MANUFACTURE QUALIFICATION REQUIREMENTS (MQR) FOR PROPULSION CRITICAL SAFETY ITEMS (CSI) & CRITICAL APPLICATION ITEMS (CAI)

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1. APPLICATION

- 1.1. This MQR applies to CSI and CAI with an Acquisition Method Suffix Code (AMSC) of C, D, K, M, N, P, Q, R, S, V, and Z within the Propulsion Sustainment Division. This MQR does not apply to items with an AMSC of G, A, B, H, L, U, and Y.
- 1.2. This MQR establishes technical requirements, which Potential Sources (PS) must satisfy in order to obtain Engineering Support Activity (ESA) approval to manufacture propulsion items.

2. SCOPE

- 2.1. The PS must have a valid Company Profile on record with the ESA in order to gain source approval status. If one does not exist the PS must submit one. Company Profile requirements are described in section 7.
- 2.2. In order to gain source approval status, the PS must submit a SAR. The SAR requirements are described in section 8.
- 2.3. The Company Profile and SAR will be reviewed by the ESA and the PS will either be made an approved source, or denied source approval. See section 10.
- 2.4. Source approval status expires after 3 years for CSI, and 7 years for CAI. Sources that deliver parts on government contract, maintain source approval status. See section 11.
- 2.5. Approved sources shall submit a Source Resubstantiation Request (SRR) prior to expiration of the current approval period (recommended 60 days) in order to renew the approval status duration. See section 12.
- 2.6. Any time a change to the SAR documentation occurs, the approved source must submit a Process Change Request (PCR) for review by the ESA. See section 13.
- 2.7. The ESA may revoke the approval status of a PS at any time per FAR 9.207.

3. SUBMITTAL CONSIDERATION

- 3.1. The PS should consider submitting a SAR for evaluation after determining that the USAF is in need of the subject item. This can be done by considering the following:
 - 3.1.1. Has the United States Air Force (USAF) listed a requirement in the System for Award Management (SAM) at <u>https://beta.sam.gov</u> or DLA Bid Board System (DIBBS) at <u>https://www.dibbs.bsm.mil</u>?

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- 3.1.2. Has the procurement history for the item been researched and determined to be active?
- 3.1.3. Is the subject item listed in the Requirement Projection on the Web (RPOW)?
 - 3.1.3.1. The RPOW can be found on the Strategic Alternative Sourcing Program Office (SASPO) website: <u>www.tinker.af.mil/Home/429SCMSSASPO/</u>.
 - 3.1.3.2. The forecasts contained on the RPOW may or may not generate due to variability in customer demands and priorities. The forecast data is for planning purposes only and does not constitute an invitation for bid or request for proposal and is not a commitment by the government to purchase the described items.
- 3.2. Any questions regarding SAR submission or the RPOW should be directed to either the Air Force Small Business Office (SBO) or SASPO.
- 4. TECHNICAL DATA REQUEST
 - 4.1. Requests related to any procurement announcement should be submitted to the announcing Contracting Officer.
 - 4.2. If no procurement announcement exists, requests should be submitted to the Tinker Engineering Drawing Public Sales Office at the following address/email:

AFLCMC/LZPEF Tinker Engineering Drawing Public Sales 3001 Staff Drive, Suite 1AB82A Tinker AFB, OK 73145-3041 Phone: 405-736-4676 Email: <u>OCALC.LGLDO.PUBLIC@US.AF.MIL</u>

- 4.3. Requests should identify the specific drawing(s) and specification(s) being requested, along with the solicitation information (if a procurement announcement exists).
- 4.4. Requests should be made on company letterhead along with an approved DD Form 2345 or Export Control License.

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5. FORMAT FOR ALL SUBMITTED DOCUMENTATION

- 5.1. All financial data must be redacted from submitted documentation.
- 5.2. Packages should be submitted on a Compact Disk-Recordable (CD-R), Digital Versatile Disc Recordable (DVD-R), or through an approved government file transfer system, in a .pdf file format.
 - 5.2.1. The package can be a single .pdf file with indexes linked to each element, or a series of files/folders for each element.
 - 5.2.2. If the PS is submitting Company Profile documents at the same time as a SAR package, the Company Profile documents should be provided in a separate .pdf file and/or in a separate and clearly identified folder.
 - 5.2.3. All documents should be scanned for viruses prior to submission.
 - 5.2.4. If the CD-R is encrypted or password protected, provide a point of contact that can give access to the documentation. Zip files cannot be encrypted.
- 5.3. Packages submitted on a Compact Disk-Rewritable (CD-RW), Digital Versatile Disc Rewritable (DVD-RW), or flash drive will not be accepted.
- 5.4. Company Profile and SAR packages must follow the order called out in Tables 1 and 2.
- 5.5. For all Company Profile and SAR submissions, a table of contents is expected.
- 5.6. Certain elements may not be required depending on the circumstances of the submittal. If an element is not applicable, the PS must provide a statement explaining why this is the case. Do not leave any element blank.

6. USE OF PROPRIETARY DATA

6.1. The PS is not to utilize intellectual property (IP) of any third parties without appropriate authorization of the IP owner. The PS is cautioned that no part of the government MQR is intended to endorse or encourage the improper use of IP developed by the Original Equipment Manufacturer (OEM) or any other third party.

7. COMPANY PROFILE

Note: Any PS seeking source approval must have a valid Company Profile on record with the ESA. Initial submission of a Company Profile should include all of the requirements listed in Table 1 and described in Elements 1-9. Company Profiles can be submitted at any time, standalone or in conjunction with a SAR. All information provided in the Company Profile may be kept by the ESA for use in future SAR reviews. A Company Profile is required for each unique CAGE code.

Company Profile Requirements				
ELEMENT 1. Company Brochure/Website				
ELEMENT 2. Quality Assurance Certificate (QAC)				
ELEMENT 3. Self-Assessment Checklist (SAC)				
ELEMENT 4. Quality Assurance System (QAS) Manual				
ELEMENT 5. Equipment List				
ELEMENT 6. DD Form 2345 or Export Control License				
ELEMENT 7. Quality History				
ELEMENT 8. Significant Industrial Proces	ss (SIP) Certifications			
1. List of all Sub-Tier Suppliers (STS)				
ELEMENT 9. Sub-Tier Supplier Info. 2. All STS Quality Assurance Certifications				
3. Any STS Significant Industrial Process Certification				

Table 1. Company Profile Requirements

7.1. Element 1, COMPANY BROCHURE/WEBSITE

- 7.1.1. Provide a company brochure and/or website.
- 7.2. Element 2, QUALITY ASSURANCE CERTIFICATE (QAC)
 - 7.2.1. Provide one of the following QAC with a valid expiration date: ISO 9001, AS9100, or NATO AQAP-2070.
- 7.3. Element 3, SELF-ASSESMENT CHECKLIST (SAC)
 - 7.3.1. The PS must complete and submit a SAC (Appendix A).
 - 7.3.2. The SAC must be signed by an authorized binding company official (i.e. President, Owner, or Facility General Manager).
 - 7.3.3. If artifacts are used to support any of the items on the checklist, they can be attached to the checklist. However, not all items require artifacts.

- 7.4. Element 4, QUALITY ASSURANCE SYSTEM (QAS) MANUAL
 - 7.4.1. Provide a copy of the PS's QAS manual and all supporting/referenced documentation.
- 7.5. Element 5, EQUIPMENT LIST
 - 7.5.1. Provide a complete list of all equipment owned and used for the manufacturing and repair of parts by the PS.
- 7.6. Element 6, DD FORM 2345 OR EXPORT CONTROL LICENSE
 - 7.6.1. If located within the United States or Canada, provide a copy of the PS's DD Form 2345 with a valid expiration date.
 - 7.6.2. If not located within the United States or Canada, provide a copy of the PS's Export Control License with a valid expiration date.
- 7.7. Element 7, QUALITY HISTORY

Note: Nonconformance is not necessarily perceived as an increase in risk when considering source approval. Identification of nonconformance can illustrate a successful quality assurance program.

- 7.7.1. Provide a PS quality history summary of Deficiency Reports (DR) experienced for the last 36 months including but not limited to: internal deficiencies, commercial deficiencies, FAA Service Bulletins, Maintenance Review Board (MRB) actions, Quality Deficiency Reports (QDR), Laboratory Quality Review Orders (LQRO), Offeror Report of Nonconformance (ORON), Supplier Reports of Nonconformance (SRON), Material Deficiency Reports (MDR), statistical reports of nonconformance and nonconforming material rejection reports. If the PS facilities have not experienced any quality deficiencies within the last 36 months, provide a document stating as such.
 - 7.7.1.1. If government source inspections were conducted, the Government Quality Assurance Representative will coordinate on the summary. Otherwise, an authorized binding company official (i.e. President, Facility General Manager, or Quality Assurance Manager) must coordinate on the summary.
 - 7.7.1.2. The summary will include the following data: part number, nomenclature, feature, deficiency, quantity, date, and corrective action.

7.7.2. Provide an example corrective action request and corrective action plan or resolution for an identified deficiency, if one exists.

Note: Elements 8 and 9 may be reviewed during the SAR, SRR, and PCR evaluation processes. If the PS claims the use of a SIP or STS in any of these requests, the referenced SIP or STS must be included in, or added to the Company Profile at that time.

- 7.8. Element 8, SIGNIFICANT INDUSTRIAL PROCESS (SIP) CERTIFICATIONS
 - 7.8.1. Provide any SIP certifications possessed by the PS with a valid expiration date.
 - 7.8.2. SIP certification is required for those processes denoted by grey highlight in Appendix B. Methods of certification include:
 - 7.8.2.1. National Aerospace & Defense Contractors Accreditation Program (NADCAP) certification.
 - 7.8.2.2. OEM Certification and/or audit.
 - 7.8.2.3. Department of Defense (Air Force, DCMA, Navy, or Army) certification and/or audit.
 - 7.8.2.4. Other external audit and/or certification.
 - 7.8.2.4.1. Requires the submission of documents showing the process and procedure used for certification to be reviewed by the ESA in order to determine acceptability of alternative certification.
- 7.9. Element 9, SUB-TIER SUPPLIER (STS) INFORMATION
 - 7.9.1. Provide a complete list of all STS that the PS is currently using for government contracts, or may use in future source approval requests. List must include the STS company name and CAGE code.
 - 7.9.2. For each STS, provide one of the following QAC with a valid expiration date: ISO 9001, AS9100, NATO AQAP-2070, or Aerospace Quality System (AQS) NADCAP.
 - 7.9.3. Provide any SIP certifications possessed by each STS listed, with a valid expiration date. See Section 7.8.2 for requirements.

7.10. COMPANY PROFILE EVALUATION

Note: The Company Profile does not have an inherent expiration date. However, elements within the profile do expire and must be updated to maintain a valid Company Profile.

- 7.10.1. The initial review of the Company Profile includes the examination of all elements described in sections 7.1-7.7.
- 7.10.2. During the review of any future SAR, SRR, or PCR submitted by the PS, the Company Profile will be reviewed in order to determine if the following requirements are met:
 - 7.10.2.1. All certificates must not be expired.
 - 7.10.2.1.1. Elements 2 and 6 have inherent expiration dates that, if expired, must be renewed before source approval status can be granted.
 - 7.10.2.1.2. If a SIP requiring certification is identified in the request, a valid certificate must be included in either Elements 8 or 9.
 - 7.10.2.2. Any STS identified in the request must be included in Element 9 with a valid QAC provided.
- 7.10.3. If any deficiency in the Company Profile is identified at the time of review, the PS may be issued a conditional approval letter pending resolution of these issues. See section 10 for details on corrective actions.
- 7.11. COMPANY PROFILE AMENDMENTS

Note: It is encouraged for the PS to maintain a valid and up to date Company Profile at all times in order to expedite the SAR evaluation process.

- 7.11.1. At any time, the PS may submit amendments or updates to the Company Profile.
 - 7.11.1.1. Common updates include: Replacing expired certificates (QAC, SIP, DD Form 2345), adding a new STS, or notification of a significant change to any element of the Company Profile.
- 7.11.2. Company Profile amendments can be submitted per section 9.
- 7.11.3. If the PS is bought or sold by a third party the PS must submit a novation letter detailing the specifics of this change in company makeup/structure.

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8. SOURCE APPROVAL REQUEST (SAR)

Note: Any PS seeking source approval must have a valid Company Profile on record with the ESA. If one does not exist, the PS cannot be awarded source approval. See section 7 for details.

- 8.1. SAR Categories Determination
 - 8.1.1. CATEGORY I (Actual Item)
 - 8.1.1.1. This category covers PS who manufacture the exact subject item, using OEM technical data, for the prime contractor, OEM, DOD, civil agency, foreign government, or the civil sector under Federal Aviation Administration (FAA).
 - 8.1.2. CATEGORY II (Similar Item)
 - 8.1.2.1. This category covers PS who have not previously manufactured the exact subject item, but have manufactured other items similar in material, coatings, design features, industrial processes, etc. for the prime contractor, OEM, DOD, civil agency, foreign government, or the civil sector under FAA. Multiple similar items may be used to demonstrate relevant experience. Similarity is not limited to aerospace applications.

Note: Category III (No Experience) and IV (Reverse Engineering) SARs as defined by the AFMCI 23-113 are not covered by this QR document. The ESA will direct sources when a need arises for reverse engineered components and will provide relevant requirements at that time. Category III and IV SARs submitted under this QR will not be evaluated.

- 8.2. A SAR consists of two (2) packages of information:
 - 8.2.1. SUBJECT ITEM PACKAGE (Elements A-I)
 - 8.2.1.1. Includes all of the required engineering data, proposed manufacturing plan, and other legal documents required to manufacture the subject item.
 - 8.2.2. DEMONSTRATION PACKAGE (Elements J-M)
 - 8.2.2.1. Demonstrates that the PS has recently manufactured and delivered either the subject item, or part(s) of similar complexity compared to the subject item.

8.2.2.1.1. For Category II SARs, if more than one similar item is required to demonstrate relevant experience, the PS must submit a demonstration package for each unique similar item.

8.3. ASSEMBLY SAR REQUIREMENTS

8.3.1. Any SAR package submitted for an assembly, module, or whole engine must meet all of the additional requirements called out in Appendix D. Submit the source of supply matrix in Element A along with the cover letter.

8.4. SAR WAIVERS

8.4.1. The ESA may decide to waive certain requirements in special circumstances. If the PS has a letter from the ESA waiving them of certain SAR requirements, provide this letter in place of said requirements.

Section		Element	Title
		А	Cover Letter
	Engineering Data	В	Subject Item Technical Data
		С	Proposed Production Documents
	Manufacturing	D	Sub-Tier Supplier (STS) List
Subject Item Package	Plan	E	Significant Industrial Processes (SIP)
		F	Calibrated Equipment List
	Licensing/Legal Documents	G	Technical Data Rights Certification Statement
		Н	License Agreements
		I	Government Quality Assurance Compliance
		J	Similarities/Differences Summary*
		К	Similar Item Technical Data*
Demonstratio	п Раскаде	L	Demonstration Production Documents
		М	Purchase Orders and Shipping Documents
Table 2. SAR Requirer	nents Outline	*	N/A for Category I SARs

8.5. Element A, COVER LETTER

- 8.5.1. Provide a cover letter (Appendix C).
- 8.5.2. For assemblies, modules or whole engine SAR packages provide the Source of Supply Matrix (Appendix D).

- 8.6. Element B, SUBJECT ITEM TECHNICAL DATA
 - 8.6.1. Provide the subject item Engineering Data List (EDL).
 - 8.6.1.1. The EDL is the complete list of all technical data required to manufacture an item. This may include drawings (casting, forging, source control, master, assembly, detail, schematic, airfoil data, etc.), specifications, parts lists, etc.
 - 8.6.2. Provide the latest legible revision of all technical data listed on the EDL.
 - 8.6.2.1. For specifications, only the title page is required.
 - 8.6.2.2. Proprietary technical data may be redacted to only reveal the drawing/ specification number, title, revision, and proprietary statement.
- 8.7. Element C, PROPOSED PRODUCTION DOCUMENTS

Note: Proposed Production Documents consist of Travelers, Process Operation Sheets (POS) and Inspection Method Sheets (IMS). Together, these documents must demonstrate that the PS has an adequate manufacturing plan and that traceability of the work being performed is achieved.

- 8.7.1. All Proposed Production Documents must meet the following requirements:
 - 8.7.1.1. Must be created and owned by the PS.
 - 8.7.1.2. Must include any and all proprietary production documents.
 - 8.7.1.2.1. The process description may be redacted for proprietary processes.
 - 8.7.1.3. Must establish traceability.
 - 8.7.1.3.1. Proper traceability connects the work being performed to the facility, performing operator, specific part, and the date that the work is being performed.
 - 8.7.1.3.2. An example of adequate traceability is the use of page numbers along with a unique document number that is present on each page. On the first page of the document, the date, company name, cage code is present, and the travelers have stamp blocks that allow the operator to indicate the work that is accomplished by the specific operator.

- 8.7.1.4. Any sub-vended process listed must identify the STS by name and CAGE at each applicable operational step with clearly identified process or procedure.
 - 8.7.1.4.1. Any STS referenced in the production documents must be included in Element D, and the PS Company Profile.

8.7.2. TRAVELERS

- 8.7.2.1. Travelers are a detailed step-by-step account of the proper sequenced procedures necessary to manufacture the subject item.
- 8.7.2.2. Must include the following:
 - 8.7.2.2.1. The operation number, process description, location, software data file name, etc. necessary to control the manufacture operations.
 - 8.7.2.2.2. Signature blocks for in-process operator and/or inspector signing or stamping.
 - 8.7.2.2.3. Tracked disposition of all parts during the entire manufacturing operation to include rejects and laboratory samples.
 - 8.7.2.2.4. References to specific IMS or POS in applicable steps.

Note: Travelers enclosed in this section are not to be considered a replacement for detailed Process Operation Sheets (POS). Lack of detailed POS pertaining to manufacture may be cause for disapproval of the PS's SAR.

- 8.7.3. PROCESS OPERATION SHEETS (POS)
 - 8.7.3.1. POS are a detailed description of the process being performed.
 - 8.7.3.2. POS should include an identification of the equipment/tooling used in the process, material handling procedures, set-up procedures, necessary safety precautions, any process specific drawings/graphics and a description of the in-process parameters used (i.e. speed and feed rates).

8.7.4. INSPECTION METHOD SHEETS (IMS)

8.7.4.1. IMS are a detailed step-by-step account of the proper sequenced procedures necessary to inspect the subject item.

- 8.7.4.2. Must include part number(s), exact dimensions and proper units.
- 8.7.4.3. Pass/Fail dimensions are not acceptable, except when using a part specific "go-no-go" gage. This type of gage must be included in Element F.
- 8.7.4.4. If a sampling plan is used, provide the sampling plan to be reviewed.
- 8.8. Element D, SUB-TIER SUPPLIER (STS) LIST

Note: All STS identified in this section must be included in the PS Company Profile, or the SAR will not be approved until the issue is resolved. If a new STS must be added to the PS Company Profile, submit a Company Profile amendment per sections 7.9 and 7.11 of this document.

8.8.1. Provide a matrix, Table 3, with the CAGE, Company Name, and a short description of any work being performed by STS.

Sub-Tier Suppliers Used to Manufacture Subject Item			
CAGE: Company Name: Description of support:			
XXXXX Example Company #1 Provides raw materi		Provides raw material	
YYYYY Example Company #2 Performs SIP for the PS (See Element E)		Performs SIP for the PS (See Element E)	

Table 3. Example of Sub-Tier Supplier Matrix

8.9. Element E, SIGNIFICANT INDUSTRIAL PROCESSES (SIP)

Note: Any SIP that requires quality certification, identified in this section, must be included in the PS Company Profile or the SAR will not be approved until the issue is resolved. If a new SIP certification must be added to the PS Company Profile, submit a Company Profile amendment per sections 7.8 and 7.11 of this document.

- 8.9.1. Provide a matrix (Appendix B) indicating the performing cage code (PS or STS) for any and all SIP performed during the manufacturing of the subject item.
- 8.10. Element F, CALIBRATED EQUIPMENT LIST
 - 8.10.1. Provide a matrix listing all equipment/tooling requiring calibration to include: part number, serial number, location, and date of calibration and expiration for each item used in the manufacturing of the subject item.
 - 8.10.1.1. This includes any "go-no-go" gages referenced in section 8.7.4.

8.11. Element G, TECHNICAL DATA RIGHTS CERTIFICATION STATEMENT

- 8.11.1. The PS must provide a certification of rights to use technical data in the format and wording provided in Appendix E, signed on company letterhead by an authorized binding company official (i.e. President, Owner, or Facility General Manager).
- 8.11.2. This Certificate states that the technical data was obtained by legal means and the company has the rights to use the data supplied in the SAR for manufacture purposes.
- 8.11.3. It is acceptable for the certificate to address multiple PN/NSN on a single certificate.
- 8.12. Element H, LICENSE AGREEMENTS
 - 8.12.1. For an item where proprietary data is used, or with an AMSC code of V, provide an ownership statement or a copy of the licensee agreement between the PS and the data owner.
 - 8.12.2. If a STS owns a proprietary process, the PS will provide a letter of support from the STS. The letter should state the duration of the proprietary process support, availability and capacity.
 - 8.12.3. MASTER TOOLING CERTIFICATION
 - 8.12.3.1. Provide certification of the right to use, and access the following, as applicable to the latest item technical data and/or drawing(s) required for manufacture: any required master tooling, special tooling/test equipment, mylars (stable base drawings), glass layout, loft data, and contour data.
- 8.13. Element I, GOVERNMENT QUALITY ASSURANCE COMPLIANCE
 - 8.13.1. Provide a statement that the PS will comply with all government imposed quality assurance provisions, testing requirements, etc. as identified in the solicitation or contract for the subject item.

Note: For Category I SAR submittals, Elements J and K are not required.

Note: For Category II SAR submittals, if more than one similar item is required to demonstrate relevant experience, multiple demonstration packages consisting of elements J-M must be submitted.

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- 8.14. Element J, SIMILARITIES AND DIFFERENCES BETWEEN SUBJECT AND SIMILAR ITEM(S)
 - 8.14.1. Provide a comparison matrix (Appendix F) identifying the specific similarities and differences in materials, coatings, design features, industrial processes, etc. between the subject and similar item(s).
 - 8.14.1.1. If more than one similar item is being used to demonstrate relevant experience, the comparison matrix should include a column for each item being compared in a single matrix. Provide a copy of this matrix in each demonstration package submitted.
- 8.15. Element K, SIMILAR ITEM TECHNICAL DATA
 - 8.15.1. Provide all technical data used in the manufacturing of the similar item.
- 8.16. Element L, DEMONSTRATION PRODUCTION DOCUMENTS
 - 8.16.1. Provide copies of all demonstration travelers, POS, and IMS used in the manufacturing of the demonstration item. Blank documents do not meet this requirement.
- 8.17. Element M, PURCHASE ORDERS AND SHIPPING DOCUMENTS
 - 8.17.1. Provide copies of the purchase orders and shipping documents that demonstrate that the PS manufactured and delivered the demonstration item.
 - 8.17.1.1. These documents must be from the same contract as the demonstration production documents provided in Element L.
 - 8.17.1.2. Contracts must be with the Prime/OEM, DOD, foreign government, or other commercial customers.
 - 8.17.1.3. These documents must be from a date within three (3) years for CSI, and seven (7) years for CAI, as evidenced by the latest shipping document provided. The threshold will be evaluated against the date that the SBO receives the SAR.
 - 8.17.1.3.1. Highlight the date on all documents in this section.
 - 8.17.1.4. All financial information must be removed, else the SAR may be returned.
 - 8.17.1.5. If a contract was terminated, state the reason for the termination.

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9. DOCUMENT SUBMITTAL

9.1. If the part is AF managed, documents should be submitted to:

AFSC/SB Solicitation Number: (If known) 3001 Staff Drive, Suite 1AG85A Tinker AFB, OK 73145-3009 Email: <u>afsc.sb.workflow@us.af.mil</u>

9.2. If the part is DLA managed, documents should be submitted to:

DLA Aviation Richmond ATTN: Small Business Office/DU SAR Program Manager Solicitation Number: (If known) 8000 Jefferson Davis Highway Richmond, VA 23297

9.3. All Company Profile documents should be submitted to the SBO per section 9.1.

10. EVALUATION METHODS

- 10.1. The ESA will evaluate the submitted SAR package using the criteria specified within this requirements document.
 - 10.1.1. If the ESA identifies any issues, missing data, or discrepancies during the evaluation of the submitted package, the ESA will provide the PS with a list of issues that need to be resolved.
 - 10.1.1.1. The PS will be given a Data Submission Date (DSD) of 5 working days to provide the requested data. A longer DSD may be provided upon the PS request, if determined acceptable by the ESA.
 - 10.1.1.1.1. If the DSD is met and the PS provides all missing/required data then the ESA will approve the package per section 10.1.2.
 - 10.1.1.1.2. If the DSD is not met, or the PS cannot provide the required missing data, then the ESA will complete the evaluation and forward a disapproval letter with a list of issues that need to be resolved. The PS will be encouraged to resubmit the request once all identified issues have been resolved.

- 10.1.2. If the PS provides all of the specified data in the required format, the ESA will issue an approval letter with an expiration date in accordance with section 11 and update the approved source list accordingly.
- 10.2. All transactions required to evaluate the approval request will be documented. All necessary artifacts will be recorded and retained in an ESA designated information system.
- 10.3. The PS is responsible for retaining all disposition letters received from the government.
- 10.4. The ESA retains the right to request an on-site audit of the vendor's facility during Company Profile, SAR, SRR, or PCR evaluation, or at any time during the vendor's approval period.

11. APPROVAL DURATION

- 11.1. ESA source approval expiration is three (3) years for CSI and seven (7) years for CAI. The expiration date will be based off of the date printed on the ESA approval letter.
- 11.2. Prior to source approval expiration, the approved source must submit an SRR in accordance with section 12 in order to renew their approval status.
- 11.3. Sources that are delivering the subject item on a government contract maintain their approval status and do not require source resubstantiation until there is a lapse in delivery/contract award of greater than three (3) years for CSI and seven (7) years for CAI.
- 11.4. The ESA may decide to revoke source approval status at any time per FAR 9.207.

12. SOURCE RESUBSTANTIATION REQUEST (SRR)

Note: Only sources that are currently approved to manufacture the subject item (must have been approved through the USAF SAR process and be listed on the AFMC Form 761) may submit an SRR. Sources that are delivering the subject item on government contract maintain their approval status and do not require source resubstantiation until there is a lapse in delivery/contract award of greater than three (3) years for CSI and seven (7) years for CAI (this does not include sources who were awarded government contracts without going through the USAF SAR process).

12.1. The SRR provides an approved source the opportunity to renew the approval status of a previously approved SAR through the review of any and all changes to the contents of the referenced SAR since the time of approval.

- 12.2. Provide the SRR (Appendix G).
 - 12.2.1. Describe any and all changes made to the contents of the referenced SAR package since the time of approval.
 - 12.2.2. The original SAR approval letter should be attached to the SRR.
 - 12.2.3. The SRR must be in the format provided in Appendix G and signed on company letterhead by an authorized binding company official (i.e. President, Owner, or Facility General Manager).
 - 12.2.4. Any SAR element identified as "Updated" must be submitted for review.
 - 12.2.4.1. All changes within the submitted documents should be highlighted.
- 12.3. For sources that previously delivered the subject item on a government contract, submit the quality history, any DRs, and the latest purchase orders and shipping documents from the referenced contract.
- 12.4. Upon review of the SRR, the ESA may request additional information and documentation for review.
- 12.5. If the changes are determined to be acceptable, the ESA will issue a new approval letter.

13. PROCESS CHANGE REQUEST (PCR)

- 13.1. The approved source is responsible for submitting a PCR any time a change to the contents of the Subject Item Package occurs.
 - 13.1.1. This may include, but is not limited to: changes to the STS list, using different equipment/tooling, and/or changing the sequence of operations on the travelers.
 - 13.1.2. Failure to provide a formal PCR when a significant change occurs could result in a revocation of the source's approval status.
- 13.2. Provide the PCR (Appendix G) in accordance with section 12.2.
- 13.3. Upon review of the PCR, the ESA may request additional information and documentation for review.
- 13.4. If the changes are determined to be acceptable, the ESA will issue a new approval letter.

This document reviewed and signed by:

Competition Advocate AFSC/PZCAB Competition Advocate DLA Aviation/AOCA Head of Contracting DLA Aviation /AO Head of Contracting AFSC/PZA Chief Engineer Fighter Engines AFLCMC/LPE Chief Engineer Tanker/Bomber Engines AFLCMC/LPE Small Business Office AFSC/SB SASPO Office AFSC/429 SCMS

Signatures kept on file by AFLCMC/LPE

For a copy of the signatures, please contact AFLCMC.LPE.SourceEvalTeam@us.af.mil.

The authority granted by the signatures for qualification requirement shall not exceed seven (7) years past the signed date. Qualification requirements shall be examined and revalidated if the last signed date is over seven (7) years old per FAR 9 .202(f).

APPENDIX A: SELF-ASSESMENT CHECKLIST (SAC)

1. Complete the SAC using the checklist below.

- 1.1. In the references and artifacts column, identify the location within the PS QAM, or other documentation, where the requirement is met.
- 1.2. If other documentation is used to cover items on this list, provide the specified document.

Item No.	Review Item	References and Artifacts	Pass
1.	Production Engineering and Planning		
1.1.	Government furnished data		
1.1.1.	Are contractor's procedures adequate to verify currency of depot/Naval Air Systems Command (NAVAIR)/Army Aviation and Missile Command (AMCOM)/Air Force Material Command (AFMC) technical publications, Local Engineering Specifications (LES)/Local Process Specifications (LPS)/Engineering Change Proposals (ECP), Maintenance Engineering Orders (MEO), Manual Change Revisions (MCR), and Engineering Drawings		
2.	Production Control		
2.1.	Delivered non-conforming CSIs		
2.1.1.	Is there a procedure for notification to the Administrative and Procuring Contract Officers (ACO & PCO) of any delivered non-conforming as soon as practicable, but no later than 72 hours		
2.1.2.	Do procedures require that the contract, part, and serial numbers be identified if non-conforming parts are delivered		
2.2.	Purchasing Records		
2.2.1.	Do vendor purchase orders (POs) reference QE- STD-1 and/or other applicable Critical Item program documents		
2.2.2.	Are POs available for review by the appropriate Government Official		
2.3.	Government Furnished Material (GFM)		
2.3.1.	Do the contractor's procedures include the following	□ Yes □ No	
2.3.1.1.	Examination upon receipt to detect transit damage		
2.3.1.2.	Inspection for completeness and proper type		
2.3.1.3.	Periodic inspection and precautions to assure adequate storage conditions are maintained, to guard against damage from handling and deterioration during storage, and to segregate it in a secure, controlled area		

2.3.1.4.	Functional testing, as required by contract, to determine satisfactory operation			
2.3.1.5.	Identification and protection from improper use or disposition			
2.3.1.6.	Verification of Quantity			
2.3.1.7.	Procedures to report damaged/non-conforming GFM and to segregate it in a secure, controlled area pending disposition instructions			
3.	Production Methods and Processes:			
	List of in-house processes (e.g. MPI, LPI, x-ray, brazing, welding, heat treat, shot peen, metallurgical lab, chemical lab, plating processes (identify), other coating capabilities (identify), etc.)			
3.1.				
5.1.				
3.2.	Material Review Board Actions			
3.2.1.	Do you have separate secured MRB storage areas (Gov/Civ)			
4.	Facility Test Equipment and Tooling			
4.1.	Tooling			
4.1.1.	Who manufactures your special tools and fixtures?			
4.1.2.	Is any tooling within the facility owned by the Government			
4.1.2.1.	If yes, how is the tooling stored and segregated?			
5.	Configuration Management			
5.1.	Do government and commercial products require segregation?			
5.2.	If yes, are government and commercial products segregated			
6.	Packing, Storage, and Delivery			
6.1.	Packing			
6.1.1.	Are military packaging tests performed when required by contract and documented			
6.1.2.	Are military packaging test results documented			
7.	Non-conforming Material and Corrective Action			
7.1.	Material			
7.1.1.	Is action taken to promptly document and correct all conditions of non-conforming materials to the government			

(Signature)

(Date)

(Typed or printed name & title)

This document must be signed by the Company President, Owner, or Plant Manager

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APPENDIX B: SIGNIFICANT INDUSTRIAL PROCESS FORM

- 1. Complete and provide this table in Element E of the SAR.
 - 1.1. If any of the listed SIP are required to manufacture the subject item, indicate the CAGE code of the performing company (PS or STS).
 - 1.2. The processes shown in grey require NADCAP, OEM/Prime, DOD, or other approved certification and/or audit and must have a certificate included in the PS Company Profile.

1.2.1.	See sections 7.8 and 7.11 for details on updating the Company Profile.
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#		SIGNIFICANT INDUSTRIAL PROCESSES	NADCAP	Performing CAGE:
1	Casting /Forging Processes		NA	
2		Other Forming Processes	NA	
3		Blending/Reworking	NA	
4		Heat Treating:	7102	
	4a	Carburizing	7102	
	4b	Nitriding	7102	
	4c	Hot Isostatic Pressing	7102	
	4d	Sintering	7102	
5		Brazing	7102/7110	
6		Chemical Processes:	7108	
	6a	Chemical Cleaning/Surface Treatment/- Passivation	7108	
	6b		7108	
		Anodizing		
	6C	Conversion/Phosphate Coatings	7108	
	6d	Paint/Dry Film Coatings	7108	
	6e	Stripping	7108	
	6f	Chemical Milling	7108	
	6g	Electroplating	7108	
	6h	Electroless Plating	7108	
	6i	Etching (Nital/Pre-Penetrant/Temper/- Macrostructure/Blue Etch Anodize)	7108	
7		Vapor Deposition	7108/7109	
8		Coatings:	7109	
	8a	Thermal Spray	7109	
	8b	Diffusion Coatings	7109	
9		Welding:	7110	

	9a	Flash	7110	
	9b	Resistance	7110	
	9c	Fusion	7110	
	9d	Laser	7110	
	9e	Rotational Friction	7110	
-	9f	Diffusion	7110	
-	9g	Percussion Stud	7110	
10		Nonconventional Machining:	7116	
	10a	Electrochemical Machining	7116	
	10b	Electrochemical Grinding	7116	
	10c	Electrical Discharge Machining	7116	
	10d	Laser Beam Machining	7116	
	10e	Laser Part Marking	7116	
	10f	Spark Erosion Grinding	7116	
	10g	Abrasive Water Jet Machining	7116	
11		Blasting Processes	NA	
12		Peening:	7117	
	12a	Computer Controlled	7117	
	12b	Automated	7117	
	12c	Forming	7117	
	12d	Flapper	7117	
	12e	Manual	7117	
13		Soldering	7120	
14		Conventional Machining as a Special Process	7126	
	14a	Broaching	7126	
	14b	Substantial Grinding (not to include spot-grinding)	7126	
15		Surface Finishing Processes:	NA	
	15a	Honing	NA	
	15b	Sutton Barrel	NA	
16		Non-Destructive Inspections:	7114	
	16a	Fluorescent Penetrant	7114	
	16b	Magnetic Particle	7114	
	16c	Eddy Current	7114	
	16d	Ultrasonic	7114	
	16e	Radiography	7114	
	16f	Laser Holography	NA	
17		Measurement and Inspection:	7130	
	17a	Coordinate Measuring Machines	7130	
	17b	Laser Trackers	7130	
	17c	Optical Systems	7130	
	17d	Mass Airflow	7130	

APPENDIX C: COVER LETTER REQUIREMENTS

The following information is required for the cover letter:

Solicitation Number (if applicable): Contracting Officer POC (if applicable): Engine Type: **Company Name:** Company CAGE: **Company Address:** Primary Company POC: Name, phone, fax and email Secondary Company POC: Name, phone, fax and email Company Size: (Large or Small) Qualification Requirement Designation and Revision: (i.e. MQR-PSD-1, Rev 1) Technical Data Proprietary: No, Yes or Partial (Select One) NSN(s): PN(s): Nomenclature: ERRC Code (if known): Assembly/Module/Whole Engine SAR: (Yes or No) SAR Waiver Included: (Yes or No)

APPENDIX D:

SOURCE OF SUPPLY MATRIX FOR MODULES/ASSEMBLIES

- 1. SAR package submissions for parts that are made up of multiple embedded items, such as modules or assemblies, must include a matrix (see table below) that describes the PS's method of procurement for all of the embedded items. Approved methods include:
 - 1.1. Organic The PS is an approved source of supply or has submitted a SAR package for the embedded item. Provide the SAR approval letter or SAR control number.
 - 1.2. OEM The PS will purchase the embedded item from the OEM. Provide the company name and CAGE code along with an offer letter, on company letterhead, stating that the parts are available for procurement to the PS.
 - 1.3. USAF Approved Source The PS will purchase the embedded item from a SAR approved source (must be listed on the AFMC Form 761). Provide the company name and CAGE code along with an offer letter, on company letterhead, stating that the parts are available for procurement to the PS.
 - 1.4. Common Part The embedded item is common and does not have any critical design elements requiring procurement from an approved source and is readily available.
- 2. The Assembly SAR does not qualify the PS to manufacture any of the embedded items. If the PS wishes to become an approved source of supply for any of the embedded items, a unique SAR package must be submitted for each embedded item.

3.	Include the matrix in Element A of any SAR submitted for a Module/Assembly.
----	---

Assembly PN:	XXXXXXXX		
Part Number	Noun/Nomenclature	Source of Supply	<u>Details</u>
XXXXXXX	Embedded Item #1	Organic	SAR submitted for review on (DD MM YY). SAR control number: XXXXXXX
XXXXXXX	Embedded Item #2	Organic	The PS is already an approved source. See attached ESA approval letter
XXXXXXX	Embedded Item #3	OEM	See attached letter of support from OEM (CAGE: XXXXX)
XXXXXXX	Embedded Item #4	USAF Approved Source	See attached letter of support from Approved Source (CAGE: XXXXX)
XXXXXXX	Embedded Item #5	Common Part	Part is standard/common

*Example Source of Supply Matrix for Modules/Assemblies

APPENDIX E:

TECHNICAL DATA RIGHTS CERTIFICATION LETTER

I am an officer and employee of the above name 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:

I certify that the technical data submitted as a part of my company's request for approval as potential source for the purpose of obtaining a contract were obtained by legal means by my company, without breach of any contractual or confidential relations pertaining to said technical data by my company, its current or recent employees; and

I 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 rights legend from any U.S. Governments agency or employee or other third parties that were used in the preparation of or were incorporated into the request for approval or its supporting technical data other than as described herein; and

I certify that my company has the legal right to use said technical data to manufacture/repair 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 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 the certification have formed the basis for claiming legal right to use said technical data. Such documentation 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 THE TITLE 18, UNITED STATES CODE, SECTION 1001.

THIS CERTIFICATION APPLIES TO: NSN P/N Noun

Note: If SAR package is for multiple NSNs, all NSNs, Part Numbers, Nouns must be listed. The list can be attached to the letter.

(Signature)

(Date)

(Typed or printed name & title)

This document must be signed by the Company President, Owner or Plant Manager

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APPENDIX F: SIMILAR ITEM COMPARISON MATRIX

*This table to be used as an example for the required matrix.

Subject Item Nomenclature	Similar Item Nomenclature	
Subject Item NSN	Similar Item NSN	
Subject Item Part Number	Similar Item Part Number	
Subject Item TMS (if known)	Similar Item TMS (if known)	
Subject Item Material	Similar Item Material	
Subject Item Function	Similar Item Function	
Subject Item Coatings	Similar Item Coatings	
Subject Item Manufacturing/ROMM Processes	Similar Item Manufacturing/ROMM Processes	
Subject Item Inspection Processes	Similar Item Inspection Processes	
Subject Item Surface Finish	Similar Item Surface Finish	
Subject Item Tightest Tolerance	Similar Item Tightest Tolerance	

APPENDIX G: PROCESS CHANGE REQUEST (PCR) / SOURCE RESUBSTANTIATION REQUEST (SRR)

MEMORANDUM FOR AFSC/SB

DATE MM/DD/YYYY

3001 Staff Drive Ste. 1AG85A Tinker AFB, OK 73145-3009

FROM: COMPANY NAME CAGE Code ADDRESS PHONE NUMBER

SUBJECT: Process Change Request/Source Resubstantiation Request for NSN 1234-00-567-8910, PN 12345678, NOMENCLATURE

SOURCE RESUBSTANTIATION REQUEST (SRR)	PROCESS CHANGE REQEST (PCR)	

1. COMPANY (CAGE: NUMBER) was approved to manufacture PN: 12345678 on MM/DD/YYYY. This (PCR or SRR) is a notification of the changes to the subject item package that have occurred since that date.

2. The SAR contents have been changed as follows:

	Required Element	Remain Unchanged	Update Provided
A:	Cover Letter		
В:	Subject Item Technical Data		
C:	Proposed Production Documents		
D:	Sub-Tier Supplier (STS) List		
E:	Significant Industrial Processes (SIP)		
F:	Calibrated Equipment List		
G:	Technical Data Rights Cert. Statement		
H:	License Agreements		
l:	Gov't Quality Assurance Compliance		

3. The items that have been updated are provided with changes noted.

4. Please review the (PCR or SRR) and consider renewing the approval status of our company for the subject item.

Respectfully, (Signature) (Typed or printed name & title)

ATTACHMENTS:

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APPENDIX H: DEFINITIONS

- AFMC Form 761 The "Screening Analysis Worksheet" that lists all USAF approved sources of supply for a specific NSN. The document also lists the AMSC code for the NSN.
- Company Profile A collection of all quality assurance documentation, SIP certification, and STS network that fully describes the capability of the PS at the time of submittal. The Company Profile is reviewed during SAR review to ensure agreement with any STS and SIP certification called out in the SAR. All relevant certificates must not be expired in order to receive SAR approval.
- Critical Application Item (CAI) An item, part, assembly, installation, or production system 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.
- Critical Characteristic Any feature throughout the life cycle of a Critical Item, such as dimension, tolerance, finish, material, or assembly, manufacture, manufacture or inspection process, operation, field maintenance, or depot overhaul requirement that if non-conforming, missing, or degraded may cause the failure or malfunction of the item.
- Critical Safety Items (CSI) An item, part, assembly, installation or production system with one or more critical characteristic that, if missing or not conforming to the design data or quality requirements, would result in an unsafe condition that could cause loss or serious damage to the end item or major items, loss of control, uncommanded engine shutdown, or serious injury or death to personnel. Unsafe conditions relate to hazard severity categories I and II of MIL-STD-882, System Safety Requirements. The determining factor in CSI is the consequence of failure, not the probability that the failure or consequence would occur.
- 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 to 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 QR, the ESA is synonymous with the Designated Air Force Single Manager for the Weapon System, Design Control Activity, the Cognizant Engineering Authority (CEA) and the USAF Propulsion Division Engineering Chief.

- Inspection Method Sheets (IMS) document used to describe the steps involved in executing an inspection or series of inspections to include tooling, gages, fixtures, dimensions and other parameters necessary to execute the required inspections(s). Sheets must be certified by an authorized representative empowered to comply with the inspection process.
- Material A general term referring to material at any stage in the manufacture/repair process.
- National Aerospace & Defense Contractors Accreditation Program (NADCAP) The accreditation program through which the Performance Review Institute (an independent, non-profit trade association affiliated with the Society of Automotive Engineers), accredits subcontractors and sub-tier suppliers to aerospace and defense industry consensus standards.
- Original Equipment Manufacturer (OEM) –An individual, activity, or organization that performs the physical fabrication processes that produce the deliverable part or other items of supply for the prime contractor and performed the original development of the subject item or assembly. The OEM must produce the part in-house. The OEM may or may not be granted design responsibility by the prime contractor for preparation and technical currency of technical data.
- Potential Source Any potential offeror who wants to be considered as a source for a given part, but who has not yet been approved/disapproved. A source of this type would normally be required to meet prequalification requirements prior to contract award and may also be subjected to production inspection or surveillance if a contract is received.
- Prime Contractor A contractor having responsibility for design and/or delivery of a system, subsystem, or equipment such as aircraft, engines, ships, tanks, vehicles, guns and missiles, ground communications and electronics systems and test equipment.
- Process Operation Sheets (POS) documents used to describe the steps involved in executing an operation or series of operations to include tooling, machinery, dimensions, speeds, feed rates, coolants, cutters, tape numbers and other operating, process and/or set-up parameters necessary to execute the operation. Includes detailed shop sketches. At a minimum, significant processes in Appendix B shall be fully defined.
- Repair Necessary preparation, fault correction, disassembly, inspection, replacement of parts, adjustment, reassembly, calibration, or tests accomplished in restoring items to serviceable status.
- Significant Industrial Process A process which is capable of producing alterations in the material structure of a part which cannot normally be evaluated without destructive testing and which can compromise the mechanical properties and ultimately the reliability of the part. Examples of processes that are considered to be significant by AFLCMC/LPS are listed in Appendix B.

- Similar part A part fabricated from the same or a similar material that is equivalent or more difficult than the subject item to form and finish. The similar part must demonstrate the ability of the prospective source, in conjunction with their STS, to perform all requisite significant manufacturing/repair processes applicable per the technical data and sub-tier specifications. Significant processes are defined in Appendix B.
- Subject Item The actual item or assembly that the PS is attempting to be qualified for by submitting a SAR.
- Sub-Tier Supplier (Sub-Vendor) (STS) A source supplying material, products and/or services to the PS as required in the performance of the contract. This term applies to all facilities other than the PS's facility including those of the same company with a separate cage code.
- Technical Data Data required for the accomplishment of logistics and engineering processes in support of the contract end item. Includes drawings, operating and maintenance instructions, provisioning information, specifications, inspection and test procedures, instruction cards and equipment placards, engineering and support analysis data, special purpose computer programs and other forms of audio visual presentation required to guide personnel in the performance of operating and support tasks.