the item is repairable, the extent of interchangeability you intend to achieve.

d. A statement that your firm will comply with all POB Program requirements and

guidelines.

If your request is approved for the RPPOB Program, you will be notified by letter. If

you wish to purchase the parts at the price given in the approval letter, complete

and sign the RPPOB Agreement enclosed with the letter, and return it along with your

payment. We will then make the necessary shipping arrangements.

DoD Guidance for RPPOB can be found within DoDI 4140.57

END OF DOCUMENT