

# ***Air Force Sustainment Center***

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**Strategic Alternate Sourcing  
Program Office (SASPO)  
Tinker AFB Industry Day  
24 August 2017**

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# ***Air Force Sustainment Center***

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## **SASPO Industry Day**



## **WELCOME REMARKS**

**Mr. Levi Warren**

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# ***Air Force Sustainment Center***

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## **Alternate Sourcing Overview**

**Ms. Julia Séas**  
**429 SCMS- SASPO**  
**[Julia.seas@us.af.mil](mailto:Julia.seas@us.af.mil)**

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# ***SASPO Mission Statement***



- **Serves as the 448 SCMW focal point for alternate sourcing efforts and diminishing manufacturing sources and material shortages**
- **Responsible for providing a strategic focus on qualifying and developing alternate sources, developing and implementing strategies for increased supportability and parts availability, and leveraging opportunities for resolution of obsolescence issues across the enterprise**



# Alternate Sourcing



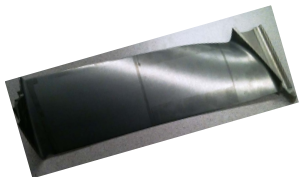
PLAN

SOURCE

MAKE/REPAIR

DELIVER/RETURN

ENABLE

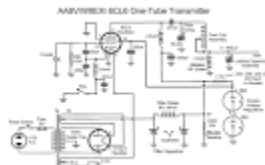


## Alternate Sourcing Strategies

F108 Alternate Sourcing strategy to procure engine components previously flown on commercial aircraft and repaired by an Air Force-approved source

### RESULTS:

- \$113M Saved
- 291 Days Reduced PLT

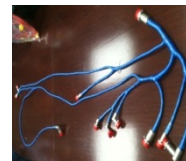


## Source Approval Requests

Increasing competition by facilitating the Source Approval Request process to qualify new sources of manufacture and repair to include; marketing through FBO, Industry Days, Conferences and SASPO Website

### RESULTS:

- \$46M Saved
- Reduced Process Time



## Repair Development/Reverse Engineering For Competition

Provide support to IPTs in the development of repairs and reverse engineering projects based on optimizing the supply chain

### RESULTS:

- Increased Supportability
- Increased Competition



## Alternate Sourcing Contract

Provide SAR evaluation recommendations, alternate sourcing and reverse engineering support

### RESULTS:

- Reduced Process Time
- Reduced Touch Time



# *Alternate Sourcing Industry Day*

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## **Benefits:**

- **Communicate 448 SCMW projected requirements**
- **To be effective and efficient in supply chain planning and execution**
- **Resource for private industry**
- **Government focal point**
- **Identification of possible Reverse Engineering, Repair Development, Additive Manufacturing candidates**
- **SAR training**



# SASPO Products



- **Target List**
  - **A list intended to help companies get into the ballpark in determining which items to target for Source Approval Requests (SARs)**
    - Only one or two sources of supply
    - A projected buy within the next three fiscal years
    - Acquisition Method Suffix Code (AMSC) “C”
      - The AF **SHOULD** own the data
    - Covers all three locations (OC, OO and WR)
    - Consists of 81 items (Spring 2017)
    - March and September Comp Cycle data
      - Six month lag to produce



# *SASPO Products cont...*



- **G Coded List**
  - **A list intended to help companies who have not done business with the government**
    - **Acquisition Method Suffix Code (AMSC) “G”**
      - **No Qualification required**
- **RPOW List(s)**
  - **Raw data from USAF requirements database**
  - **Projected requirements for the next 3-4 years**
  - **Buy/Spares and Repair forecasted requirements**
  - **Look at AMSC/RMSC to access data availability**





# SAR Process



- **Source Approval Request (SAR) Process Overview:**
  - Research Federal Business Opportunities (FEDBIZOPS)
  - Determine the Managing Organization
  - Request the Qualification Requirements (QR)
  - Procure Drawings/Manufacturing or Repair Data
  - Do your Market Research
  - Build and submit your SAR Package
  - For DLA Managed Items call 804.279.5114 or email at:  
[http://www.aviation.dla.mil/UserWeb/AviationEngineering/Engineering/valueengineering/RPPOB\\_SAR.asp](http://www.aviation.dla.mil/UserWeb/AviationEngineering/Engineering/valueengineering/RPPOB_SAR.asp)
  - This information is found on the SASPO Website and the Alternate Sourcing Brochure



# 429 SCMS SASPO Web Site



## VENDOR RESOURCES

- [T.O. Fact Sheet](#)
  - [Quick Overview of Qualification Process 2015](#)
  - [White Paper Template](#)
  - [Small Business Office \(SBO\) \(New Link\)](#)
  - [DD Form 2345 \(New Link\)](#)
  - [MMAC Code Identifier \(New Link\)](#)
  - [Acronym Finder \(New Link\)](#)
  - [AMSC\\_RMSC Codes Defined \(New Link\)](#)
  - [Drawing Fact Sheet \(New Link\)](#)
  - [Tinker Request for Engineering Data](#)
  - [Public Sales Request Form](#)
  - [Zero - One List \(New Link\)](#)
- More to come ...

## REFERENCE DOCS

- [SAR Propulsion Training 2017](#)
- [Manufacture Qualification Requirements \(MQR\) for Propulsion Critical Safety Items \(CSI\) Critical Application Items \(CAI\)](#)
- [USAF Propulsion Manufacture Spare, MQR-PSD-1](#)
- [Repair Qualification Requirements \(RQR\) for Propulsion Critical Safety \(CSI\) Critical Application Items \(CAI\)](#)
- [USAF Propulsion Repair, RQR-PSD-1](#)
- [Repair Qualification Requirements \(RQR\) for Propulsion Critical Safety \(CSI\) Critical Application Items \(CAI\) with a Source Demonstration](#)
- [USAF Propulsion Repair Source Demonstration, RQR-PSD-2](#)
- [LPS Form 815 20170405 SAR Evaluation Checklist Distribution E](#)
- [AF XB3 Ducts and Tubes](#)
- [848 QR Master Item List](#)
- [JQR-RQR-848](#)

## SASPO ANNOUNCEMENTS

- **Tinker Air Force Base, Okla. --**
- [Industry Day Save the Date 24 Aug 17 NEW](#)
- [Industry Day Feb 2017](#)
- [F108 Industry Day Jan 2017](#)
- [Tinker Industry Day Aug 2016](#)
- [Tinker Industry Day Mar 2016](#)
- **Hill Air Force Base, Utah --**
- [Industry Day June 2017](#)
- **Robins Air Force Base, Ga. --**
- [Industry Day Save the Date 28 Sep 17 NEW](#)

## SASPO PRODUCTS

- [SASPO Commercially-Used Overhauled List from Spring 2017 Requirements](#)
- [Spring 2017 Target List](#)
- [Spring 2017 G Coded List](#)
- [Spring 2017 RPOW Repair](#)
- [Spring 2017 RPOW Spares](#)

## SOURCE DEVELOPMENT

- [AFMCI 23-113](#)
- [DLA WebFLIS \(New Link\)](#)
- [FedBizOpps](#)
- [Defense Logistics Agency Internet Bid Board System \(DIBBS\)](#)
- [Aviation Critical Safety Item Management Handbook \(CSI Handbook\)](#)
- [JACG Source-Approved and Management Handbook](#)

## CONTACT INFO

E MAIL : [429SCMS.SASPO.Workflow@us.af.mil](mailto:429SCMS.SASPO.Workflow@us.af.mil)

<http://www.tinker.af.mil/Home/429SCMSSASPO.aspx>



# *Alternate Sourcing POCs*

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- **Julia Séas, (405) 736-7373**  
– [julia.seas@us.af.mil](mailto:julia.seas@us.af.mil)
  
- **Myron Knight, (405) 734-7809**  
– [myron.knight@us.af.mil](mailto:myron.knight@us.af.mil)
  
- **Randy Harris, (405) 734-8358**  
– [randolph.harris@us.af.mil](mailto:randolph.harris@us.af.mil)
  
- **Michael Deaton, (405) 582-9712**  
– [michael.deaton.1@us.af.mil](mailto:michael.deaton.1@us.af.mil)



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# Questions

*Breaking Barriers ... Since 1947*

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# Air Force Sustainment Center SMALL BUSINESS OFFICE

**Small Source, Right Value, Big Performance**

Our mission is to maximize small business participation in AFMC Acquisitions and aide in making the small business the solution of choice to meet the warfighter's mission.

Director: Ms. Chip Chambers

Website: [www.afsc.af.mil/Units/SBO.aspx](http://www.afsc.af.mil/Units/SBO.aspx)

Phone: (405)739-7243

Email: [afsc.sb.workflow@us.af.mil](mailto:afsc.sb.workflow@us.af.mil)

August 24, 2017

*Breaking Barriers ... Since 1947*



# AFSC/SB Organization Contact Information



## Air Force Sustainment Center (AFSC) Small Business Office (SBO)

**AFSC/SB Director**  
Ms. Tracy Nicholson  
DSN 339-2601 Com (405) 739-2601

**AFSC/SB-OL:R Director**  
Ms. Angela Dial  
DSN 468-7073 Com (478) 926-7073

Ms. Cassandra Tharpe  
Small Business Professional  
DSN 468-5872 Com (478) 926-5872

**Mr. Randy Miller**  
Source Development Specialist  
DSN 468-5871 Com (478) 926-5871

Ms. Rosemary Foskey  
Small Business Professional  
DSN 468-9526 Com (478) 926-9526

**AFSC/SB Director**  
Ms. Tracy Nicholson  
DSN 339-2601 Com (405) 739-2601

**Ms. Laurel Chambers**  
Source Development Specialist  
DSN 339-7243 Com (405) 739-7243

Ms. Darla DeAngelis  
Small Business Professional  
DSN 339-2604 Com (405) 739-2604

Mr. Richard D. Scroggins  
Small Business Professional  
DSN 339-5242 Com (405) 739-5242

**AFSC/SB-OL:H Director**  
Mr. James Dean  
DSN 777- 4143 Com (801) 777-4143

Ms. Kathy Butler  
Small Business Professional  
DSN 777-3447 Com (801) 777-3447

**Mr. Michael Cottam**  
Source Development Specialist  
DSN 777-2211 Com (801) 777-2211

Ms. Mary Ann Flinders  
Small Business Professional  
DSN 777-9993 Com (801) 777-9993



# SBO Role



- **Our Role**
  - **Ensure SB maximum practicable opportunity to participate in Hill AFB acquisitions**
    - **Carry Out Policy & Directives**
    - **Set/Achieve Program Goals**
    - **Knowledge of SB Program Requirements**
  - **Participate in acquisition activities**
    - **Review subcontracting plans/acquisition documentation**
    - **Make Set-Aside Recommendations/SBA Coordination**
    - **Market research**
    - **Acquisition strategy meetings**
    - **Industry days**
    - **Provide training (internal and external)**
  - **Outreach events---Meet with small business**
  - **Source Development**



# Procurement Activities Supported (\$11.7B)



## Tinker

OC-ALC  
72<sup>nd</sup> ABW  
848<sup>th</sup> SCMG

## Robins

WR-ALC  
78<sup>nd</sup> ABW  
638<sup>th</sup> SCMG

## Hill

OO-ALC  
75<sup>nd</sup> ABW  
748<sup>th</sup> SCMG



E-3  
Propulsion  
B-1 B-2 B-52  
C/KC-135 KC-46  
CLS  
HF Global  
ATCALS

F-15      E-8  
C-17      U-2  
C-5      C-130  
C2ISR      SOF/PR  
Support Equipment  
Vehicles  
Automatic Test Sets  
Electronic Warfare

F-16  
A-10  
F-22  
MAPA  
Space & C3I  
Munitions



AFNWC  
  
FY16 Results: \$3.4B  
(AFSC \$1.2B; LCMC  
\$2.2B) AFNWC \$22M)

FY16 Results: \$5.4B  
(AFSC \$696M; LCMC  
\$4.7B)

AFNWC  
  
FY16 Results: \$2.9B  
(AFSC \$600M; LCMC  
\$1.7B; AFNWC \$564M)

## \$1.5B to Small Business





# *Doing Business with the Air Force*



- ***STEP 1: EDUCATE Yourself on How to Do Business with the Government***
  - A. DoD SB Programs**  
<http://www.acq.osd.mil/osbp/sb/programs/index.shtml>
  - B. Guide to Marketing to the DoD**  
<http://www.acq.osd.mil/osbp/sb/guide.shtml>
  - C. Procurement Technical Assistance Center (PTAC)**  
<http://www.aptac-us.org/> (Free Support)
  - D. Small Business Administration (SBA) Website**  
[www.sba.gov](http://www.sba.gov)
  - E. AFSC Small Business Website**  
<http://www.afsc.af.mil/Units/SBO.aspx>



# *Procurement Technical Assistance Centers (PTAC)*

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What can a PTAC do for you?

- Determine if your business is ready for Government contracting
- Help you register your company in SAM, DSBS, etc
- Determine eligibility for Small Business Certifications
- Educate how to research past contract opportunities
- Show how to apply filters in FBO



# Doing Business with the Air Force



## ■ STEP 1 Continued...

### F. Government Contract Policy

- a) FAR, DFARS, AFFARS <http://farsite.hill.af.mil/>
- b) Defense Procurement and Acquisition Policy  
<http://www.acq.osd.mil/dpap/index.html>
- c) Defense Contract Audit Agency  
<http://www.dcaa.mil/>
- d) Defense Contract Management Agency  
<http://www.dcma.mil/>

### G. Wide-Area Workflow (Government Invoicing System)

<https://wawf.eb.mil>



# *System for Award Management (SAM)*

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- Must be registered in SAM in order to receive a contract with the Government
- Will get your company a CAGE code
- Website: [www.sam.gov](http://www.sam.gov)
- Self Registering process
- List **ALL** your NAICS codes in the system



# *Dynamic Small Business Search (DSBS)*

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- DSBS is a market research tool that the requiring activities use to find potential vendors
- Allows you to input your Capabilities, Keywords, NAICS, Past Performance
- **Keywords are crucial**
- Keep past performance information updated
- If you develop a new capability make sure that your DSBS profile reflects the new capability



# Doing Business with the Air Force



- **STEP 2: Define Your PRODUCT/SERVICE and IDENTIFY Your MARKET**
  - A. **What Product Service Codes/Federal Stock Class Codes are you selling?**  
<https://www.dlis.dla.mil/H2/H2home.aspx>
  - B. **Identify Potential NAICS Codes:**  
<https://www.census.gov/eos/www/naics/>
  - C. **Find who is buying your product/goods/service:**  
[www.USAspending.gov](http://www.USAspending.gov) **AND**  
[https://www.fpds.gov/fpdsng\\_cms/index.php/en/](https://www.fpds.gov/fpdsng_cms/index.php/en/)
  - D. **DoD SB Website** <http://www.acq.osd.mil/osbp/index.shtml>



# *Who Buys Your Product?*

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## Federal Procurement Data System (FPDS)

- Shows contract actions throughout the Government
- Search by: NAICS, Location, Agency, Keywords, etc...
- Website: [www.fpds.gov](http://www.fpds.gov)

## USASpending.gov

- Shows contract actions throughout the Government
- Search by: Location, Agency, Keywords, etc...
- Allows you to download Data and manipulate it.
- Website: [www.usaspending.gov](http://www.usaspending.gov)



# Doing Business with the Air Force



- **STEP 3: REGISTER Your Company to do Business with Government**
  - A. **Must be Registered in System for Award Management**  
[www.sam.gov](http://www.sam.gov)
  - a) **Need to have your NAICS**  
<https://www.census.gov/eos/www/naics/>
  - b) **Need Your DUNS** <http://fedgov.dnb.com/webform>
  - c) **Commercial and Government Entity Program**  
<https://cage.dla.mil/Home/UsageAgree>
  - B. **Contact your local PTAC for Free Assistance**  
<http://www.aptac-us.org/>





# *Doing Business with the Air Force*



## ■ *STEP 3 Continued...*

**C. Update Dynamic Small Business Search Database  
(How Agencies can FIND YOU!)**

[http://dsbs.sba.gov/dsbs/search/dsp\\_dsbs.cfm](http://dsbs.sba.gov/dsbs/search/dsp_dsbs.cfm)

**D. To obtain Tech Data/Drawings, an approved DD2345,  
Military Critical Technical Data Agreement is required**

<http://www.dtic.mil/dtic/> (search "DD 2345")



# Doing Business with the Air Force



## ■ **STEP 4: Find Government OPPORTUNITIES**

- A. All acquisitions >\$10K listed on Federal Business Opportunities (FBO) [www.fbo.gov](http://www.fbo.gov)**
- B. Defense Internet Bid Board  
<https://www.dibbs.bsm.dla.mil/>**
- C. General Services Administration  
<https://www.gsa.gov/portal/category/100000>**
- D. Strategic Alternate Sourcing Program Office  
<http://www.tinker.af.mil/home/429scmssaspo.aspx>**
  - a) RPOW (Requirement Projection on Web)**
  - b) Target List (what AFSC Supply Chain plans to buy)**
  - c) Industry Days – Advertised on FBO**



# Doing Business with the Air Force



## ■ **STEP 4 Continued...**

**E. Qualification Requirements/Source Approval Request (SAR)** <http://www.afsc.af.mil/Units/SBO.aspx>

**F. Sub-Contracting Opportunities**  
<http://web.sba.gov/subnet>

**G. United States/Canada Joint Certification Program (JCP)** <https://www.dlis.dla.mil/jcp/>

## ■ **STEP 5: Ready to PROPOSE**

**A. Proposal Checklist**  
<http://www.acq.osd.mil/dpap/dars/dfars/html/current/252215.htm#252.215-7009>



# *Federal Business Opportunities (FBO)*

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- The Official Government Point of entry
- All Opportunities above \$25,000 are required to be advertised on FBO. You DON'T have to be registered to search for Opportunities.
- Can search for Opportunities based upon Location, NAICS, Keywords, etc...
- **Sources Sought Synopsis's (SSS) are advertised on FBO– It is important to respond!**
- Award Notifications are posted on FBO. The award notifications can be used to find out who buys your products.



# *Strategic Contract Vehicles*



## **NETCENTS 2 Contract**

- Information Technology (IT) contract
- Tinker is required to use the NETCENTS 2 contract for IT
- Possible subcontract opportunities
- Website: [www.netcents.af.mil](http://www.netcents.af.mil)

## **One Acquisition Solution for Integrated Services (OASIS) contracts**

- Advisory & Assistance Services
- Air Force Life Cycle Management Center is required to use OASIS
- Possible Subcontracting Opportunities
- Website: [www.gsa.gov/oasis](http://www.gsa.gov/oasis)



# Source Approval Request (SAR)

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- Small Business Office Primary Liaison with Industry for SAR Packages
- Qualification Requirement Requests
- Reviews the Non-Technical aspects of the SAR packages
- Sends Approval and Disapproval Letters to Industry
- AFMCI 23-113 “*Pre-Award Qualification of New or Additional Parts Sources and the use of the Source Approval Request (SAR)*”



# *The Strategic Alternate Sourcing Program Office (SASPO)*



- SASPO is always looking to get new companies qualified
- Posts a target list twice a year in FBO
- Has several lists of NSN's under the SASPO Products section of the website that have projected buys for the 12, 24, and 36 months
- Hosts two industry days a year locally
- Website:  
[www.tinker.af.mil/home/429scmssaspo.aspx](http://www.tinker.af.mil/home/429scmssaspo.aspx)



# Top 10 FY16 NAICS Codes (Tinker)



NAICS Category	Total Action	Total Dollars	Customer
33 Manufacturing	5,384	\$ 2,014,731,655	ABW, AFNWC, AFLCMC, OC-ALC, SC
54 Professional, Scientific, and Technical Services	875	\$ 644,819,611	ABW, AFNWC, AFLCMC, OC-ALC, SC
56 Administrative, Support, and Waste Management Services	462	\$ 111,164,324	ABW, OC-ALC, SC
23 Construction	190	\$ 38,967,777	ABW, OC-ALC, AFLCMC
48 Transportation	67	\$ 21,076,961	ABW, AFLCMC, OC-ALC
51 Information	98	\$ 20,317,745	ABW, AFLCMC, OC-ALC
81 Other Services	230	\$ 8,209,014	ABW & OC-ALC
62 Health Care & Social Assistance	101	\$ 5,738,767	ABW
32 Manufacturing Chemical, Paper, Rubber etc.	116	\$ 5,576,327	ABW & OC-ALC
61 Educational Services	30	\$ 2,286,862	ABW & OC-ALC
<b>TOTAL</b>	<b>7,553</b>	<b>2,872,889,043</b>	

Source of Data: FPDS.gov using Tinker Contracting DoDAACs July 2017





# *We are here to Help!*

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Visit our Website: [www.afsc.af.mil/Units/SBO.aspx](http://www.afsc.af.mil/Units/SBO.aspx)

Phone: 405-739-2601

Email: [afsc.sb.workflow@us.af.mil](mailto:afsc.sb.workflow@us.af.mil)

# ***Air Force Sustainment Center***

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## **Getting Data**

**Ms. Julia Séas  
429 SCMS- SASPO  
Julia.seas@us.af.mil**

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# *Technical Order Requests*

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- **Complete DD Form 2345 (signed and certified)**
  
- **Request on Company Letterhead to include:**
  1. **Current date**
  2. **Phone number and fax number**
  3. **Point of contact and signature**
  4. **Detailed background information about your company/org**
  5. **Clear reason or justification for the request**
  6. **Clear description of the specific intended use of the data**
  7. **Tech Manual Number and Weapon System**
  8. **NSN, Part Number, and Nomenclature**
  
- **Please allow 30 calendar days before requesting status of request**

Robins: [robinspublicsales@us.af.mil](mailto:robinspublicsales@us.af.mil)

Hill and Tinker: [aflcmc.ezgtp.PubSale@us.af.mil](mailto:aflcmc.ezgtp.PubSale@us.af.mil)



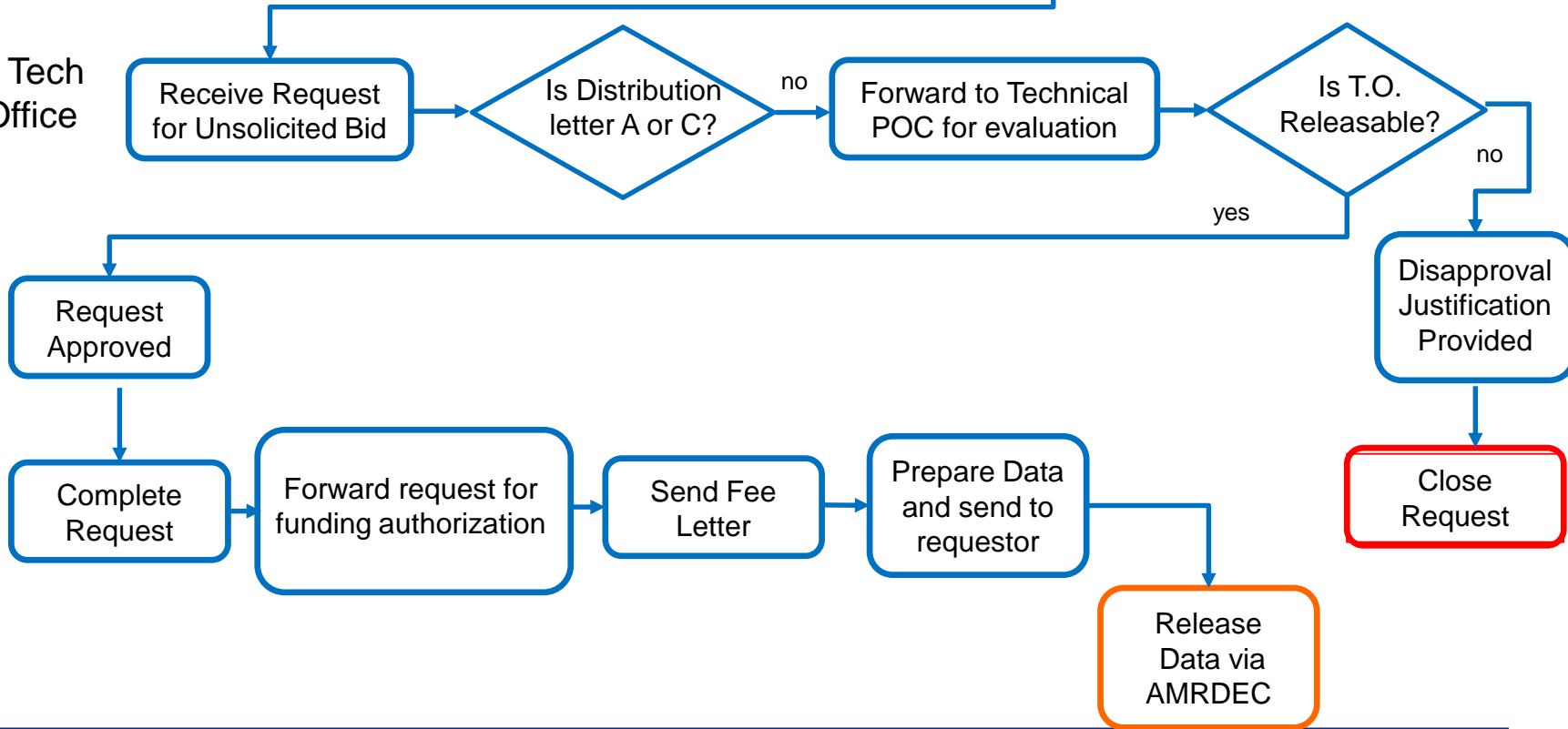
# How to Acquire Tech Orders



Customer



LZPT – Tech Order Office





# *Drawing Requests*

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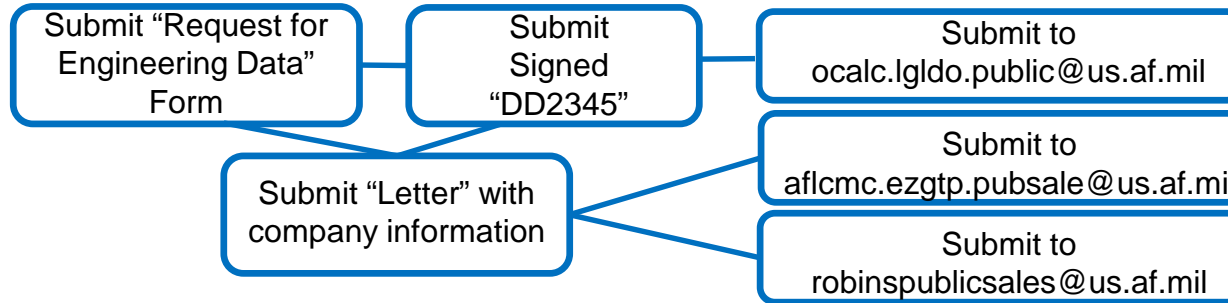
- **Complete DD Form 2345 (signed and certified)**
  
- **Complete a Request For Engineering Data Form and ensure following information is provided:**
  1. **Drawing number**
  2. **Cage Code/Nomenclature**
  3. **National Stock Number and/or Part Number**
  4. **Specific business purpose for which data would be used**
  
- **Send request to the following Public Sales office:**
  - Hill: [aflcmc.ezgtp.PubSale@us.af.mil](mailto:aflcmc.ezgtp.PubSale@us.af.mil)
  - Robins: [robinspublicsales@us.af.mil](mailto:robinspublicsales@us.af.mil)
  - Tinker: [ocalc.lgldo.public@us.af.mil](mailto:ocalc.lgldo.public@us.af.mil)



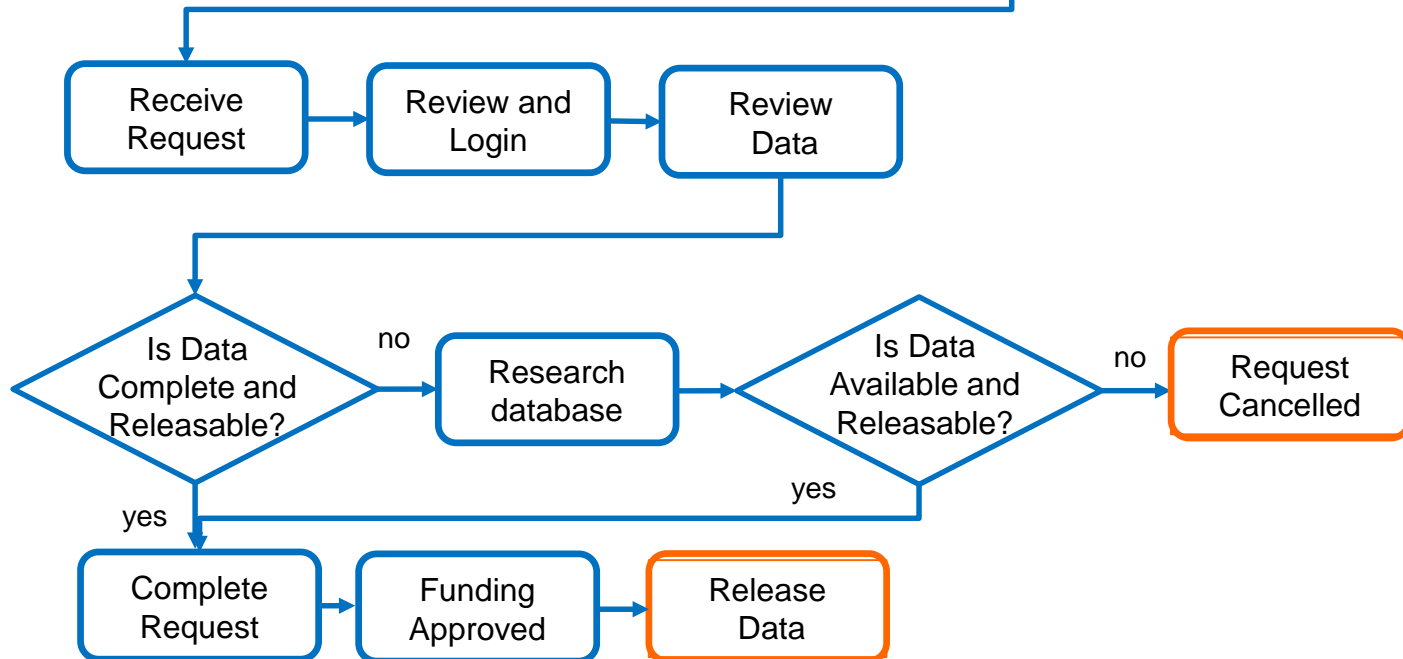
# How to Acquire Drawings



Customer



LZPE – Drawing Office





# *How to Acquire Data*



- **Drawings – Buy Requirements and SAR packages**
- **Tech orders – Repair Requirements and SAR packages**
- **Ask for EDL/RDL from SASPO and/or SBO**
- **Look for QRs on FBO or SASPO website**
  - **Master QR listing**
  - **Ask SASPO and/or SBO**
- **Future State – information available on RPOW Lists**



## *How much does it cost?*



- **Drawings**
  - **\$.75 per image plus hourly labor rate**
- **Tech orders**
  - **Cost of processing and researching request at the “Professional” rate**
- **Rate is captured on the DD Form 2086 – Record of Freedom of Information Processing Cost**





# Questions?



*Breaking Barriers ... Since 1947*

# ***Air Force Sustainment Center***

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***Commercially -  
Used Overhauled  
Industry Day  
24 August 2017***



***Mr. Randy Harris  
429 SCMS - SASPO  
randolph.harris@us.af.mil***

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# *Introductions*



- **Strategic Alternate Sourcing Program Office (SASPO)**
  - **Jerry Zamora – SASPO Chief**
  - **Julia Séas – SASPO Lead**
  - **Randolph (Randy) Harris – CU&OH Program Manager**
  - **Myron Knight – RE/RD Program Manager**
  - **Michael Deaton – Program Manager**



# Commercially-Used Overhauled Program



- **Air Force (AF) requirements**
  - Items with AF approved source(s) of repair
  - Items with no AF approved source(s) of repair
  - Additional opportunities for commercially-used parts
- **Other SASPO Programs/Products**
  - SASPO Target List
  - SASPO “G” Coded List
  - RPOW Spares and Repairs List
  - Reverse Engineer / Repair Development
- **Source Approval Request (SAR) training (available on our website)**

<http://www.tinker.af.mil/Home/429SCMSSASPO.aspx>



# Overview of Commercially-Used Parts

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- **Objective: Match AF requirements to industry availability of commercially-used parts with a military application**
- **Purpose: To create savings through careful implementation of a commercial practice**
- **Goal: Achieve \$140M in savings**
- **Savings to date: \$113.7M**



# F108

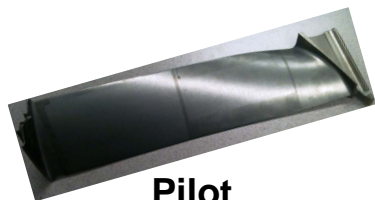
## Commercially-Used Overhauled Program



### Prototype

### Expand

### Standardize



**Pilot**  
2011-2012

- 1 approved item
- 1 contract awarded

**RESULTS:**

- \$36.7M saved
- 84 days reduced PLT

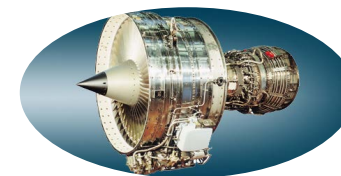


2012-2017

- 43 approved items
- 36 added through SAR process
- 26 contracts awarded

**RESULTS:**

- \$77M saved
- 267 days reduced PLT



2018 and Beyond

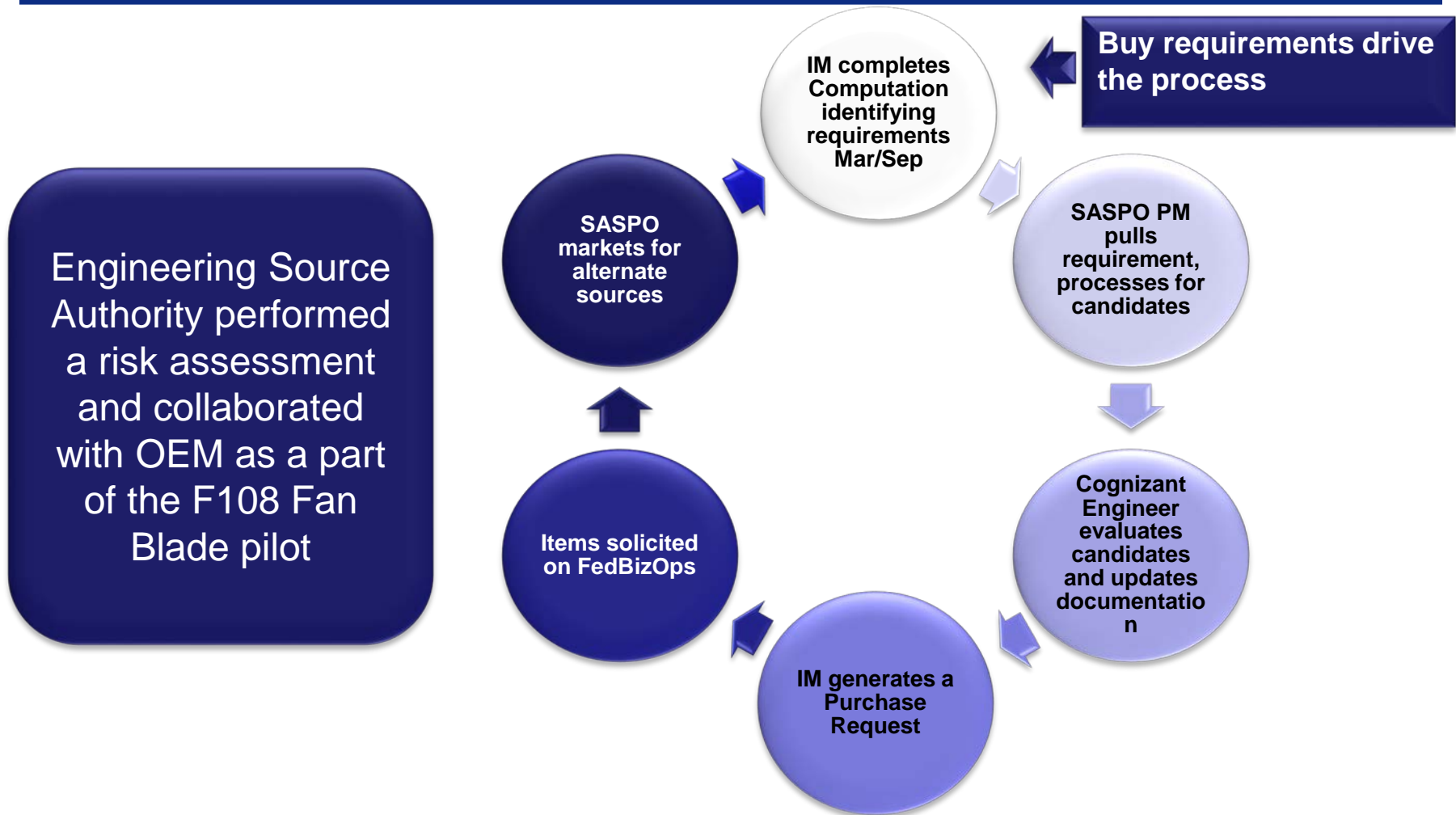
- Analyze F108 Life Limited Parts (LLPs)
- Analyze other commercial derivative engines
- Increase approved items through Source Approval process

Increase Supportability ★ Increase Availability ★ Increase Competition ★ Reduce Costs

*Breaking Barriers ... Since 1947*



# Candidate Determination Process



Increase Supportability ★ Increase Availability ★ Increase Competition ★ Reduce Costs

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# ***Commercially-Used Parts with AF Approved Source(s) of Repair***



- **Parts with at least one AF approved source of repair**
  - **Advertised and procured through Federal Business Opportunities (FedBizOps) at [www.FBO.gov](http://www.FBO.gov)**
  - **Forecasts published twice per year from the Fall and Spring AF Requirements Computation Cycle on Federal Business Opportunities (FedBizOps) at [www.FBO.gov](http://www.FBO.gov)**
- **Solicitation identifies**
  - **AF Approved manufacturing (usually OEM) and repair sources**
  - **Parameters for disqualification of parts**
    - **Involved in an accident, submerged in water, exposed to volcanic ash, flown on Emery Air, etc.**





# ***Commercially-Used Parts with No AF Approved Source(s) of Repair***



- **Parts with NO AF approved source(s) of repair**
  - **Advertised through Requests For Information (RFI) or Sources Sought Synopsis on Federal Business Opportunities (FedBizOps) at [www.FBO.gov](http://www.FBO.gov)**
    - **Looking for companies to submit repair Source Approval Request (SAR) packages**
    - **Companies approved and qualified via the SAR process will be listed as an AF Approved Source of Repair**
      - **AF approved Source(s) of Repair will be included in the solicitations on FedBizOps for future commercially-used overhauled requirements**



# ***AF Commercially-Used Overhauled Program***



- **If you have the right repair capabilities the AF would like you to submit repair SARs**
  - **Request Qualification Requirements (QR) from the AFSC**  
**Small Business Office: <http://www.tinker.af.mil.sbo.asp>**
  - **Include the NSN in the Subject Line of the email**
  - **Determine if you have the ability to repair the item**
  - **Determine if the AF repair fits your business case**
  - **Build a SAR IAW the QR and AFMCI 23-113**



# Commercially Used Overhauled List - Example



J85									
With Air Force-Approved Source(s) of Repair									
	NSN	Noun	FY16 QTY	FY16 BUY Value	FY17 QTY	FY17 BUY Value	FY18 QTY	FY18 BUY Value	FY16-FY18 Buy Value
1	2840-01-516-9165	FWD, SPOOL	37	\$1,530,810	9	\$372,359	8	\$330,986	\$2,234,156
2	2840-00-795-1513	HOUSING, GE	46	\$ 726,648	24	\$ 379,121		\$ 157,967	\$ 1,263,735
3	2840-01-490-1337	CASE, A/B,	17	\$662,916	15	\$584,920	14	\$545,931	\$1,793,773
4	4820-01-341-2016	VALVE,GATE	26	\$135,200	0	\$0	0	\$0	\$135,200
5	2915-00-143-6107	VALVE,FUEL	11	\$32,843	3	\$8,910	2	\$5,971	\$47,771
6	2840-01-123-1000	SEAL,AIR,A	8	\$ 12,909	5	\$ 8,068	4	\$ 6,454	\$ 27,431
7	2840-01-542-7488	ROTOR,COMP	0	\$0	12	\$315,627	24	\$631,254	\$946,881
8	2840-01-558-5877	FRAME,FRON	0	\$0	0	\$0	1	\$24,377	\$24,377

J85									
No Air Force-Approved Source(s) of Repair									
	NSN	Noun	FY16 QTY	FY16 BUY Value	FY17 QTY	FY17 BUY Value	FY18 QTY	FY18 BUY Value	FY16-FY18 Buy Value
1	2840-01-600-9154	ROTOR,COMP	2	\$1,016,647	0	\$0	0	\$0	\$1,016,647
2	2840-01-480-1845	REAR SPOOL	3	\$217,620	3	\$217,620	3	\$217,620	\$652,861
3	2915-01-572-2557	PUMP,FUEL,	0	\$0	197	\$3,212,491	126	\$2,054,690	\$5,267,180
4	4320-01-042-3944	PUMP,ROTAR	0	\$0	2	\$24,746	0	\$0	\$24,746
5	4820-00-710-0978	BODY, VALV	0	\$0	0	\$0	0	\$0	\$0



# ***Specific Opportunities for Commercially-Used Parts***



- 
- **Looking for opportunities/assistance**
    - **F108 Lube unit housing**
      - **2995-01-443-6889**
      - **301-510-641-0**
    - **F108 Heat Exchanger**
      - **2935-01-148-5714**
      - **301-771-402-0**
    - **F108 Gearbox Main Housing**
      - **2840-01-199-1547**
      - **301-484-017-0**
    - **Alternate: F108 Transfer Gearbox**
      - **2840-01-189-2936**
      - **305-100-112-0**



# ***Additional Opportunities for Commercially-Used Parts***



- **What are other opportunities**
  - **Expanding to additional engines**
    - **F108 = CFM56-2B**
    - **TF33 = JT3D-7**
    - **TF34 = CF34**
    - **J85 = CJ610**
    - **T56 = T501-D**
      - **In order to be successful we need visibility of commercial availability**
  - **Consumables (Items Managed As)**
  - **Other, your input is valuable**



# Contact Information



- AFSC Small Business Office

- Website: <http://www.tinker.af.mil/sbo.asp>
- Email: [afsc.sb.workflow@tinker.af.mil](mailto:afsc.sb.workflow@tinker.af.mil)
- Address: 3001 Staff Drive Suite 1AG 85A  
Tinker AFB, Oklahoma  
73145-3009

- SASPO

- Website: <http://www.tinker.af.mil/Home/429SCMSSASPO.aspx/>
- Email: [429scms.workflow.saspo@us.af.mil](mailto:429scms.workflow.saspo@us.af.mil)
- Address: 3001 Staff Drive Suite 2AC4 94B  
Tinker AFB, Oklahoma  
73145-3009



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# Questions

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# BREAK

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# ***Air Force Sustainment Center***

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***Reverse Engineering  
& Repair Development  
Industry Day  
24 August 17***



**Mr. Myron O. Knight  
429 SCMS-SASPO  
myron.knight@us.af.mil**

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# Purpose



- **Objective:** Reduce Air Force supply chain costs/risks through increased competitive sourcing strategies
  - Focus on creating competition to improve affordability and supportability
- **Plan:** Implement Wing Approved approach to the identification and management processes of CER engineering projects
- **Projected results:** Strategic identification, prioritization and tracking of engineering project candidates and capability to report actual ROI results

50% of the 448 SCMW Spares Buys and  
60% of Repairs are Sole Source



# 448 SCMW RE / RD Plan



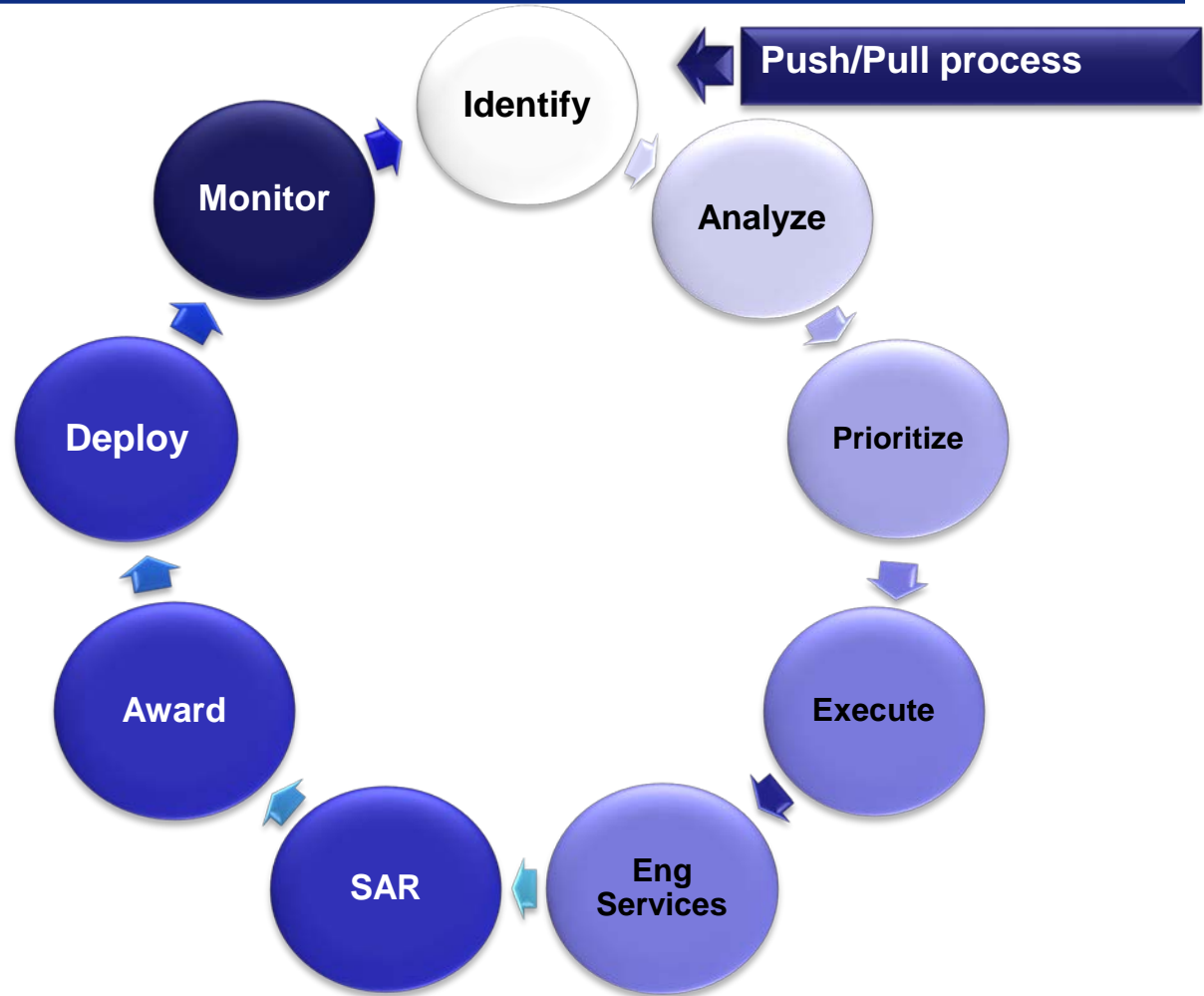
- 448 SCMW is investing in their supply chain
  - Acquire Data
    - Reverse Engineering
    - Repair Development
- Able to use CSAG dollars to create competition
  - Working Capital Fund
- Enterprise Level (WR, OO, OC)
- Working to identify candidate item



# Competitive RE/RD Process



Candidate items can be identified from any source; Engineer, Loggie, Item Manager, Contractor, Data Research, etc.

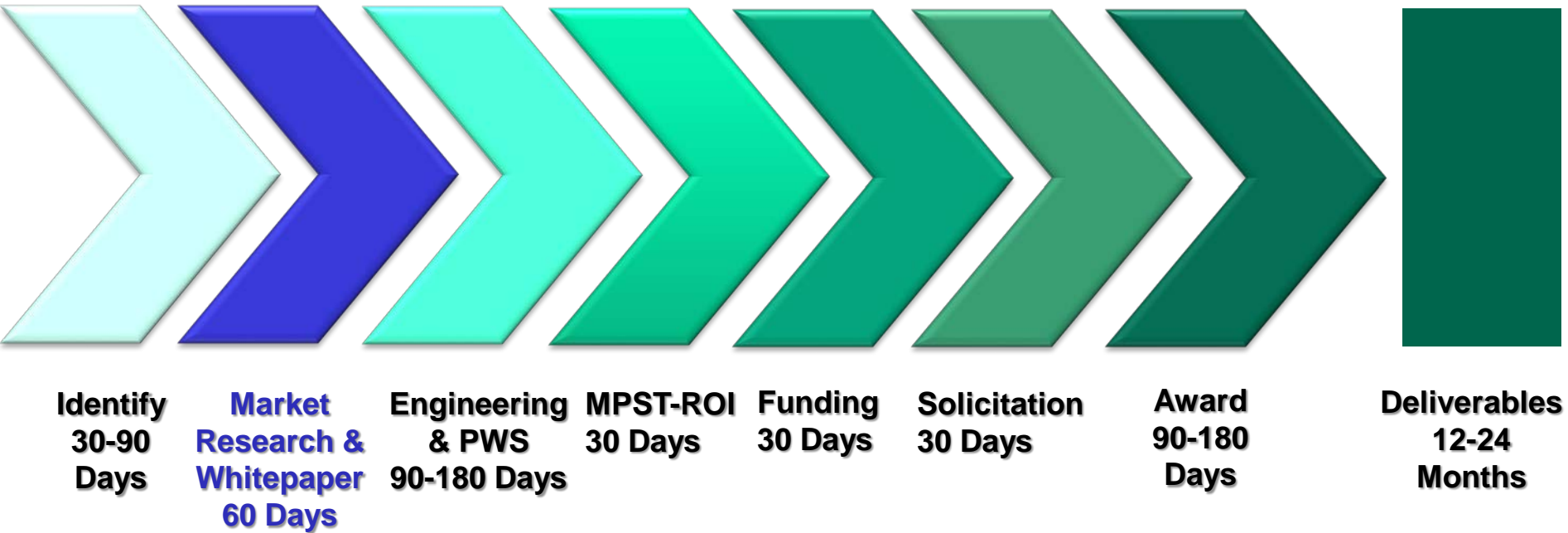


Increase Supportability ★ Increase Availability ★ Increase Competition ★ Reduce Costs

*Breaking Barriers ... Since 1947*



# RE/RD Projected Timeline 1 - 3 Years





# ***RE/RD Process***



- Identification (SASPO/Requirement Squadrons/Vendors)
- Market Research (Industry Day, RFI)
- Whitepapers (Vendor Response)
- Performance Work Statement (PWS - Engineering)
- Maintenance Engineering Project Sustaining Tool (MPST) – (ROI, Create Project)
- Funding (3.2 MPST Status)
- Solicitation (Contracting)
- Award (RE/RD Project)



# *What the Air Force is looking for?*



- Partner to produce a prototype
- Provide a full Tech Data Package (TDP)
- Maintaining the same Form/Fit/Function
- Reducing risk/cost/leadtime
- Application of sound scientific principles to resolve obsolescence
- Being a cooperative partner
- Open communications
- Fulfilling expectations
- Fairness



# *Acquiring Data*



- Contractors must be registered as a Federal Vendor in FedBizOpps:
- Contractors must have a valid DD Form 2345 on file
- Contractors must have a valid CAGE Code
- Contractors must have a valid DUNS number





# *Expectations*



## Interested Companies:

- Submit a no-cost white paper stating interest with estimated costs and schedule
- Request the Engineering Data List (EDL)
- Procure all available data from the Public Sales Office
- Work with SASPO Program Manager and Engineer to identify the requirements
  - Test and Qualification
  - Tooling
  - Specifications



# *Future Opportunities*



- This program is in the infancy stage and will experience changes as it grows
- 448 SCMW will continue to identify opportunities
- Will post Sources Sought Synopses (SSS) and/or Requests For Information (RFIs) on Federal Business Opportunities (FBO)
- Additional Industry Days Advertised on FBO and SASPO Website
- Open for suggestions or white papers on candidate items or other items



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# Reverse Engineering Candidates

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# TF33 Spacers

Reverse Engineering  
Tinker AFB



## Description

TMS: TF33 (P103)  
Noun: #10 Spacer  
NSN: 2840-01-305-5305

Noun: #11 Spacer  
NSN: 2840-01-305-5306

Noun: #15 Spacer  
NSN: 2840-01-305-5307

## Details

- Spacers have an AF drawing that has been modified from the original PW drawing, P20
- Pratt has taken back the standard numbers as proprietary we need other vendors to make the P20

## Description

TMS: TF33 - P103/102C/5/9  
Noun: #12Spacer  
NSN: 2840-01-305-5308

## Status:

- Seeking alternate source to reverse engineer



# B-52 Indicator Assembly

Reverse Engineering  
Tinker AFB



## Description

TMS: B-52  
Noun: Indicator Assembly (B-52 Trip Signal)  
NSN: 6340-00-861-5282RK  
PN: R1188  
AMSC: C



## Details

- 50 year old design, last built 20 years ago. No supplier. Organic repair. Buy of 15 each.
- Indicator monitors 8 lines looking for 9ms DC pulse, stores triggered channel after power removed. (Troubleshooting of power gen system.)
- Build to print package available. (Qualification Requirements, Engineering Data List, Engineering Instructions, CDRLs)

## Status

- Will post in two weeks released including FBO link to drawing package, etc.
- Closes in 90 days after posting
- Submit together: Source Approval Request (SAR), Quote, and (if applicable) Engineering Change Proposal (ECP) addressing DMSMS.
- Award to: Lowest price technically acceptable

# B-52 Electric Motor Pump

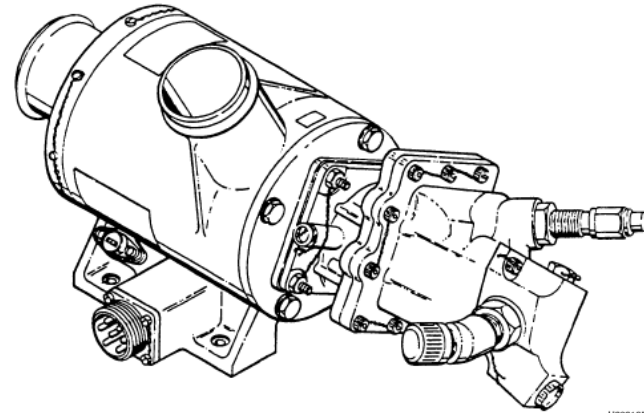
Reverse Engineering  
Tinker AFB



## Description

TMS: B-52  
Noun: Motor Pump  
NSN: 4620-00-169-0608  
PN: 66029

TO 9H4-3-67-3



HQ201355

Figure 1-1. Electric Motor Driven Variable Delivery Hydraulic Pump, Model PMP1V-9A, Part No. 66029

## Details

- July 2017 PR FD20301600016 in place from Commodity Council for Parker Corporate Contract EAD Jan 2018 with this NSN to be negotiated.
- ---Embedded motor (6105-00-479-8991) has PR FD20301700410 for 23ea initiated from Mar16 Comp. awaiting delinquent proposal from vendor.
- 13 each assets availability.

## Status:

- OEM unable to support requirement
- Requesting assets from AMARG for support until reverse engineering effort is accomplished .
- Our work around is for the AF to deal directly with Ontic.



# UDTU/RDTU Backplane

Reverse Engineering  
Hill AFB



## Description

TMS: A-10  
Noun: UDTU/RDTU Backplane  
NSN: 7025-01-619-5776  
PN: B001012-10



## Details

- The Upgrade Data Transfer Unit (UDTU) was reverse engineered due to DMS and reparability issues and renamed the Reengineered Data Transfer Unit.
- At the time the backplane wasn't identified as needing reverse engineering but that has changed.
- The Air Force requires a source for the backplane.

## Status

- UDTUs are being converted to RDTU, some are unrepairable due to lack of a good backplane.
- Reverse Engineer
- Approximately 20ea over the next two or three years
- No data for backplane is available
- Not currently stock listed



# Drogue Assembly

Reverse Engineering  
Tinker AFB



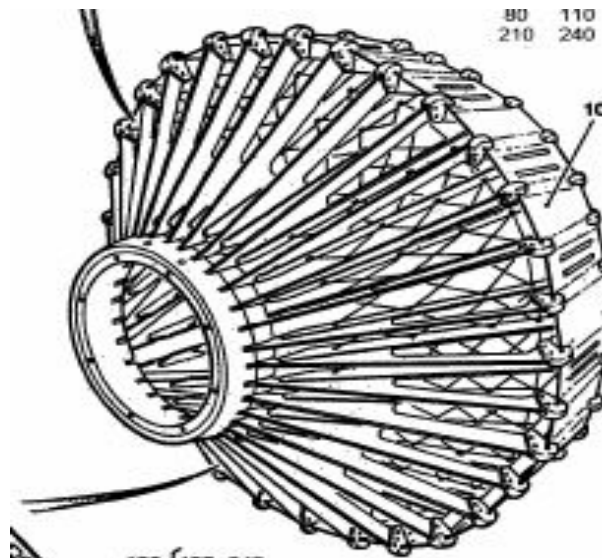
## Description

TMS: KC-135

Noun: Drogue Assembly

NSN: 1680-99-052-5087

PN: 6508840



## Details

- No manufacturing drawings, specifications or repair data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture and repair



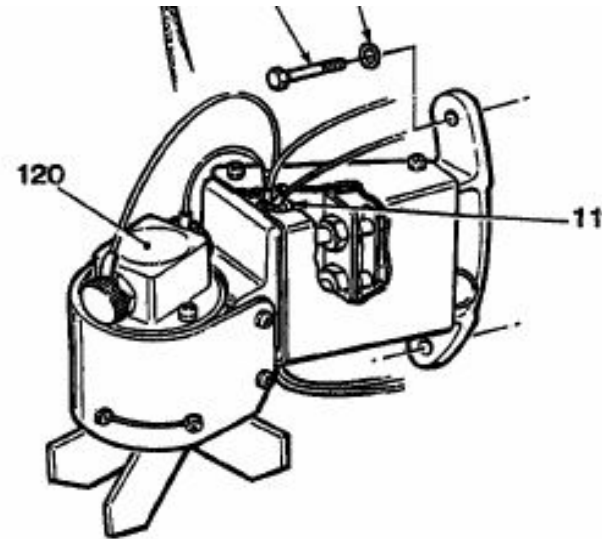
# Direct Current Generator

Reverse Engineering  
Tinker AFB



## Description

TMS: KC-135  
Noun: Direct Current Generator  
NSN: 6115-99-125-4902  
PN: 43329106



## Details

- Incomplete manufacturing data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture and repair



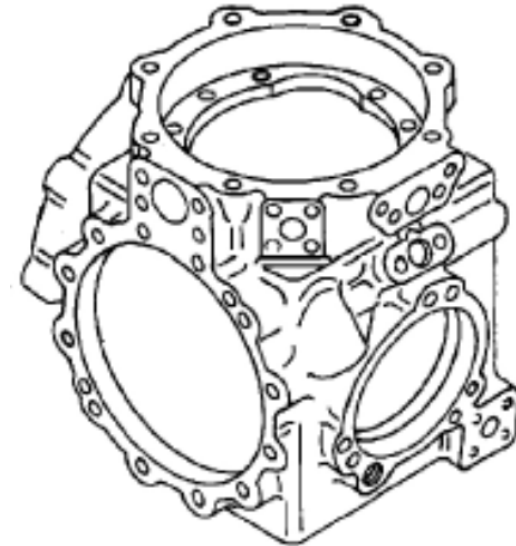
# Transfer Gearbox

Reverse Engineering  
Tinker AFB



## Description

TMS: F108 / CFM56-2  
Noun: Transfer Gearbox  
NSN: 2840-01-189-2936  
PN: 301-484-0170



## Details

- Large numbers of Transfer Gearbox (TGB) failures have occurred on the F108 Program
- Lack of vendors and long lead times is impacting supportability
- Aluminum Alloy Casting with finish machine work

## Status

- Currently working with the OEM on retooling efforts
- Lead Times and Setbacks are pushing supportability further out.



# Heat Exchanger

Reverse Engineering  
Tinker AFB



## Description

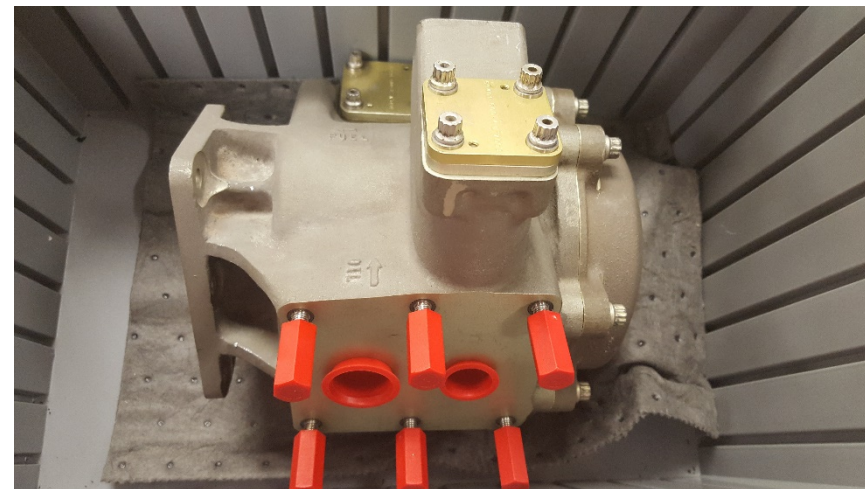
TMS: F108

Noun: Heat Exchanger

NSN: 2935-01-148-5714

PN: 301-771-402-0, 301-779-401-0,  
301-779-402-0

● 761 ● 762 ○ EDL ○ RDL ○ Print



## Details

- The Heat Exchanger provides the means of heat transfer from the engine lubricating oil to the fuel.
- CMM 79-21-23

## Status

- Currently Supportable
- High rate of failure at test
- Sole Sourced GE



# TF33 Fuel Manifold

Reverse Engineering/Repair Development  
Tinker AFB



## Description

TMS: TF33 P103/102C/5/9

Noun: Right Hand Fuel Manifold

NSN: 2995-01-160-6392

PN: 799561

● 761 ● 762 ○ EDL ● RDL ● Print



## Details

- Manifolds are organically repaired
- Have a proprietary repair that belongs to Woodward.
- All assets that require the Woodward repair are currently setting in supply
- There is a piece part on the manifold that is proprietary to PW

## Status

- Request reverse engineering on repair and new manufacture



# TF33 Fuel Manifold

Reverse Engineering/Repair Development  
Tinker AFB



## Description

TMS: TF33 P103/102C/5/9  
Noun: Left Hand Fuel Manifold  
NSN: 2995-01-162-0920  
PN: 799560

● 761 ● 762 ○ EDL ● RDL ● Print



## Details

- Manifolds are organically repaired
- Have a proprietary repair that belongs to Woodward.
- All assets that require the Woodward repair are currently setting in supply
- There is a piece part on the manifold that is proprietary to PW

## Status

- Request reverse engineering on repair and new manufacture



# TF33 Fuel Manifold

Reverse Engineering/Repair Development  
Tinker AFB



## Description

TMS: TF33 P100

Noun: Right Hand Fuel Manifold

NSN: 2995-00-061-8892

PN: 563217

● 761   ● 762   ○ EDL   ● RDL   ● Print



## Details

- Manifolds are organically repaired
- Have a proprietary repair that belongs to Woodward
- All assets that require the Woodward repair are currently setting in supply
- There is a piece part on the manifold that is proprietary to PW.

## Status

- Request reverse engineering on repair and new manufacture



# TF33 Fuel Manifold

Reverse Engineering/Repair Development  
Tinker AFB



## Description

TMS: TF33 P100

Noun: Left Hand Fuel Manifold

NSN: 2995-00-061-8889

PN: 563215

● 761 ● 762 ○ EDL ● RDL ● Print



## Details

- Manifolds are organically repaired
- Have a proprietary repair that belongs to Woodward.
- All assets that require the Woodward repair are currently setting in supply
- There is a piece part on the manifold that is proprietary to PW

## Status

- Request reverse engineering on repair and new manufacture



# TF33 Combustion Chamber Duct

Reverse Engineering/Repair Development  
Tinker AFB



## Description

TMS: TF33 P103/102C/100/5/9  
Noun: Combustion Chamber Duct  
NSN: 2840-00-243-7740  
PN: 694794



761    762    EDL    RDL    Print

## Details

- Organic repair failing
- Seeking alternate repair source

## Status

- Sole source new manufacture to Pratt.





# LH Ignition Exciter Box

Reverse Engineering/Repair Development  
Tinker AFB



## Description

TMS: P103

Noun: LH Ignition Exciter Box

NSN: 2925-01-503-4385

PN: 9045600-1



● 761   ● 762   ○ EDL   ● RDL   ○ Print

## Details

- Sole Source to Unison for procurement and repair
- No bid on repair

## Status

- Request reverse engineering on repair and new manufacture



# RH Ignition Exciter Box

Reverse Engineering/Repair Development  
Tinker AFB



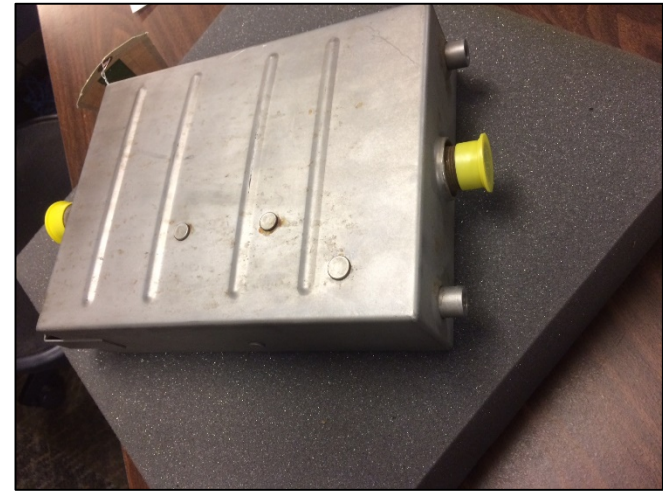
## Description

TMS: P103

Noun: RH Ignition Exciter Box

NSN: 2925-01-503-4386

PN: 9045600-20



● 761   ● 762   ○ EDL   ● RDL   ○ Print

## Details

- Sole Source to Unison for Procurement and Repair
- No bid on repair

## Status

- Request reverse engineering on repair and new manufacture



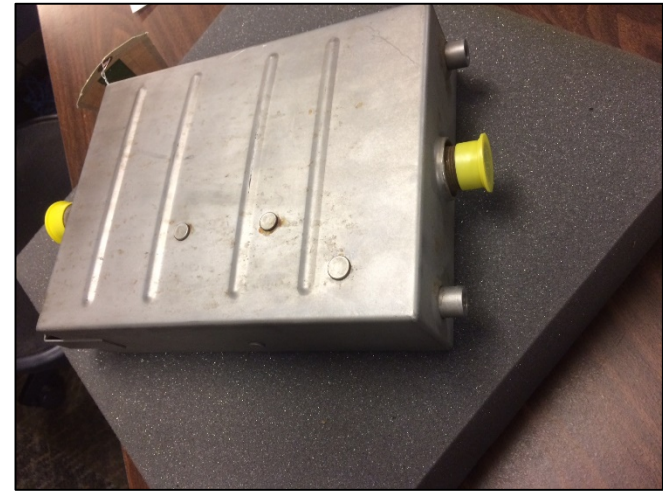
# Ignition Exciter Box

Reverse Engineering/Repair Development  
Tinker AFB



## Description

TMS: P100  
Noun: Ignition Exciter Box  
NSN: 2925-01-421-7473  
PN: 10-614500-1



● 761   ● 762   ○ EDL   ● RDL   ● Print

## Details

- Sole Source to Unison for Procurement and Repair
- No bid on repair

## Status

- Request reverse engineering on repair and new manufacture



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# Repair Development Candidates

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# TF33 IGV

Repair Development  
Tinker AFB



## Description

TMS: P103  
Noun: IGV  
NSN 2840-01-167-9584

## Description

TMS: P102C/5/9  
Noun: IGV  
NSN: 2840-00-442-7112

## Details

- Due to old style rubber in these assemblies a rubber burn out is required to repair them
- Currently no contract for rubber burn out

## Status

- Seeking alternate source for repair/overhaul



# Fuel Cell “Window” Fittings A-10 FWD & AFT



Repair Development  
Hill AFB

## Description

TMS: A-10

Noun: Forward and AFT Fuel Cells

NSN: 1560-01-055-9909

NSN: 1560-01-050-2290

P/N: 160C950901-9 FWD Fuel Cell

P/N: 160C950901-11 AFT Fuel Cell

TO: 1-1-3



## Details

- Organically repaired.
- Low production rate due to limited suppliers.
- High condemnation rate for cracking around the upper F-1 or “window” fittings.
- Organic repair is currently condemning fuel cells at a rate which closely matches the new production rate. Stock on-hand is near zero

## Status

- Develop and validate a repair process to repair and/or replace the F-1 “window” fittings on top of the FWD and AFT Fuel Cells



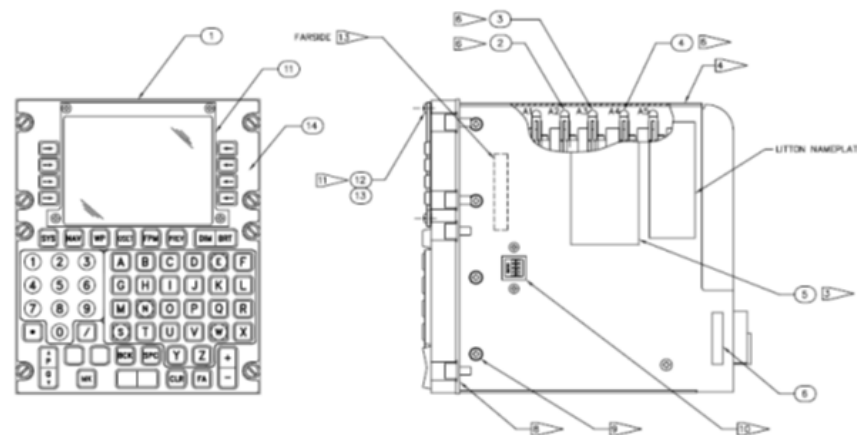
# Digital Keyboard Interface Card A-10 Central Display Unit



Repair Development  
Hill AFB

## Description

TMS: A-10  
Noun: Digital Keyboard Interface Card  
NSN 5998-21-914-0195  
PN 10-46110-01  
T.O. 5N29-36-3



## Details

- OEM and sub have divested themselves of the CDU and its subcomponents.
- Schematic and parts list is available in
- Current requirement for repair of 7, demand is sporadic

## Status

- Organic repair is currently condemning fuel cells at a rate which closely matches the new production rate. Stock on-hand is near zero.
- Provide repair, would need to develop an Acceptance Test Procedure (ATP)





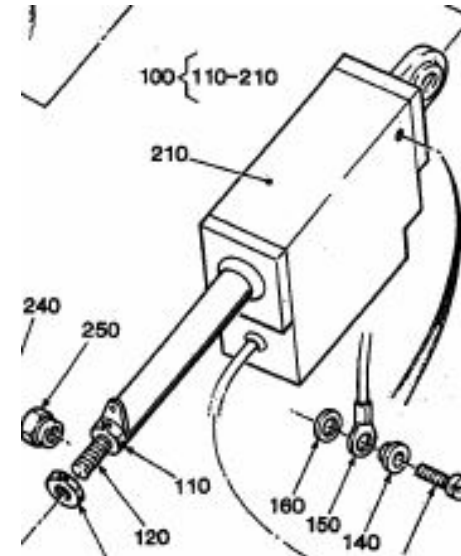
# Electro-Mechanical Actuator

Repair Development  
Tinker AFB



## Description

TMS: KC-135  
Noun: Electro-Mechanical Actuator  
NSN: 1680-99-125-7391  
PN: FRS599804



## Details

- No manufacturing drawings, specifications or repair data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture and repair



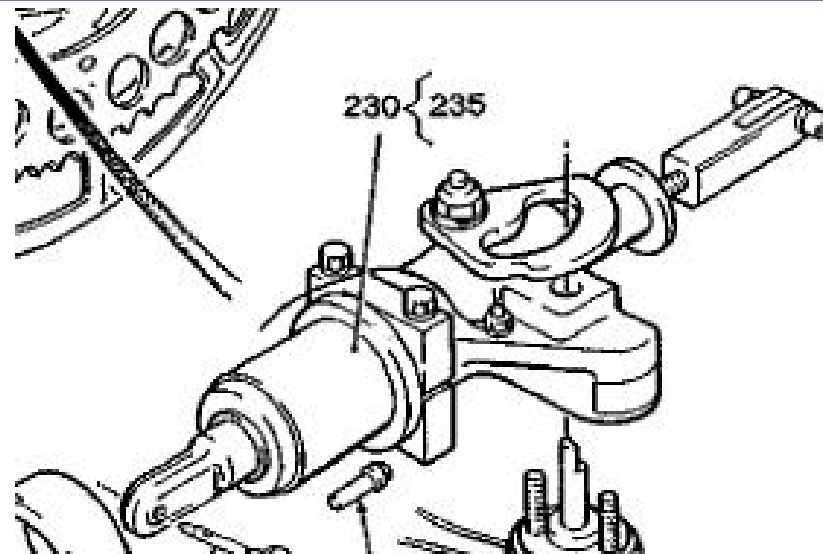
# Hose Jettison Unit

Repair Development  
Tinker AFB



## Description

TMS: KC-135  
Noun: Hose Jettison Unit  
NSN: 1680-99-168-7382  
PN: 43324795



## Details

- No manufacturing drawings, specifications or repair data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture



# Pod Controller

Repair Development  
Tinker AFB



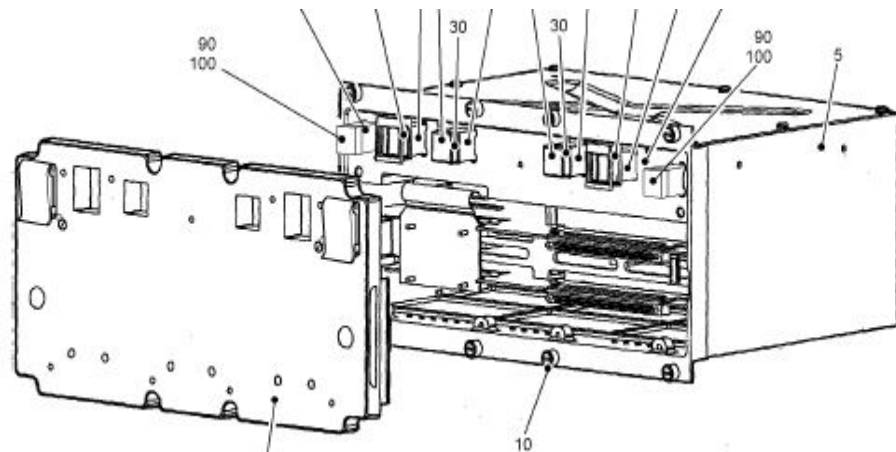
## Description

TMS: KC-135

Noun: Controller Unit

NSN: 1680-99-216-2169

PN: 4332-1117-00



## Details

- No manufacturing drawings, specifications or repair data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture and repair



# Hydraulic Drive Unit

Repair Development  
Tinker AFB



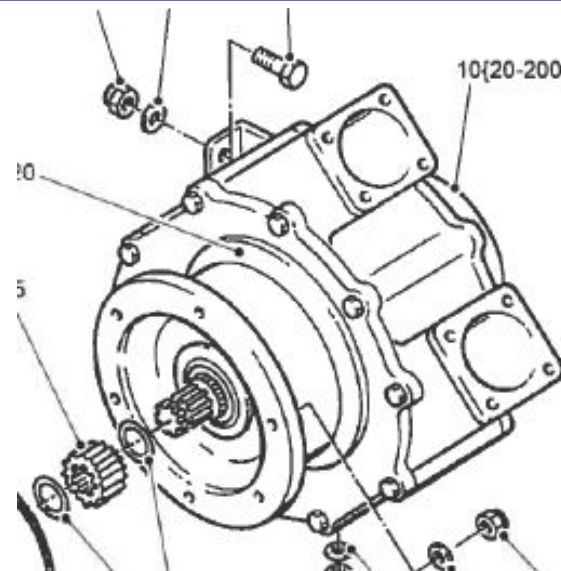
## Description

TMS: KC-135

Noun: Hydraulic Drive Unit

NSN: 1680-99-477-5431

PN: 43323070



## Details

- No manufacturing drawings, specifications or repair data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture and repair



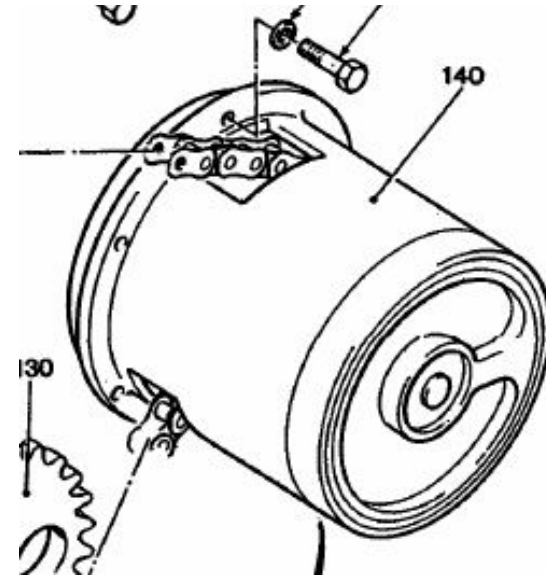
# Drive Assembly

Repair Development  
Tinker AFB



## Description

TMS: KC-135  
Noun: Drive Assembly  
NSN: 1680-99-934-6413  
PN: 43324509



## Details

- No manufacturing drawings, specifications or repair data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture and repair

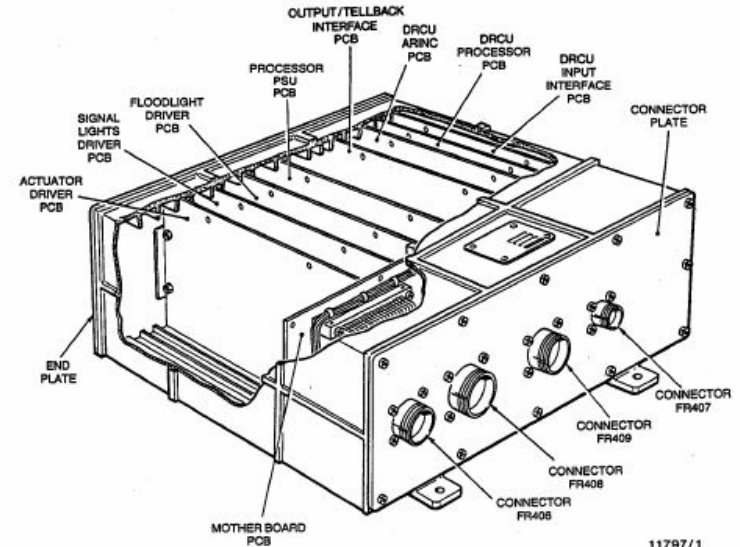
# Pump Control Unit

Repair Development  
Tinker AFB



## Description

TMS: KC-135  
Noun: Pump Control Unit  
NSN: 2915-99-919-1490  
PN: 43329005



## Details

- No manufacturing drawings, specifications or repair data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture and repair



# Manifold Valve

Repair Development  
Tinker AFB



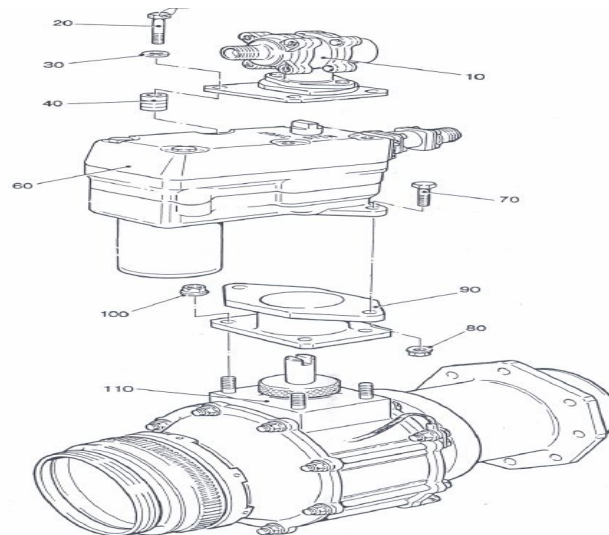
## Description

TMS: KC-135

Noun: Manifold Valve

NSN: 4810-99-641-8724

PN: FRS7099804



## Details

- No manufacturing drawings, specifications or repair data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture and repair



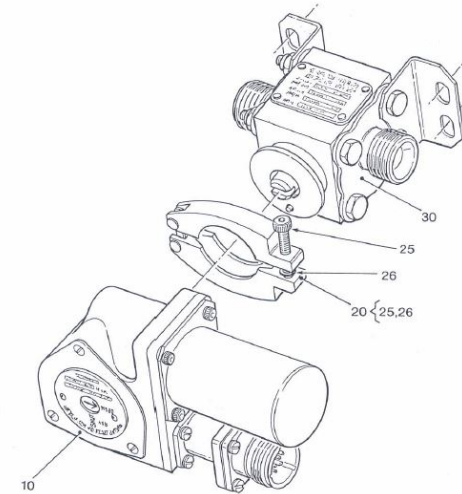
# Motor Valve Assembly

Repair Development  
Tinker AFB



## Description

TMS: KC-135  
Noun: Motor Valve Assembly  
NSN: 4810-99-862-2658  
PN: 7923276D



9337/1

## Details

- No manufacturing drawings, specifications or repair data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture and repair





# Direct Current Drive Unit

Repair Development  
Tinker AFB



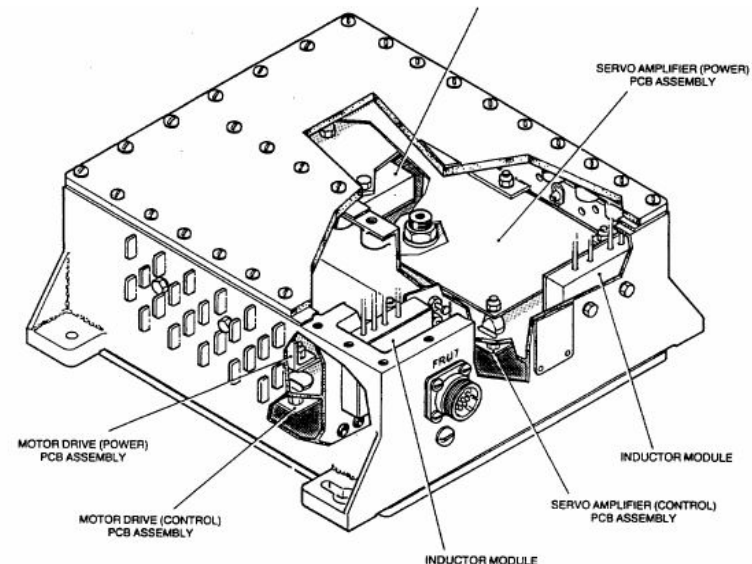
## Description

TMS: KC-135

Noun: Direct Current Drive Unit

NSN: 6105-99-227-6035

PN: 43327810



## Details

- No manufacturing drawings, specifications or repair data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture and repair



# Power Supply Unit

Repair Development  
Tinker AFB



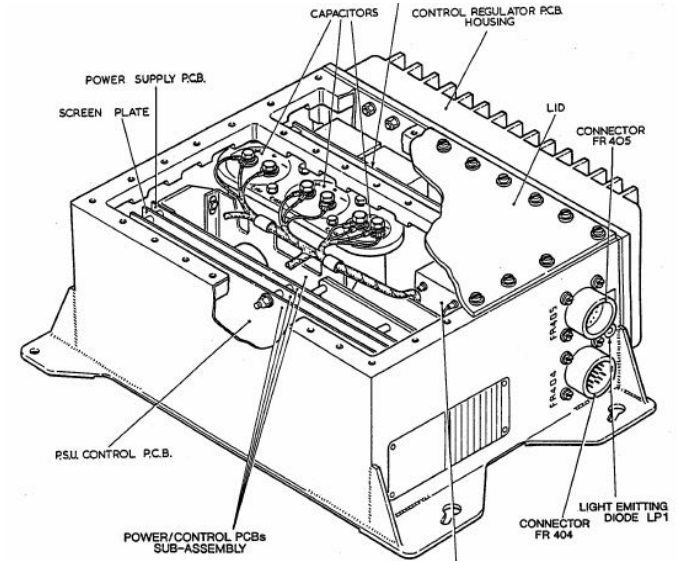
## Description

TMS: KC-135

Noun: Power Supply Unit

NSN: 6130-99-955-8787

PN: 43329025



## Details

- No manufacturing drawings, specifications or repair data
- Limited to no spares available to use as source material for reverse engineering

## Status

- OEM is the source of manufacture and repair



# Main Oil Pump

Repair Development  
Tinker AFB



## Description

TMS: P103/102C/5/9  
Noun: Main Oil Pump  
NSN: 2995-01-537-3386  
PN: 820450-01



761    762    EDL    RDL    Print

## Details

- Organic repair failing
- Seeking alternate repair source

## Status

- Sole source new manufacture to Pratt.



# Main Oil Pump

Repair Development  
Tinker AFB



## Description

TMS: P100

Noun: Main Oil Pump

NSN: 2995-01-526-7170

PN: 820460-01



761    762    EDL    RDL    Print

## Details

- Organic repair failing
- Seeking alternate repair source

## Status

- Sole source new manufacture to Pratt.



---

# Alternate Sourcing Candidates

*Breaking Barriers ... Since 1947*

---



# ICBM - Zero to One Initiative

Reverse Engineering/Repair Development  
Hill AFB



- 414<sup>th</sup> SCMS – Inter-Continental Ballistic Missiles (ICBM)
- Supportability Issues
  - Over 900 Items
  - No-Bids
  - Obsolescence
    - Last procurement over 20 years
  - Low usage items
  - Little to no data (drawings/T.O.)
- Reverse Engineering and Repair Development
- RFI is Currently Posted on FBO
- List will be posted on SASPO website



# F107 AF/DLA Parts

Reverse Engineering/Alternate Sources  
Tinker AFB



- 44 Air Force Managed Items
  - Reverse Engineering
- 418 DLA Managed Items
  - Alternate Sources/Reverse Engineering
- No-Bids
- RFI is Currently on FBO
- List will be posted on SASPO website



# Hill AFB – AF/DLA Parts

Reverse Engineering/Alternate Sources  
Hill AFB



- 10 Air Force Managed Items
  - Reverse Engineering
- 106 DLA Managed items
  - Alternate Sources/Reverse Engineering
- Items are No-Bids
- Full TDP does not exist
- RFI is on FBO





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# Additive Manufacturing Projects

*Breaking Barriers ... Since 1947*

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# AIR FORCE

# LIFE CYCLE MANAGEMENT CENTER



*AFLCMC... Providing the Warfighter's Edge*

## *PROPULSION DIRECTORATE*



## **USAF Additive Manufacturing Efforts**

**16 Aug 2017**

**Richard Banks**                      **and**  
**AFLCMC/LPE**  
**Comm: 405-734-4803**  
**Email: [richard.banks.7@us.af.mil](mailto:richard.banks.7@us.af.mil)**  
**[scott.strecker@us.af.mil](mailto:scott.strecker@us.af.mil)**

**Scott Strecker**  
**AFLCMC/LPE**  
**405-734-3652**

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*Integrity - Service - Excellence*  
*Breaking Barriers ... Since 1947*



# TF34 Pressure Regulator

## Remanufacture

TMS: TF34

Noun: Pressure Regulator

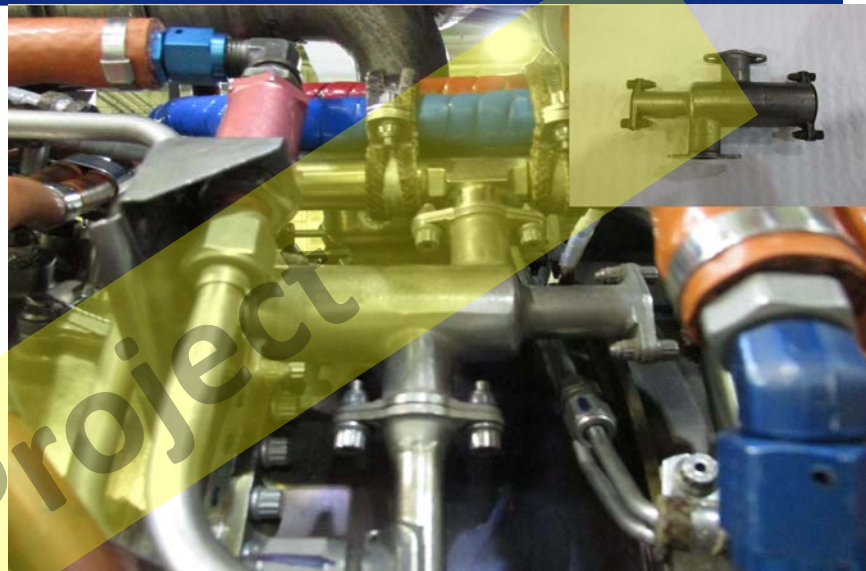
NSN: N/A

PN: 6019T77P01

Material: AMS 5387 CO alloy

Dimensions: 4"x1.25"x3"

Criticality: UNK (update)



○ 761 ○ 762 ○ EDL ○ RDL ● Print

### Details

- Rebuilt regulator using old bodies
- As a result all old bodies consumed and no new bodies procured
- Plenty of internal parts available
- Project in negotiation to design AM housing

### Pros

- Long lead time
- No current vendor

### Cons

- May not be suitable material for AM

Price: UNK



# F110 Augmentor Spraybars

## Remanufacture

TMS: F110-129

Noun: Fan/Core Spraybar, Local Spraybar

NSN: (2915-01-310-2883, 2915-01-310-2884, 2915-01-310-5595)/(2915-01-481-8352, 4710-01-309-3158)

PN: (1465M16G04, 1465M18G04, 1465M17G04)/ (5054M72G09, 1452M64G01)

Material: AMS 5754 Hast X, B50TF178 Haynes 188 Tubing, B50TF65 Thoria Dispersion Nickel Tubing, B50TF77 Ti6-4, B50TF263 Rene 108 Cast

Dimensions: up to 11"x1.8"

Criticality: CSI (F)

● 761 ○ 762 ● EDL ○ RDL ● Print



### Details

- Investigate AM spray bars for F110-129

### Pros

- Address current deficiency in spraybar tech
- Future applicability to other engines

### Cons

- Goal of 6000 TAC may not be achievable

Price: \$354.62 (2017) to \$1,495.68 (2016)



# TF34 Oil Cooler

**New Manufacture**

TMS: TF34

Noun: Oil Cooler

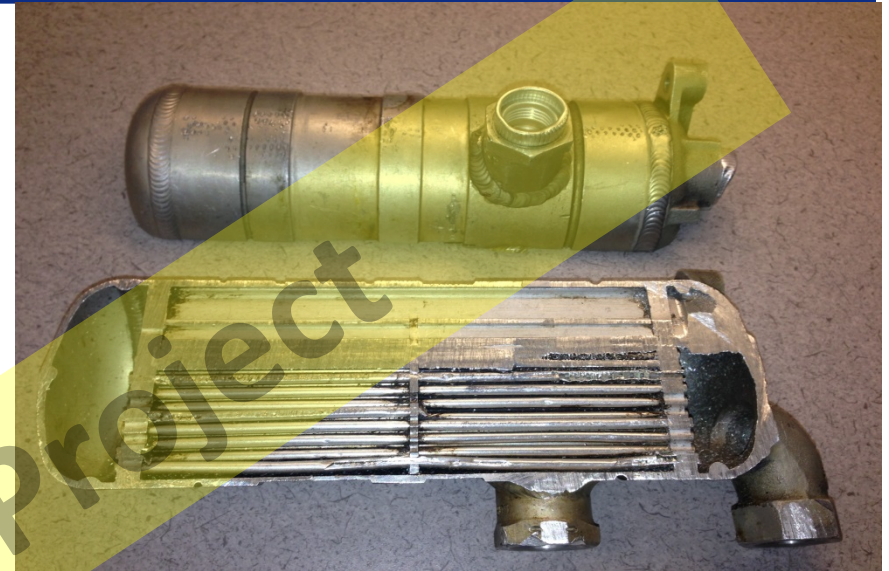
NSN: 2935-01-037-0494

PN: 4048T39P01

Material: 6061 Aluminum

Dimensions: 10"x4" dia.

Criticality: X (update)



● 761 ○ 762 ○ EDL ○ RDL ● Print

## Details

- Internal fuel leak caused an internal engine fire
- AF Safety Automated System (AFSAS) recommendation to replace all coolers
- No repair for this item
- Contract award on 30 Sep 15 for 24 coolers has not gone through yet

## Pros

- Long lead time
- No current vendor
- Simple design
- Opportunity for increased performance

## Cons

- Only have interface drawing
- Need 600+ quickly

Price: 22,279.82 (2016)



# F110/F118 Fuel Oil Cooler

**New Manufacture**

TMS: F110-100, F118-100

Noun: Fuel/Oil Heat Exchanger

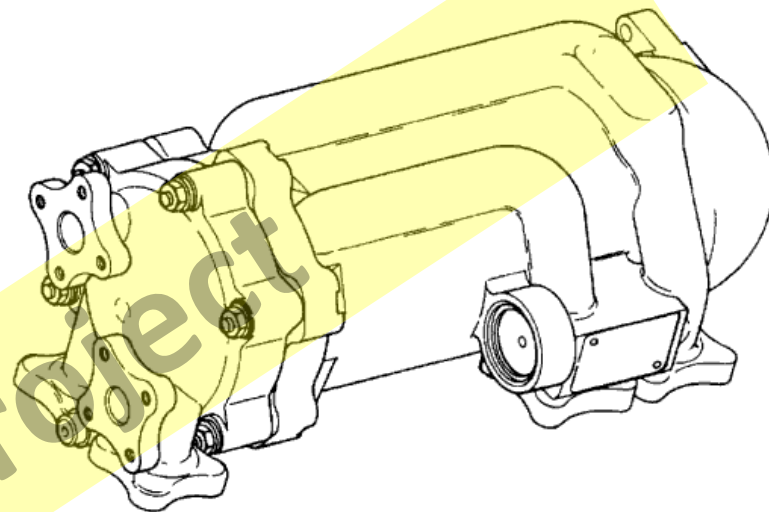
NSN: 2935-01-238-8808

PN: 9338M23P04

Material: **UNK Al Alloy**

Dimensions: 15" x 6" dia.

Criticality: CSI (F)



● 761 ○ 762 ○ EDL ○ RDL ● Print

## Details

- F110-100 driven
- Needing weight and reliability improvement
- Cost of replacement matrix has increased from \$4,000 to \$80,000

## Pros

- Steady low demand
- Multiple TMS
- Opportunity for increased performance

## Cons

- Only have interface drawing
- Complete redesign

Price: 85,451.49 (2015)



# F101 Stage 9 Bleed Horn

**New Manufacture**

TMS: F101

Noun: Stage 9 Bleed Horn

NSN: 4710-01-147-0475

PN: 9979M77G06

Material: Inco 718

Dimensions: 10.43"x5.1"x4"

Criticality: X (update)



Ongoing Project

● 761 ○ 762 ● EDL ○ RDL ● Print

## Details

- OEM with 1 other supplier
- 4 individual castings

## Pros

- Reduce assembly from 4 parts to 1
- Low demand

## Cons

- Already competitive
- Single engine application

Price: 10,434.23 (2015)



# F110 IGV Actuator Body

Casting



TMS: F110-100 / F110-129

Noun: IGV Actuator Body

NSN: 2995-01-202-5197 (assy)

PN: 3831001-1, -2, -4 (3831001-101 assy)

Material: Aluminum Alloy

Dimensions: 6.75"x4.5"x2.75"

Criticality: CSI (F)



761  762  EDL  RDL  Print

## Details

- IGV Actuators are very similar across engine platforms

## Pros

- Low demand
- Potential weight savings
- No engine test required

## Cons

- Fuel accessory

Price: Assy 6,422.98 (2015)





# F101 / F110-100 / F118 Forward Sump Cover

New Manufacture



TMS: F101 / F110-100 / F118

Noun: Forward Sump Cover

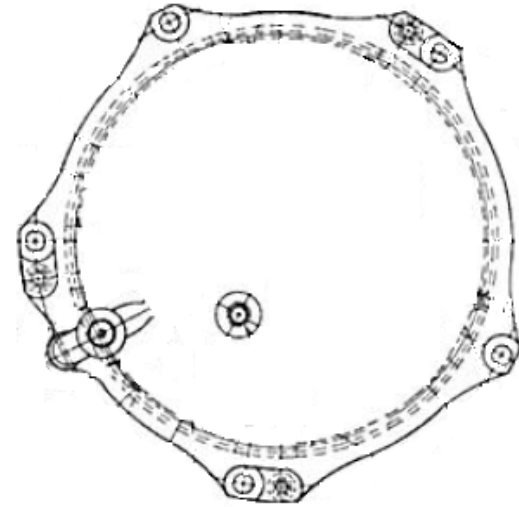
NSN: 2840-01-465-4606

PN: 9340M33G05

Material: 4225 Al

Dimensions: 2.16"x8.23" (dia.)

Criticality: CSI (F)



● 761 ○ 762 ● EDL ○ RDL ● Print

## Details

- Cast cover with attaching hardware
- OEM with 2 other manufactures
- 100% replace on the F110 due to warping and leaking

## Pros

- Multiple engines
- Could be redesigned to remove plugs
- Similar to other sump covers

## Cons

- Already competitive

Price: 2,549.69 (2015)



# F110 Hydraulic Pump Housing



## Casting

TMS: F110-100 / F110-129

Noun: Hydraulic Pump Housings

NSN: 4320-01-202-5302 / 4320-01-387-1932 / N/A

PN: 624131 / 887522 / 569215

Material: 203.0 Al

Dimensions: upto 11"x6.5"x4"

Criticality: X / X / UNK



761  762  EDL  RDL  Print

### Details

- Pump housing damage leads to purchase of new pump vs repair of old pump
- Very similar to F101 hydraulic pump
- Make casting molds

### Pros

- Long lead time
- Similar across TMS
- Redesign to save weight
- No engine test required

### Cons

- High pressures
- Potentially high volume

Price: 3,075.65 (2015) / 2,890.68 (2015) / UNK



# F110 Main Fuel Pump Housing



## Casting

TMS: F110-100

Noun: Main Fuel Pump Housing

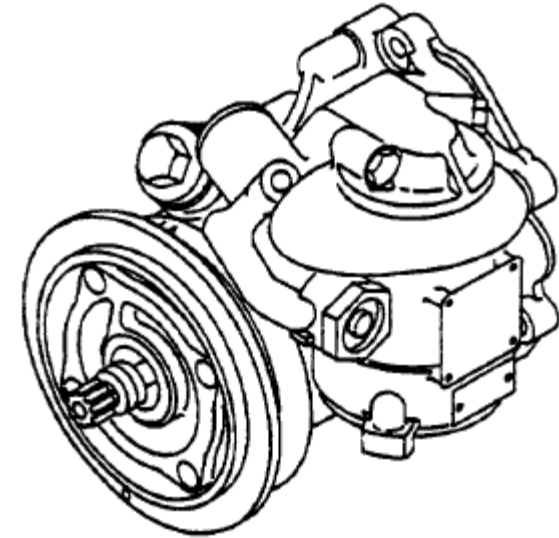
NSN: 2915-01-313-8129

PN: 5009571

Material: **UNK Alum Alloy**

Dimensions: 10"x10"x10"

Criticality: CSI (F)



● 761 ○ 762 ○ EDL ○ RDL ○ Print

### Details

- OEM has lost vendor to produce castings
- No other source of castings or housings
- Project to produce casting molds and to qualify new casting vendor
- Not part of ranking; added based on SBIR and lack of source

### Pros

- No engine test required

### Cons

- No drawing
- Interface drawing exists for assembly
- Requires coordination w/ OEM

Price: 8,605.70 (2015)



# F110 Actuator Cylinder Housing

Remanufacture



TMS: F110-100 & F110-129

Noun: A8 Actuator Cylinder Housing

NSN: 3010-01-192-2637 (assy)

PN: 2198033-1/-2 (1270M90P01 assy)

Material: 15-5 PH

Dimensions: 14"x6" dia

Criticality: X (update)



● 761 ○ 762 ○ EDL ○ RDL ○ Print

## Details

- A8 actuator housings are very similar to F101 housings.
- Contains pressure up to 4000 psi
- Recently 100% replaced for F110

## Pros

- Long lead time
- Expensive
- Low usage

## Cons

- High pressure

Price: Assy 9,218.16 (2015)



# F101 No. 5 Bearing Housing

Remanufacture



TMS: F101

Noun: No. 5 Bearing Housing

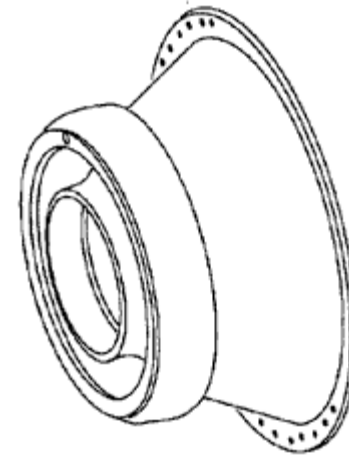
NSN: 2840-01-174-5731

PN: 9526M95G02

Material: Inco 718

Dimensions: 6.6"x16.75" (dia.)

Criticality: CAI (Y)



761  762  EDL  RDL  Print

## Details

- OEM is only supplier; last contract 1986
- Repairs: blending & cleaning blocked oil/air holes

## Pros

- Possibly reduce parts count
- Similar to other No 5 bearing housings

## Cons

- Hot section
- Single engine application

Price: 14,764.80 (2015)



# F101 IGV Inner Shroud

New Manufacture



TMS: F101

Noun: IGV Inner Shroud

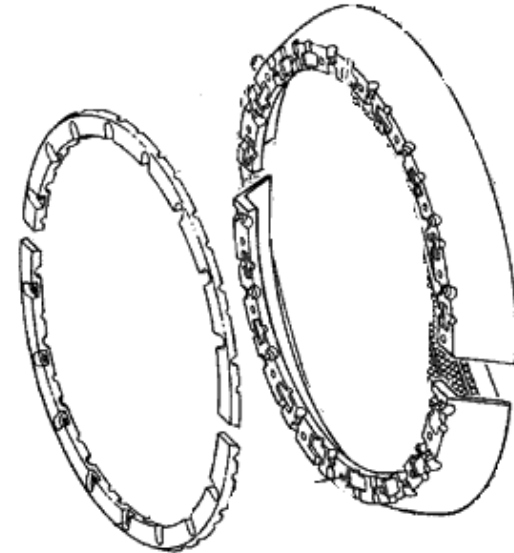
NSN: 2840-01-196-3716 / 2840-01-173-7430

PN: 9524M30G03 / 9524M31G03

Material: 2618 Al

Dimensions: 2.73"x11" (dia.)

Criticality: CAI (Y) / CSI (F)



● 761 ○ 762 ○ EDL ○ RDL ● Print

## Details

- OEM is only supplier
- 2 piece shroud
- Demand increasing (20 – 2011, 73 – 2013)

## Pros

- Similar to other IGV inner shrouds
- Stationary

## Cons

- Single engine application
- Increased demand may limit benefit

Price: 6,891.65 (2015) / 3,903.20 (2015)



# F118-100 IGV Inner Shroud

New Manufacture



TMS: F118-100

Noun: IGV Inner Shroud

NSN: 2840-01-528-4198

PN: 9536M57G08

Material: 6061 Al

Dimensions: 3.36"x11" (dia.)

Criticality: CAI (Y)



● 761 ○ 762 ○ EDL ○ RDL ○ Print

## Details

- OEM is only supplier
- Not in IPB
- No top level drawing in JEDMICS
- 2 piece shroud
- Very low demand
- LO coating and Trunnion bore repairs available

## Pros

- Similar to other IGV inner shrouds
- Low demand
- Stationary

## Cons

- Single engine application
- Drawing set not complete

Price: 48,426.44 (2015)



# F101 / F110-100 / F118 Fan Shaft Cover



## Remanufacture

TMS: F101 / F110-100 / F118

Noun: Fan Shaft Cover

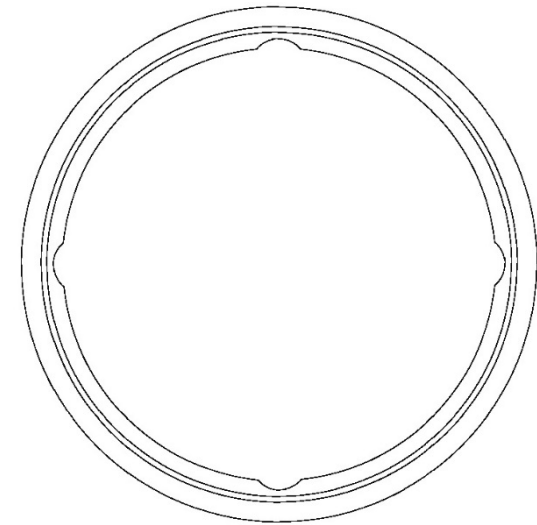
NSN: 2840-01-447-2703

PN: 1960M10P01

Material: 6061 Al

Dimensions: 1.45"x4.49" (dia.)

Criticality: X (update)



761  762  EDL  RDL  Print

### Details

- OEM is only supplier

### Pros

- Multiple engines

### Cons

Price: 338.06 (2015)





# F100-100 W1 Cable Connectors



New/Remanufacture

TMS: F100-100

Noun: W1 Electrical Cable (Black)

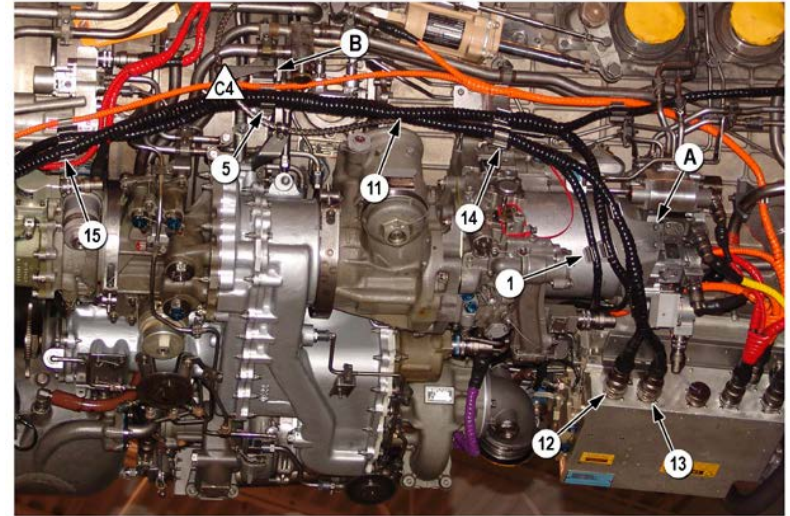
NSN: 6150-01-428-4493

PN: 1820M61G01

Material: UNK

Dimensions: Varies

Criticality: X



● 761 ○ 762 ● EDL ○ RDL ○ Print

## Details

- EMI bands commonly break and need to be replaced
- Connectors on OEM cable not serviceable

## Pros

## Cons

- Cable and Connectors Source controlled

Price: 14,884.56 (2016)

# 448th Supply Chain Management Wing

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*The Supply Chain Delivers ...  
Parts on the Shelf and Contracts in Place*



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# FINAL COMMENTS

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# Source Approval Request (SAR) Training

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*Breaking Barriers ... Since 1947*

# AF Life Cycle Management Center



DISTRIBUTION A Approved for Public  
Release; Distribution Unlimited. Destruction:  
100% Shred

*Source Approval Request (SAR) and  
Qualification Requirements  
Familiarization*

*SASPO Industry Day*

*24 Aug 17*

Mr. Steve Logan

AFLCMC/LPE (Propulsion Engineering)

(405) 734-4881 or DSN: 884-4881

Email: [steve.logan@us.af.mil](mailto:steve.logan@us.af.mil)

*Providing the Warfighter's Edge*



# Overview



- 
- Vendor Minimum Requirements
  - Manufacturing/Repair Qualification Requirements
  - SAR Categories
  - SAR Types
    - Waiver
    - Standard/Master
    - Lite
  - Resubstantiation
  - Self Inspection/Site Surveys
  - Top 5
  - How to Get Help



# BLUF



- 
- USAF Seeking Focused SARs
  - Reducing Qualification Effort
  - Find the Established Qualification Requirements
  - Construct Complete SARs
  - Submit SARs
  - Provide Missing Data, if Required
  - Take Action Based on Determination
    - Bid
    - Resubmit
    - Track Approval



# *Submitter Minimum Requirements*



- CAGE
  - DD form 2345
- Quality Management System
  - AS 9100 or ISO 9001 Certification
- Significant Industrial Process Certification
  - Internal Processes must be NADCAP or OEM Certified
  - Non-destructive Inspection (NDI) Level III for any Method Used
- Sub-Tier Supplier Shall Have
  - CAGE
  - AS 9100 or ISO 9001
  - NADCAP or OEM Process Certification
- Experience (Purchase Order/Shipping Document)
  - Manufactured/Repaired Subject or Similar item
- Licensee Agreement if Proprietary Data is Used

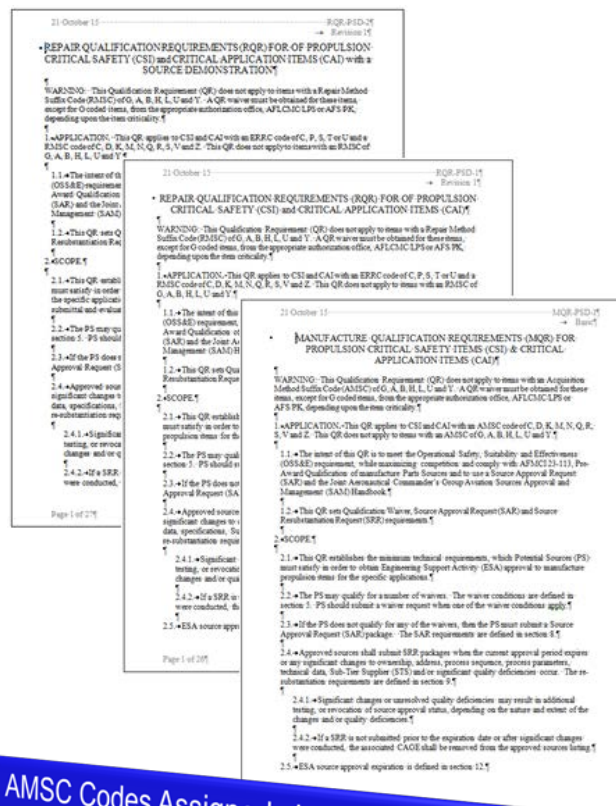




# Propulsion Standard QRs

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- QRs do not apply to AMSC/RMSC codes
  - G, A, B, H, L, O, Q, U and Y.
- MQR-PSD-1
  - Applies to CSI (CAT 1 & 2 ) and CAI (CAT 1, 2, & 3)
  - AMSC: C, K, and M (Government Rights)
  - AMSC : D, N, P, R, S, V and Z (Proprietary)
- RQR-PSD-1 or RQR-PSD-2 (Source Demo)
  - Applies to CSI (CAT 1 & 2 ) and CAI (CAT 1, 2, & 3)
  - ERRC: C, P, S, T or U
  - RMSC: C, K, and M (Government Rights)
  - RMSC : D, N, P, R, S and Z (Proprietary)



AMSC Codes Assigned via:  
 - DFARS PGI 217.7506, Part 2-201.2  
 - <http://farsite.hill.af.mil/>

## Comply with AFMCI 23-113, CSI & SAM

## Handbooks Breaking Barriers Since 1947



# AFMCI 23-113

## Source Approval Categories



- **Category I, Actual Item.** - SARs received from suppliers who have manufactured or performed ROMM on the exact (Subject) item to the OEM technical data for the prime contractor, OEM, another service or, a civil sector under FAA PMA identity. The item will be produced and evaluated against the ESA approved technical data package.
  
- **Category II, Similar Item.** - SARs received from suppliers who have not previously manufactured, repaired, or overhauled the exact (Subject) item, but have manufactured or performed ROMM on items similar in complexity, design, criticality, manufacturing/repair/overhaul processes, materials, and application for the
  - a) Prime Contractor, OEM, or another service using OEM data, or
  - b) Civil Sector under FAA PMA based on Identically
  
- **Category III, New Manufacturer of Item.** - This category covers offerors who do not meet Category I or II criteria but have the OEM's technical data and intend to produce to the ESA approved technical data package. -- does not apply to Critical Safety Items (CSI)



# SAR Types

*AFLCMC... Providing the Warfighter's Edge*

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- SAR Waiver
- Standard/Master SAR
- SAR Lite



# SAR Waiver Determination



- Submitter
  - Reviews the QR
  - Determines if a Waiver or SAR should be submitted
    - QWC1: Supplied by GOV or OEM
    - QWC2: Qualify on left hand article based on right hand article
    - QWC3: Qualify on subassemblies based on assembly
    - QWC4: Qualify on next PN dash number
    - QWC5: Not applicable / Supplier shall submit SAR CAT II or III.
    - QWC6: Source previously qualified that has been purchased/sold
    - QWC7: Other
    - QWC8 Source qualified to manufacture wanting to repair (For Repair only)
  - Submits the Qualification Waiver Condition (QWC) & Required Artifacts

*Breaking Barriers... Since 1947*  
Use Waiver if one applies versus submitting a SAR.



# SAR Waiver Data Requirements

Manufacture(1-7) /Repair(1-8)  
 AFLCMC... Providing the Warfighter's Edge

- Each Waiver must be accompanied with the required data.
- The data requirements are defined by the QR elements
  - QWC7 has two Phases. Phase 1 Submit and Seek Approval/Phase 2 Submit Artifact
- The 815 is used to evaluate the data elements.

Element	Title	Qualification Waiver Criteria							
		1	2	3	4	6	7	8	
A	Cover Letter	■	■	■	■	■	■	■	
B	Technical Data Rights Certification Statement, if required	■	■	■	■	■	□	■	
C	Brochure & Correspondence (Tool List Only)	■	■	■	■	■	□	■	
D	Quality Assurance Documentation					■	□		
E	Subject Item Technical Data							■	
G	Sub-Tier Supplier (Sub-Vendor) Information (Frozen for CSI)	■	■	■	■	■	□	■	
H	Quality History	■	■	■	■	■	□	■	
J	Similarities/Differences of Subject/Similar Items		■		■		□		
K	Purchase Orders & Shipping Documents	■	■	■	■	■	□	■	
L	Process/Operations Sheets & Travelers (Frozen for CSI)	■	■	■	■	■	■	■	
M	Inspection Method Sheets (IMS) (Frozen for CSI)	■	■	■	■	■	■	■	
N	Prime Contractor's Quality Rating System Report	■				■	□		
O	License Agreement, If Applicable	■	■	■	■	■	□	■	
Q	Government/Prime Contractor Surveys	■			■	■	□		
T	Master Tooling Certifications	■	■	■	■	■	□	■	
U	Government Quality Assurance Compliance	■	■	■	■	■	□	■	
AA	ESA/OEM Approval Letter	■	■	■	■	■	□	■	
AB	Novation Letter					■	□		



# SAR Master & Lite



- Master SAR includes (One):
  - Provide Data at the Enterprise Level
  - Cover Letter
  - Technical Data Rights Statement
    - All NSNs on Part-Process Matrix
  - Equipment List
  - Quality History, if Any
  - Licensee Agreements for the Proprietary Data
  - Calibration Schedule
- SAR Lite includes (Many):
  - Production Documentation for Each NSN
    - Travelers, Router or Work Control Document
    - Process Operation Sheet
    - Inspection Method Sheets



# SAR Data Requirements and Format

*AFLCMC... Providing the Warfighter's Edge*

- Each SAR must be accompanied with the required data
- The data requirements are defined by the QR elements
- The 815 is used to evaluate the data elements.

ELEMENT	REQUIRED ELEMENTS	CAT I		CAT II		CAT III		Remarks
		M	S	M	S	M	S	
A	COVER LETTER	■	■	■	■	■	■	
B	TECHNICAL DATA RIGHTS CERTIFICATION STATEMENT (CRITICAL)	■		■		■		Include all NSN and PN
C	BROCHURE & CORRESPONDENCE	■		■		■		Submit the complete tool list
D	QUALITY ASSURANCE DOCUMENTATION Site Survey Meets Requirement *	■		■		■		Only submit once for all the SARs
E	SUBJECT ITEM TECHNICAL DATA	■	□	■	□	■	□	For all NSN and PN
F	SUBJECT ITEM SPECIFICATIONS	■	□	■	□	■	□	For all NSN and PN
G	SUB-TIER SUPPLIER LIST (FROZEN FOR CSI)	■	■	■	■	■	■	
H	QUALITY HISTORY	■		■		■		Include all NSN and PN
I	SIMILAR ITEM TECHNICAL DATA			■	■			
J	SIMILARITIES/DIFFERENCES OF SUBJECT/SIMILAR ITEMS			■	■			
K	PURCHASE ORDERS & SHIPPING DOCUMENTS	■	■	■	■			
L	TRAVELERS & PROCESS/OPERATIONS SHEETS (POS) (FROZEN FOR CSI)	■	■	■	■	■	■	
M	MANUFACTURE PROCESS SHEETS AND / OR INSPECTION METHOD SHEETS (IMS) (FROZEN FOR CSI)	■	■	■	■	■	■	
N	PRIME CONTRACTOR'S QUALITY RATING SYSTEM REPORT	■		■		■		Only submit once for all the SARs
O	LICENSEE AGREEMENT (IF APPLICABLE)	■		■		■		Include all NSN and PN
P	VALUE ADDED (BY PRIME OR OEM)	■		■		■		For all NSN and PN. Only submit once for all the SARs
Q	GOVERNMENT / PRIME CONTRACTOR SURVEYS	■		■		■		Submit once per CAGE
T	MASTER TOOLING CERTIFICATIONS	■	■	■	■	■	■	
U	GOVERNMENT QUALITY ASSURANCE COMPLIANCE	■		■		■		Include all NSN and PN

An element may have been covered in the MSAR by the overall statement, if not provide individual data or statements for the additional part number.



# Technical Data Request

*AFLCMC... Providing the Warfighter's Edge*

- Request Data or Data Rights Purchases for Drawings
- Public Sales Office (PSO) (405) 736-4676
  - Provides commercial customers a method to purchase engineering data directly from the ALCs data repository.
  - Requires the customer to register with FedBizOps prior to a purchase request.
    - submit a request for data or ask questions through the PSO email listed below.
  - Offers single or revolving account data purchase options.
  - Department of Defense policy mandates only the Data Custodian listed on the Military Critical Technical Data Agreement (DD Form 2345) is eligible to receive data.

Prints

T.O.s

## Technical Order Home Office

- Provides commercial customers a method to purchase technical orders directly
- Department of Defense policy mandates only the Data Custodian listed on the Military Critical Technical Data Agreement (DD Form 2345) is eligible to receive data.





# Source Resubstantiation Request (SRR)

*AFLCMC... Providing the Warfighter's Edge*

- CSI every 3 Years
- CAI every 7 Years
- Assembly SAR Packages
  - Master
  - SAR Lite Packages
  - Submitted Within 30 Days
- Artifacts Submitted

Element	Source Resubstantiation Request	MSRR	SRRL	Remarks
A.	Cover Letter	■	■	
B.	Technical Data Rights Certification Statement	■		Include all NSN and PN
C.	Brochure & Correspondence	■		
D.	Quality Assurance Documentation	■*		* Site Survey Meets Requirement
E.	Subject & Alternate Item Drawings or Technical Data	■	□	For all NSN and PN
F.	Item Specifications	■	□	For all NSN and PN
G.	Sub-Tier Supplier (Sub-Vendor) Information (Frozen for CSI)	■	■	
H.	Quality History (Entire Site and All Parts)	■		Include all NSN and PN
K.	Purchase Orders & Shipping Documents	■	■	
L.	Process/Operations Sheets & Travelers (Frozen for CSI)	■	■	
M.	Manufacture Process Sheets And / Or Inspection Method Sheets (IMS) (Frozen for CSI)	■	■	
N.	Prime Contractor's Quality Rating System Report	■	□	
O.	Licensee Agreement	■		Include all NSN and PN
P.	Value Added (By Prime or OEM)	■		For all NSN and PN
Q.	Government/Prime Contractor Surveys	■		Per CAGE
T.	Master Tooling Certifications & Calibration	■	■	
U.	Government Quality Assurance Compliance	■		For all NSN and PN

□ An element may have been covered in the MSRR by the overall statement, if not provide individual data or statements for the additional part number.

To Resubstantiate, CAGE must have produced Subject Item within the Approval Period, else a SAR CAT II or Waiver must be submitted.



# Self-Assessment (SA) Checklist



- Comprehensive review of the Quality Management System and all supporting documents
  - 15 Page Checklist
- Three phase Process
  - Submittal
  - Review & Resubmittal
  - CAR & CAR Management
- ESA Recommendation for Site Survey
- Same Checklist is used for Site Survey
- Based on the ASAM Checklist

## Self-Assessment Checklist

Manufacturing, Repair & Overhaul (R&O), and Quality Assurance (QA)

<b>DoD Site Survey Number:</b>		<b>START DATE:</b>	<b>COMPLETE DATE:</b>
DoD Site Survey Number = (CAGE Code) - (Lead Service AR/AF/NA/DC) - (month and last two digits of year) e.g. 81996-AF-0314.			
<b>DoD Self-Assessment Number:</b>		<b>Date:</b>	
DoD SA Number = (CAGE Code) - (Self-Assessment SA) - (month and last two digits of year) e.g. 81996-SA-0314.			
<b>INSTRUCTIONS:</b> This self-assessment is to serve as a guideline for the vendor site survey. All areas of the checklist should be completed with the complying evidence and corresponding artifacts. All artifacts should be placed in 3 ring binders with the corresponding tab identified in the checklist. All artifacts must be submitted with the completed checklist for evaluation. This report, when completed, will be used to determine future survey activity. Pages 1 and 2 and Item No. 1 are self-explanatory.			
<b>CHECKLIST ITEMS 2 THROUGH 5</b>			
<b>References and Artifacts:</b> List/Identify where the requirement is established in the Contractor's Quality Manual, where it is detailed in the Contractor's Procedures, and what artifact demonstrates its implementation (if applicable). Write "N/A" in the block if the element is not applicable and "NR" if the element was not reviewed.			
<b>Dates:</b> When entering dates in the form use the following format. DD MMM YY			
<b>Art/Pass:</b> Fill in check box in Art Column if Artifact is provided. Pass Column is reserved for government use only.			
<b>Tab:</b> When identifying location of artifacts in the column labeled Tab, provide only the number of the corresponding tab in the 3 ring binders (i.e. 3.2.1, not Tab 3.2.1). Include the referenced section and paragraph of the Quality manual and Procedure along with the artifact that demonstrates its use/implementation. Include all three in the appropriate "Tab" in the binders.			
<b>COMPANY NAME:</b>		<b>COMPANY CAGE:</b>	
<b>ADDRESS:</b>		<b>PHONE:</b>	
<b>CONTRACT/SOLICITATION/ETC. NO.</b>	<b>PCO</b>	<b>NSN or PART NUMBER(S)</b>	
<b>COMPANY POINTS OF CONTACT</b>	<b>TITLE</b>	<b>E-MAIL</b>	
<b>GENERAL INFORMATION</b>			
<b>PRODUCTS OR SERVICES OFFERED</b>			
<b>TOTAL PLANT AREA SQUARE FEET</b>		<b>NO. OF BUILDINGS</b>	
<b>IS FACILITY OWNED OR LEASED?</b>			
<b>NO. OF PRODUCTION EMPLOYEES</b>		<b>NO. OF DESIGN ENGINEERS</b>	
<b>NO. OF PROCESS ENGINEERS</b>		<b>QUALITY ASSURANCE PERSONNEL</b>	
<b>OTHER PERSONNEL</b>			
<b>EDUCATION AND EXPERIENCE LEVEL (Average years)</b>			
<b>PRODUCTION</b>		<b>ENGINEERS</b>	<b>QUALITY</b>



# Site Survey (SS) Determination



- **ESA Determination**
  - Self-Assessment without Site Survey Approval
    - Email/Mail
    - Self Corrections are Reviewed
    - No additional Action Required
  - Site Survey 1-Day Review (Plant Verification)
    - 2 Person Site Visit
    - Overall Operation Review
  - Site Survey 3-Day Review (Full/36 Hours)
    - 2 Person Site Visit
    - Full Self-Assessment Checklist Validation
- **Based on Self Assessment Results**



# Corrective Action Request (CAR)



- Engineering
  - Completes Self-Assessment
  - 3 Phase Process
    - Submit
    - Evaluate
    - Track
  - Timeline must be monitored and maintained
    - Submitter must stay on implementation schedule
  - Site Survey may still be required

DEPARTMENT OF DEFENSE		
VENDOR SITE SURVEY REPORT		
Survey Finding Number:		Classification -
<small><b>INSTRUCTIONS:</b> This report form is to serve as a record of findings noted by Department of Defense (DoD) personnel conducting vendor Site surveys and may be used for follow-up of corrective actions. This form, when completed, will become a permanent record of the survey activity and will not normally be distributed to other non-DoD activities.</small>		
<small>Finding Number = (Survey Number) - (sequential number, beginning with 01) e.g. 81996-AR-0804-05.</small>		
<b>Finding Classifications:</b>		
<small><b>Critical</b> - A nonconformance that negatively impacts a Critical Characteristic or that would result in hazardous or unsafe conditions for individuals using, maintaining or depending upon the supplies or services, or is likely to prevent performance of a major end item, or major part thereof.</small>		
<small><b>Major</b> - 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.</small>		
<small><b>Minor</b> - A nonconformance that is not likely to materially reduce the usability of the supplies or services for their intended purpose, or operation of the supplies or services.</small>		
<small><b>Observation</b> - A condition or circumstance which does not currently meet the aforementioned criteria, but holds the potential of causing a deficiency in the future, or a finding that could be of value for Quality improvement.</small>		
Title:	Item No:	Date:
ITEM:		
FINDING:		
Auditor's Signature:		Date:
Auditee's Signature:		Date:
Corrective Action:		
Corrective Action Submitted By:		Date:
Corrective Action Accepted By:		Date:
Corrective Action Verification (DoD):		Date:
Remarks:		



# Top 5



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## #1 Incomplete/missing process and quality certifications (Element D)

Processes have to be certified by the Gov, OEM, or NADCAP

Have to be ISO 9001:2008 or AS9100 certified

## #2 Incomplete Sub-Tier Supplier (STS) information (Element G)

Must provide company's Name, Cage, Process Certification, and Quality Certification

## #3 Incomplete/missing quality history and deficiency reporting (Element H)

For the offeror and the STSs

## #4 Travelers/Process Sheets match Shipping Documents (Element L and K)

All purchase orders and shipping documents submitted in element K have to match (by part number) the travelers and process operation sheets submitted in element L

## #5 Inspection Method Sheets match Shipping Documents (Element M and K)

All purchase orders and shipping documents submitted in element K have to match (by part number) the manufacture process sheets and the inspection method sheets submitted in element M



# SAR Resources



## Focus your SARs / Get Help

### Small Business Office

Liaison between Government and all businesses

- <http://www.afsc.af.mil/Units/SBO.aspx>

### SASPO

Strategic Alternate Sourcing Program Office

- Target List

- AFMCI 23-113

- Qualification Requirements

- <http://www.tinker.af.mil/Home/429SCMS-SASPO/>

### FedBizOpps

- Find the NSN(s) from the target list

- Bidding info / dates

- <https://www.fbo.gov/>

The screenshot displays the AFSC & Tinker AFB Small Business Office website. At the top, there is a navigation bar with links for HOME, LINKS, NEWS, ABOUT US, and UNITS. A red arrow points to the 'LOCATIONS & CONTACT' section, which lists the AFSC HQ & Tinker AFB address and phone numbers. Below this, there are sections for 'DOING BUSINESS WITH THE AFSC', 'PLANS & PERFORMANCE', and 'TINKER AIR FORCE BASE'. The main content area features a search bar for 'FEDBIZOPPS.GOV' with a search button and a 'RECOVERY' section. There are also sections for 'SMALL BUSINESS EVENTS', 'VENDOR COLLABORATION', 'USER GUIDES', and 'SASPO ANNOUNCEMENTS'. A diagram in the center of the page shows the SASPO process flow, including 'Strategic Alternate Sourcing Program Office' and 'AFSC'. The bottom of the page has a footer with 'AFSC & Tinker AFB Small Business Office' and 'AF Sustainment Center'.



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# Questions?

# 448th Supply Chain Management Wing

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*The Supply Chain Delivers ...  
Parts on the Shelf and Contracts in Place*