

Air Force Sustainment Center



**Strategic Alternate Sourcing
Program Office (SASPO)
Robins AFB Industry Day
28 September 2017**

Air Force Sustainment Center



SASPO-Robins Industry Day

Planning & Execution Directors' Overview
September 28, 2017

Ms. Kimberly K. Herren
Director, 638 Supply Chain Management Group



Overview



- **Mission / Vision**
- **Who We Are / What We Do**
- **Major Concern & how industry partners can help**





448 SCMW

Mission

***Deliver supply chain readiness to enable combat power
for America***

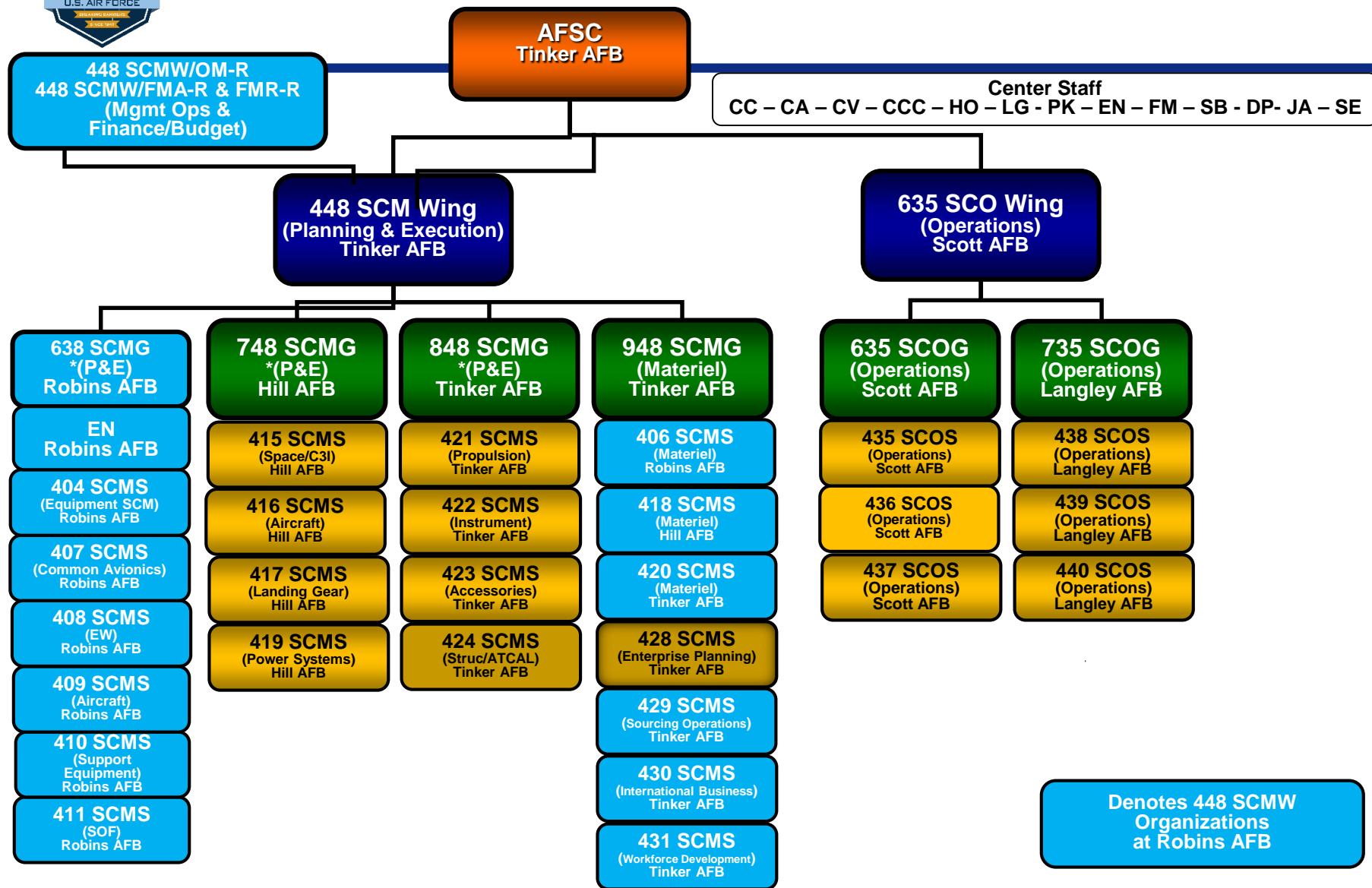


Vision

***Agile and trusted provider of war-winning supply chain
readiness—when and where needed***

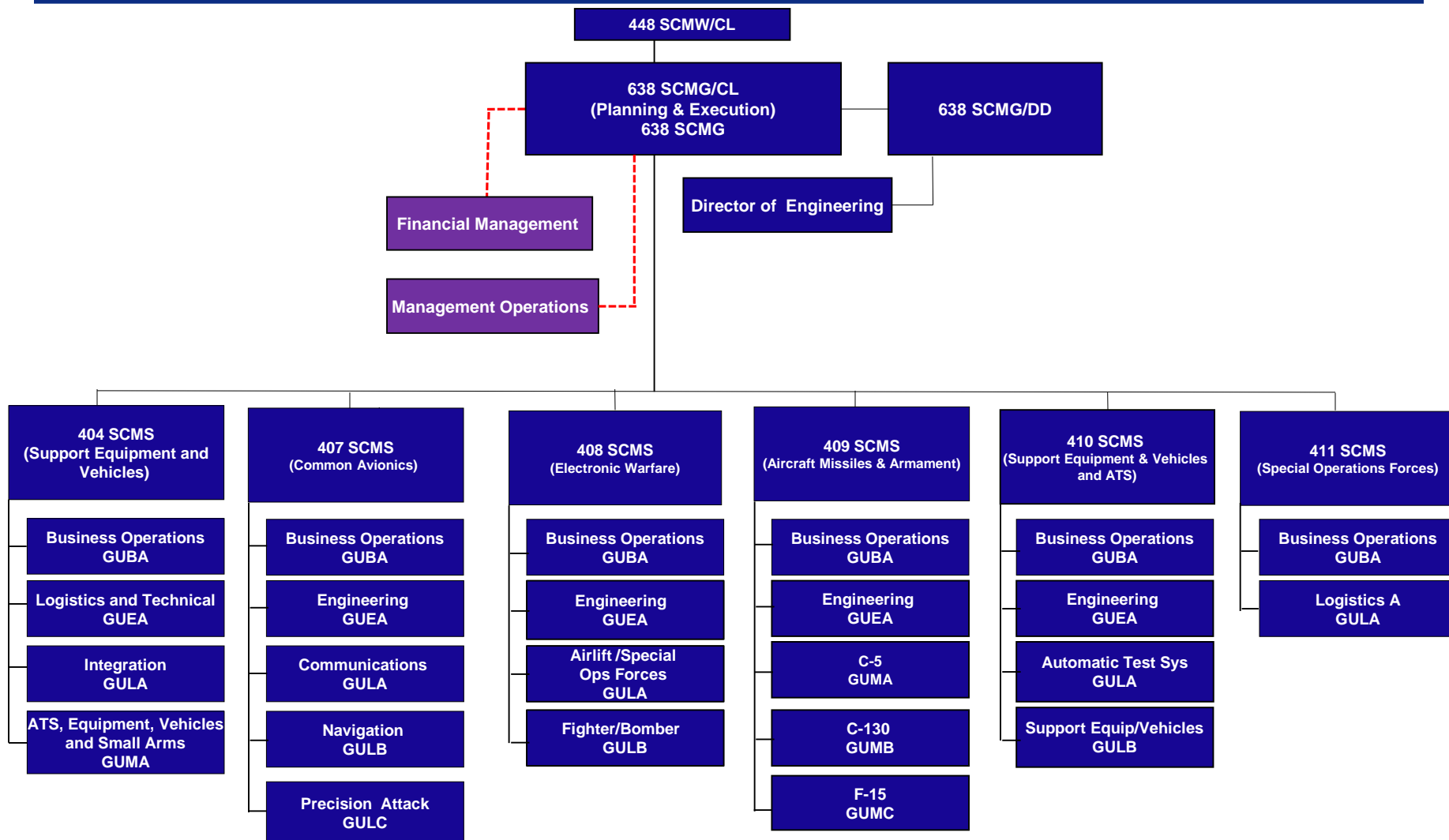


448 SCMW at Robins AFB





638th Supply Chain Management Group



SCMS: Supply Chain Management Squadron

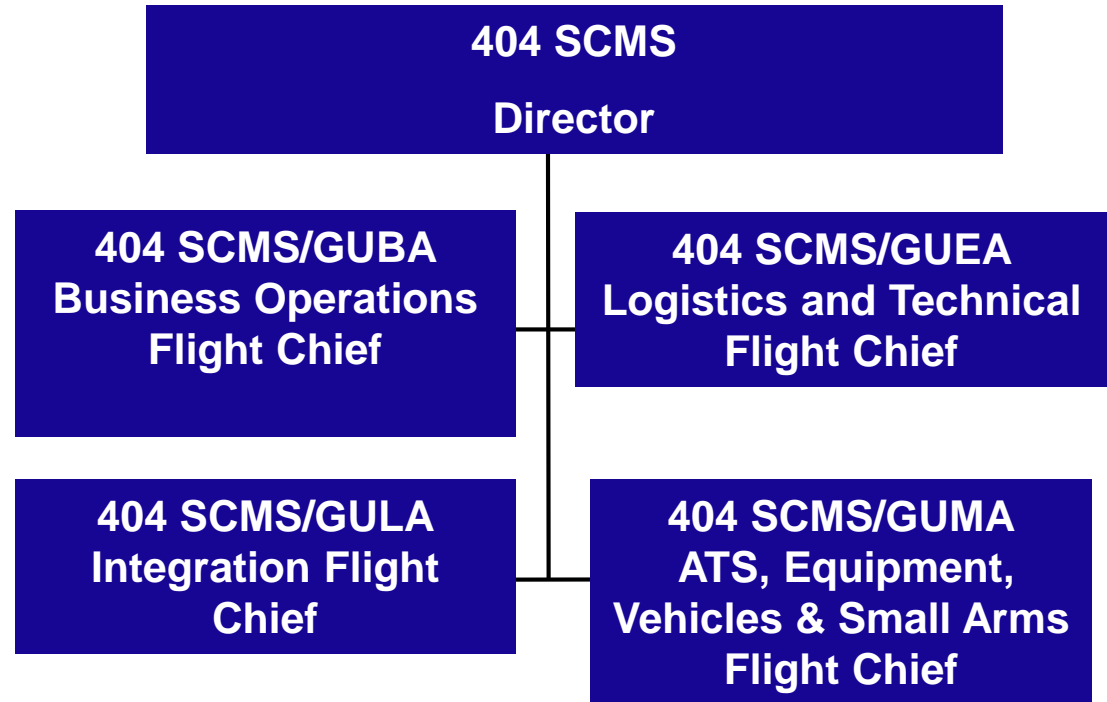
Breaking Barriers ... Since 1947



404 SCMS

Support Equipment and Vehicles

- **D200C Policies/Procedures & Data Systems**
- **Allowance Management**
- **Item Management/Production Management Specialists**
 - D200C End Items (37K NSNs)
- **Equipment specialists, engineers, logistic managers for specific commodities**
- **My major concern and how Industry Partners can help:**





Major Categories of Items (What We Do)



Aircraft Ground Equipment
Aircraft Components/Tools
Aircrew Flight
Back Shop Repair
Base Support
BEAR
Communications
Electronic Warfare
Generators
Materiel Handling
Pallets & Nets
Propulsion
Test Equipment
Trainer
Vehicles
Weapons & Munitions



Breaking Barriers ... Since 1947

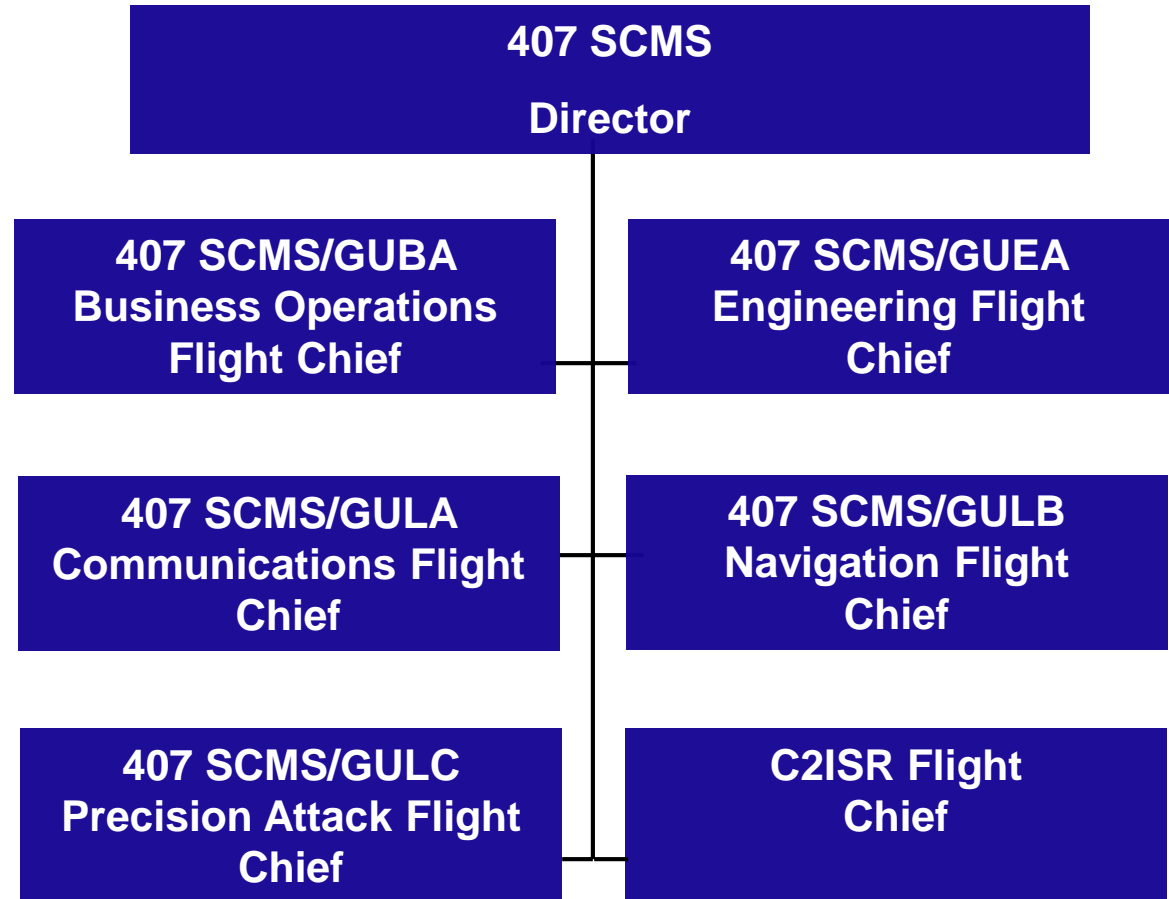


407 SCMS *Avionics*

- **CSAG Buy & Repair Requirements:**

- Avionics Systems: 301
- Weapon Systems: 28
- NSNs: 12,956
- FMS Customers: 41

- My major concern and how Industry Partners can help:





Current Focus Areas (What We Do)

■ Communications

- Airborne Radios
- Data Links
- Ground Communication



■ Precision Attack

- LANTIRN
- Sniper/Litening
- Global Positioning System



■ Navigation

- Instrument and Landing Systems/Identification Friend or Foe
- Radars/Altimeters
- Heads-Up Display
- Joint Helmet Mounted Cueing System



■ Command and Control, Intelligence, Surveillance, and Reconnaissance (C2ISR)

■ Global Hawk Supply Chain Transition



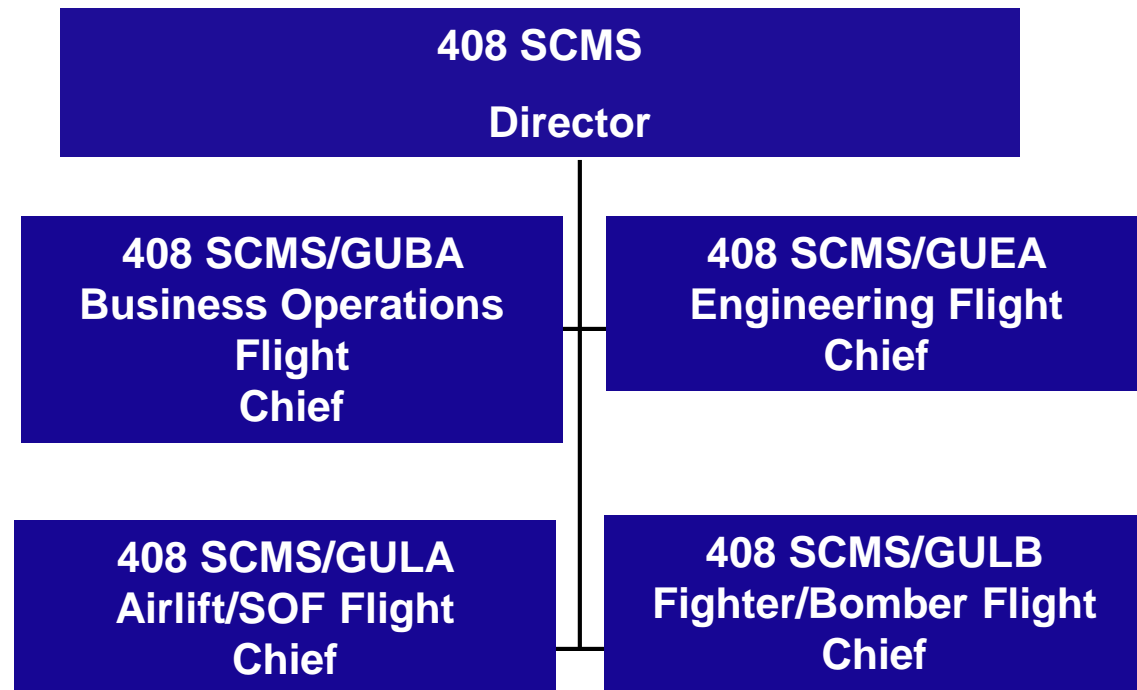
408 SCMS

Electronic Warfare

- **CSAG Buy & Repair Requirements:**

- Systems: 89
- MDS: 19
- NSNs: 9,356 Items
- FMS Customers: 24

- **My major concern and how Industry Partners can help:**





Current Focus Areas (What We Do)

- **Electronic Warfare (EW) systems provide aircraft/aircrew survivability protection in hostile environments by deception, denying functionality, and early detection of enemy weapon systems**
- **Towed Decoys**
- **Infrared Jammers**
- **Radio Frequency Jammers**
- **Missile Warning Systems**
- **Radar Warning Receivers**
- **Chaff & Flare Dispensers**
- **Electronic Support Measures**
- **EW Suite Controllers**
- **EW Test Sets**

EW Protects Aircraft & Aircrews





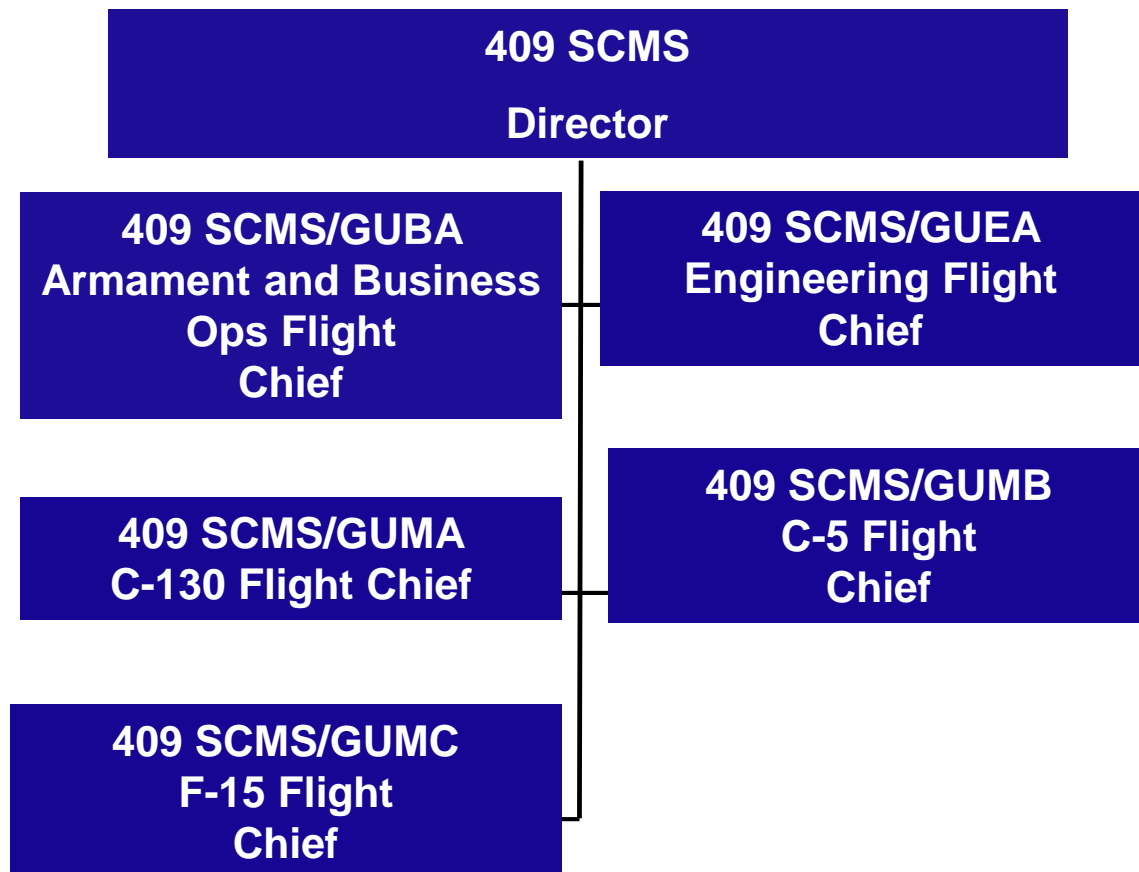
409 SCMS

Aircraft/Armament

■ CSAG Buy & Repair Requirements:

- Systems: F-15, C-5, C-130 and Armament
- MDS: Multiple Platforms
- NSNs: 9,994 Items
- FMS Customers: 64

- My major concern and how Industry Partners can help:





Current Focus Areas (What We Do)

- **Supply Chain Manager for C-5, C-130 and F-15 aircraft peculiar assets and conventional armament systems including bomb racks, missile launchers, gun and feed systems and small arms**

- C-5A/B/M
- C-130E/H/J
- F-15C/D/E
- Armament Systems



- **Depot Supply Chain Manager (DSCM) - Increase Parts Supportability/Availability for Depot Maintenance by providing parts support for both DLA and AF managed parts**





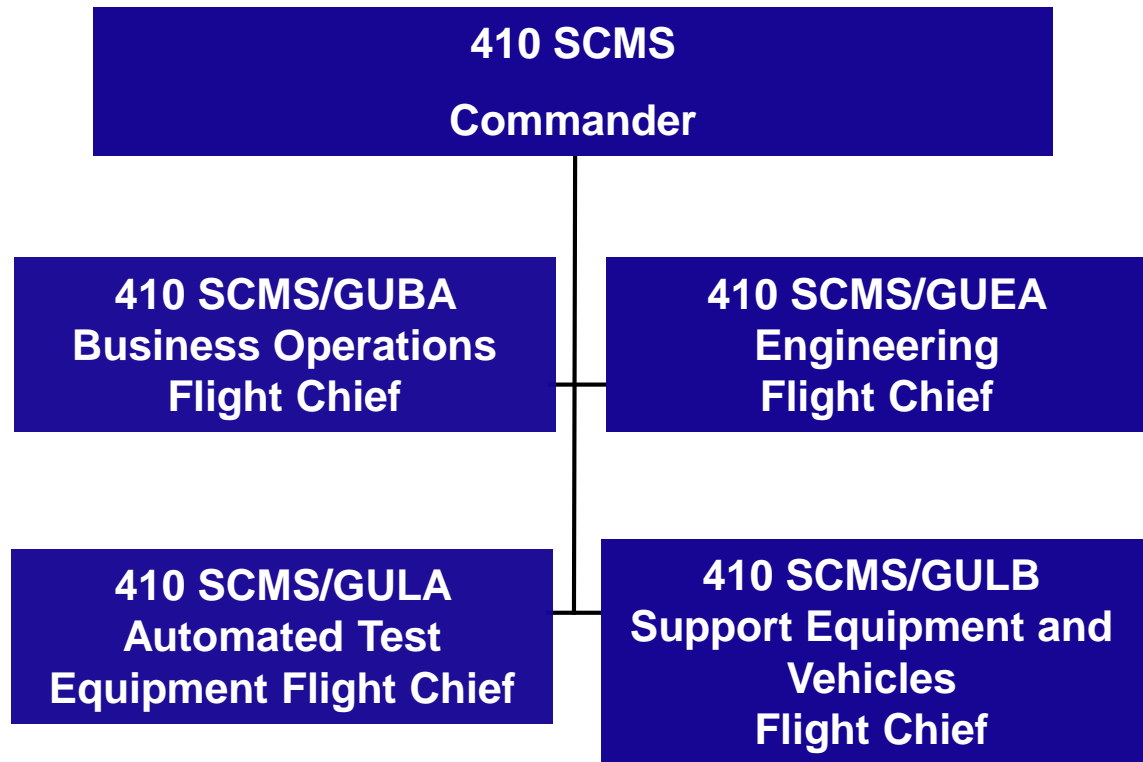
410 SCMS

SE&V and ATS DLRs

■ CSAG Buy & Repair Requirements:

- Systems: 47 Testers (ATS)
245 Programs (SE&V)
- MDS: Common across multiple platforms
- NSNs: 15,792 Items

My major concern and how Industry Partners can help:



Support Equipment and Vehicles (SEV) and Automatic Test Systems (ATS) Depot Level Reparables (DLRs)



Current Focus Areas (What We Do)

Supply Chain Manager for Repair Components for Support Equipment, Vehicles, Life Support and Automated Test Equipment

- **Aircraft Arresting Systems**
- **Air Conditioners, Compressors, Pumps, Stands & Valves**
- **Engines, Ground Support Equipment & Generators**
- **Halverson Loader, Fire Trucks, Vehicles & Munitions/
Materiel Handling Equipment**
- **ACES II, Aircrew Life Support & CBRNE Blowers & Face Pieces**
- **A-10, B-1, B-52, F-15 & F-16 ADIT, ADTS, AIS, Armament,
BRAT, CAPRE, CMBRE, DAAE, EASTE, EPCAT, ESTS, IATE,
MIDATS, RFLTS, RTS & TISS Testers**
- **COLT, Common TMDE, LANTIRN, MUSTANG, GSM/USM Series
& VDATS ATE**





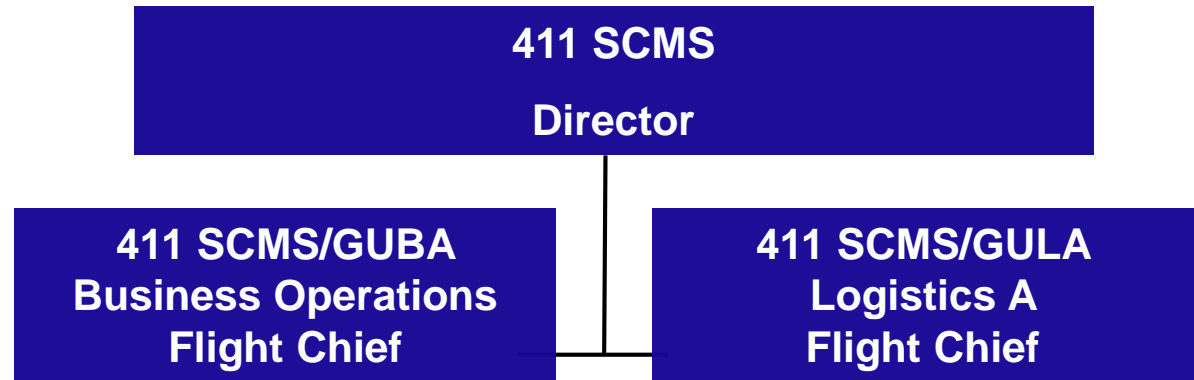
411 SCMS SOF/PR

(Special Operations Forces/Personnel Recovery)

▪ CSAG Buy & Repair Requirements:

- Systems: 160
- MDS: 12
- NSNs: 3,000 Items
- FMS Customers: 13

My major concern and how Industry Partners can help:



Our Mission: Plan and execute the AF Supply Chain to enable SOF/PR Weapon System employment when and where needed

Special Operations Forces (SOF) / Personnel Recovery (PR)

Breaking Barriers ... Since 1947



Current Focus Areas (What We Do)

**Management Responsibility for all Special Operations
Forces/Personnel Recovery (SOF/PR) Unique Items**

– Major Systems Include:

- Aircraft Intercom Systems (AIC-30, AIC-38, AIC-40) (SOF C-130s)
- CP-2108A Mission Computer (SOF C-130s)
- Multifunction Displays/Communication Equipment (UH-1N, TH-1H)
- ASQ-204 Control Data Display System (MC-130H Talon II)
- APN-239 Color Weather Radar (HH-60G)
- Area Refueling System (SOF C-130s)
- APQ-180 Multifunctional Radar System (AC-130U Gunship)
- APQ-170 Terrain Following/Terrain Avoidance Radar System (MC-130H Talon II)
- TH-1H Dynamic Components
- TCN-550 Tactical Navigation System (MC/HC-130J)
- Altitude Hover & Hold Stabilization System (AHHS) (HH-60G)
- Hoist & Flight Controls (HH-60G, UH-1N)
- CV-22 (Aircraft Commodities, Commodity TCTO Kits, Engine Components)





638 SCMG

Director of Engineering



- **Senior technical advisor to Group Director and Squadron Directors**
- **Functional lead for the Group's 55 assigned (64 authorized) engineers**
 - **Engineering process leadership**
 - **Engineering career field care and feeding**
 - **Primary Group interface to 448 SCMW/EN and Robins EN**
 - **Robins EN provides extensive home office support to 638 SCMG**
- **Close working relationship with AFLCMC chief engineers, ALC Technical Director, Robins EN to ensure seamless supply chain support across the Robins enterprise**



The Supply Chain Delivers...



Parts on the Shelf and Contracts in Place

Air Force Sustainment Center



Alternate Sourcing Overview

Mr. Jerry Zamora
429 SCMS- SASPO
Jerry.zamora@us.af.mil



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



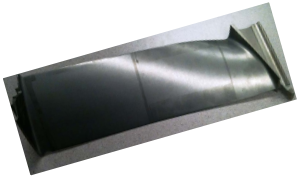
PLAN

SOURCE

MAKE/REPAIR

DELIVER/RETURN

ENABLE

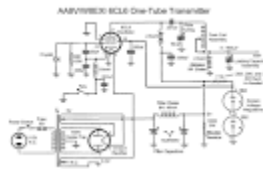


Alternate Sourcing Strategies

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

RESULTS:

- \$113.7M Saved
- 267 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:

- \$46.3M 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



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



- **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**
- **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**



SASPO Products cont...



- **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**



Technical Order Requests

- **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

Hill and Tinker: aflcmc.ezgtp.PubSale@us.af.mil



Drawing Requests

- **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
 - Robins:** robinspublicsales@us.af.mil
 - Tinker:** ocalc.lgldo.public@us.af.mil



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
 - 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

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



Alternate Sourcing POCs



- **Julia Séas, (405) 736-7373**
– julia.seas@us.af.mil

- **Myron Knight, (405) 734-7809**
– myron.knight@us.af.mil

- **Randy Harris, (405) 734-8358**
– randolph.harris@us.af.mil

- **Michael Deaton, (405) 582-9712**
– michael.deaton.1@us.af.mil



Questions

Breaking Barriers ... Since 1947

Air Force Sustainment Center



U.S. AIR FORCE
SMALL BUSINESS

Small Source, Right Value, Big Performance

Angela Dial
AFSC SB-R Director
DSN 468-5873
Email: angela.dial@us.af.mil

Randy Miller
Source Development Specialist
DSN 468-5871
Email: randy.miller.22@us.af.mil



Agenda



- **Small Business Office Role**
- **Procurement Offices Supported**
- **Source Approval Guidance**
- **A lot of Definitions**
- **SDS Responsibilities**
- **Resources**



SBO Role



- **Our Role**
 - **Ensure SB maximum practicable opportunity to participate in Robins 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
72nd ABW
848th SCMG



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



AFNWC

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

Robins

WR-ALC
78nd ABW
638th SCMG

F-15
C-17
C-5
C2ISR
Support Equipment
Vehicles
Automatic Test Sets
Electronic Warfare

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

Hill

OO-ALC
75nd ABW
748th SCMG

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

AFNWC

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

\$1.5B to Small Business



Regulatory Guidance-SAR



- **FAR 9.2 Implements**
 - **10 U.S.C. 2319**
 - **41 U.S.C. 253c**
 - **Prescribes Policies/Procedures**
 - **FAR Clause 52.209-1 Qualification Requirements**
- **DFARS PGI 217.7506**
 - **Establishes DOD Spare Parts Breakout Program**
 - **Provides Policies/Procedures**
- **AFMCI 23-113**
 - **Implements SAR process throughout AFMC**
 - **Consistent application/consistent documentation for qualification**



DOD Spare Parts Breakout Program



- **Applicable To:**
 - Centrally Managed Replenishment and Provisioned Parts
 - All DOD Personnel Involved With Design Control, Acquisition, and Management of Such Parts
- **Objective: Obtain Best Value Through Competitive Procurement Methods**



DOD Spare Parts Breakout Program (continued)



- **Acquisition Method Code (AMC):** Single digit **numeric** code to describe to the contracting officer/other government personnel the results of a technical review of a part and its suitability for breakout
- **Acquisition Method Suffix Code (AMSC):** Single digit **alpha** code assigned by a DOD activity which provides the contracting officer/other government personnel with engineering, manufacturing, and technical information



Breakout Codes



<u>AMC</u>	<u>Description</u>
1	Suitable for competitive acquisition for the second or subsequent time
2	Suitable for competitive acquisition for the first time
3	Acquire for the second or subsequent time from the actual manufacturer
4	Acquire for the first time from the actual manufacturer
5	Acquire from the sole source contractor which is not the actual manufacturer



Breakout Codes (continued)



AMSC

Description

- A The Government's right to use the data is questionable**
- B Must be bought from source(s) specified on a source control drawing**
- C Part requires engineering source approval by the design control activity in order to maintain the quality of the part**
- D Data is not physically available**
- G The Government has the rights to the data package and it is complete**
- H The Government does not have sufficient, accurate, or legible data**
- K Part must be produced from class 1 castings**
- L Annual buy value falls below the screening threshold for competitive buys**



Breakout Codes (continued)



<u>AMSC</u>	<u>Description</u>
M	Master tooling is required to manufacture
N O P	Special test/inspection equipment/facilities are required
Q	Code not assigned, screening incomplete
	Right to use the data is not owned by the Government
	Government does not have rights to data - data availability is expected to be achieved
R	Government does not have data - uneconomical to purchase data
S	Restricted to Gov't approved source(s)/mil sensitive technology
T	Part controlled by Qualified Products List (QPL)
U	Cost to compete the item has been determined to exceed savings
V	High reliability part
Y	The design of the item has been determined unstable
Z	Commercial, non-developmental, off-the-shelf type item



AMC/AMSC Targets



- **Restricted**
 - **“C” Codes Best Candidates for SARs**
 - » **Require Engineering Approval**
 - » **Data Usually Available**
 - » **Specific Qualification Requirement Criteria applies**



Definitions



•Critical Application Item (CAI):

- An item essential to weapon system performance or operation, or the preservation of life or safety of operating personnel, as determined by the military services.

•Critical Safety Item (CSI):

- A part, assembly, installation equipment, launch equipment, recovery equipment, or support equipment for an aircraft or aviation weapon system if the part, assembly, or equipment contains a characteristic any failure, malfunction, or absence of which could cause:
 - a catastrophic or critical failure resulting in the loss of or serious damage to the aircraft or weapon system;
 - an unacceptable risk of personal injury or loss of life; or
 - an uncommanded engine shutdown that jeopardizes safety.



Definitions (Continued)



- **Engineering Support Activity (ESA):** The Chief Engineer for the item/system and his/her lead engineers who have Operational Safety Suitability & Effectiveness (OSS&E) authority/responsibility.
- **Qualification Requirement (QR):** The minimum criteria set forth by the ESA to become an approved (qualified) source to either manufacture or repair/overhaul an item.



Definitions (Continued)



- **Source Approval Request (SAR):**
 - A technical data package submitted by a contractor which includes all data/documentation/information required for a competent manufacturer/repair source to manufacture or repair an item, including a Critical Safety Item, to a level of quality that is equal or better than an OEM part.
- **Source Development (SD):**
 - Function assigned within the Small Business Office at Air Logistics Centers to increase competition. The Source Development Specialist manages the SD function of the SB program.



Engineering Support Activity (ESA)



- **Assign/Document Item-Criticality**
 - **Critical Safety Item**
 - **Critical Application**
 - **Non-Critical**
- **Determine Need/Establish/Maintain Record of Qualification Requirements**
- **ESA Responsible for the Fed Biz Opps Announcement of QRs**
- **Review/Evaluate SARs**



Source Development Specialist



- **Manages the Qualification/Source Development Function of the SB program**
- **Acts as the Primary Liaison with Industry on all SARs not on solicitation**
- **Review Non-Technical Aspects of SARs**
- **Notifies Source when approved/disapproved**
- **Notifies Contractor when removed pursuant to FAR 9-207 (a)**



Robins AFB Small Business



**Angela Dial
Rosemary Foskey
Randy Miller
Cassandra Tharpe**

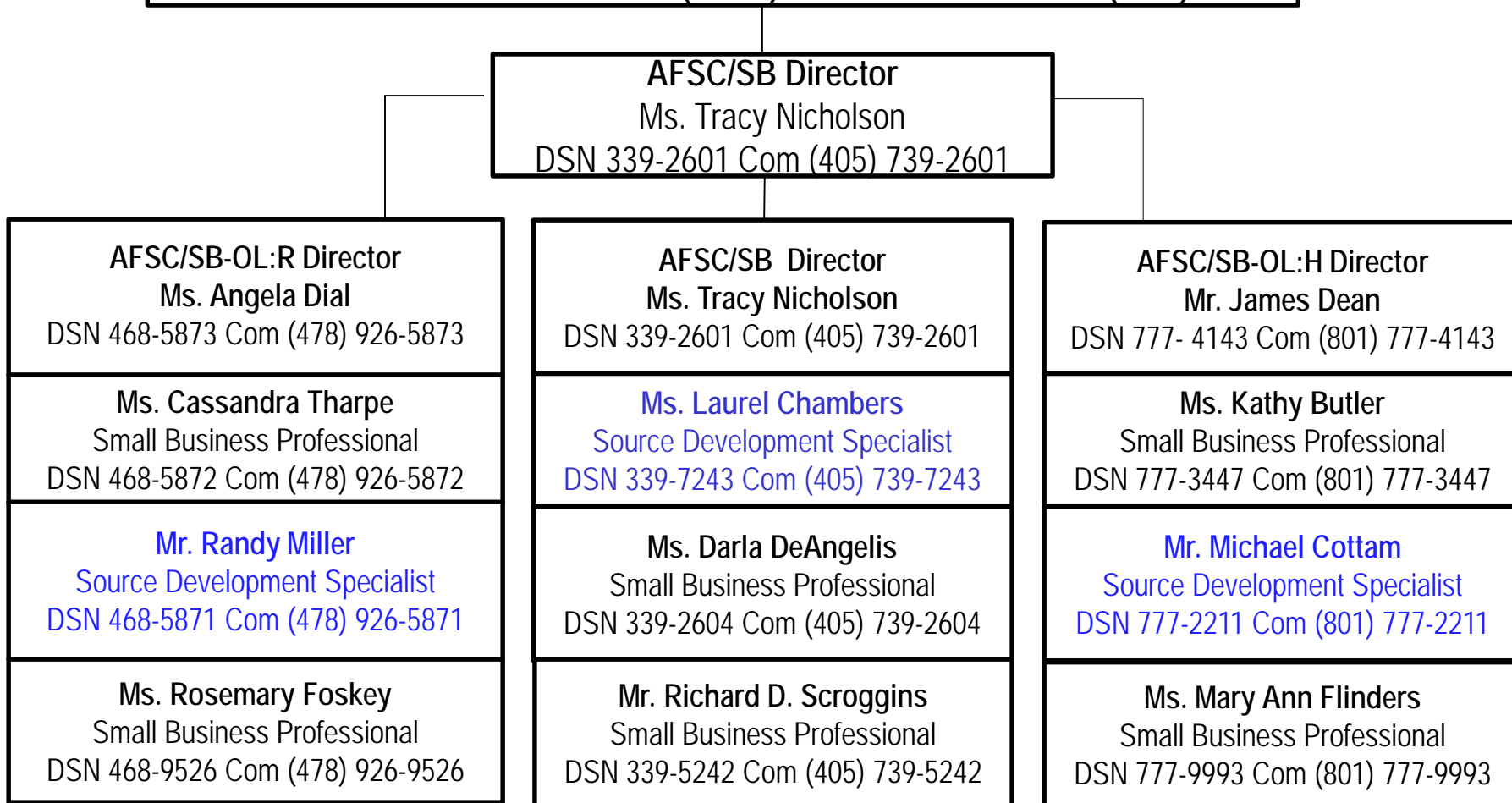
SMALL Business Phone: 478-926-5873



AFSC/SB Organization Contact Information



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





QUESTIONS?



Breaking Barriers ... Since 1947

Air Force Sustainment Center



***Commercially -
Used Overhauled
Industry Day
28 September 2017***



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



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



- **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**

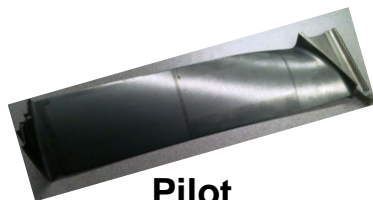


F108

Commercially-Used Overhauled Program



Prototype



Pilot
2011-2012

- 1 approved item
- 1 contract awarded

RESULTS:

- \$36.7M saved
- 84 days reduced PLT

Expand



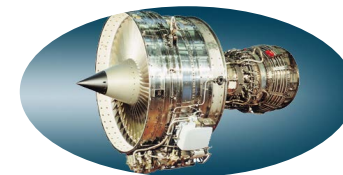
2012-2017

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

RESULTS:

- \$77M saved
- 267 days reduced PLT

Standardize



2018 and Beyond

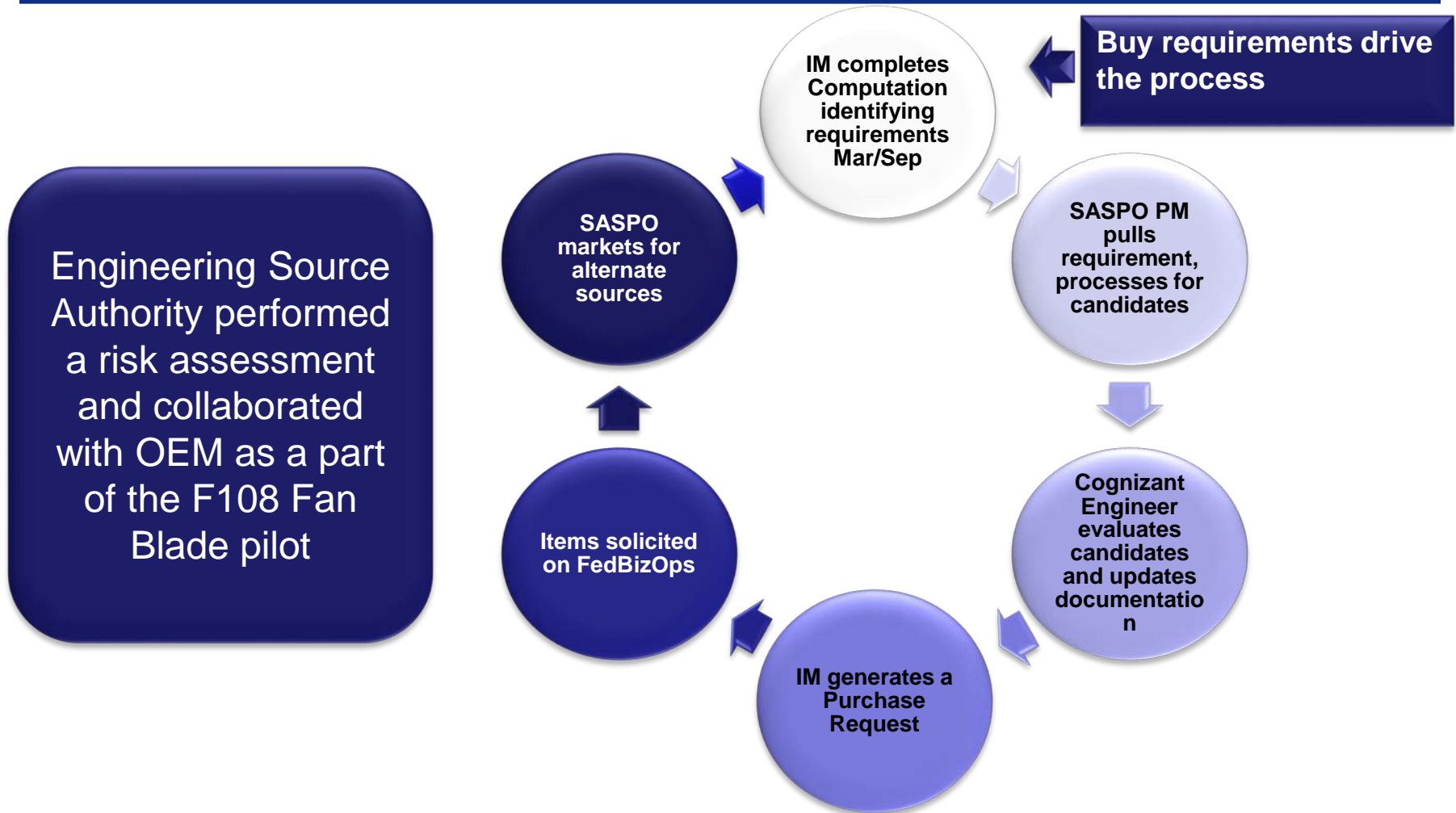
- Analyze F108 Life Limited Parts (LLPs)
- Analyze other commercial derivative engines
- Increase approved items through Source Approval process

Increase Supportability ★ Increase Availability ★ Increase Competition ★ Reduce Costs

Breaking Barriers ... Since 1947



Candidate Determination Process



Increase Supportability ★ Increase Availability ★ Increase Competition ★ Reduce Costs

Breaking Barriers ... Since 1947



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**
 - **Forecasts published twice per year from the Fall and Spring AF Requirements Computation Cycle on Federal Business Opportunities (FedBizOps) at 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
 - 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	1	\$ 157,967	\$ 1,263,735
3	2840-01-490-1337	CASE, A/B,	17	\$662,916	15	\$584,927	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	\$8,911	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	2840-01-610-9164	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



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**
-



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**



Contact Information



- AFSC Small Business Office
 - Website: <http://www.tinker.af.mil/sbo.asp>
 - Email: 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
 - Address: 3001 Staff Drive Suite 2AC4 94B
Tinker AFB, Oklahoma
73145-3009



Questions

Breaking Barriers ... Since 1947



BREAK

Breaking Barriers ... Since 1947

Air Force Sustainment Center



***Reverse Engineering
& Repair Development
Industry Day
28 September 17***



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



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



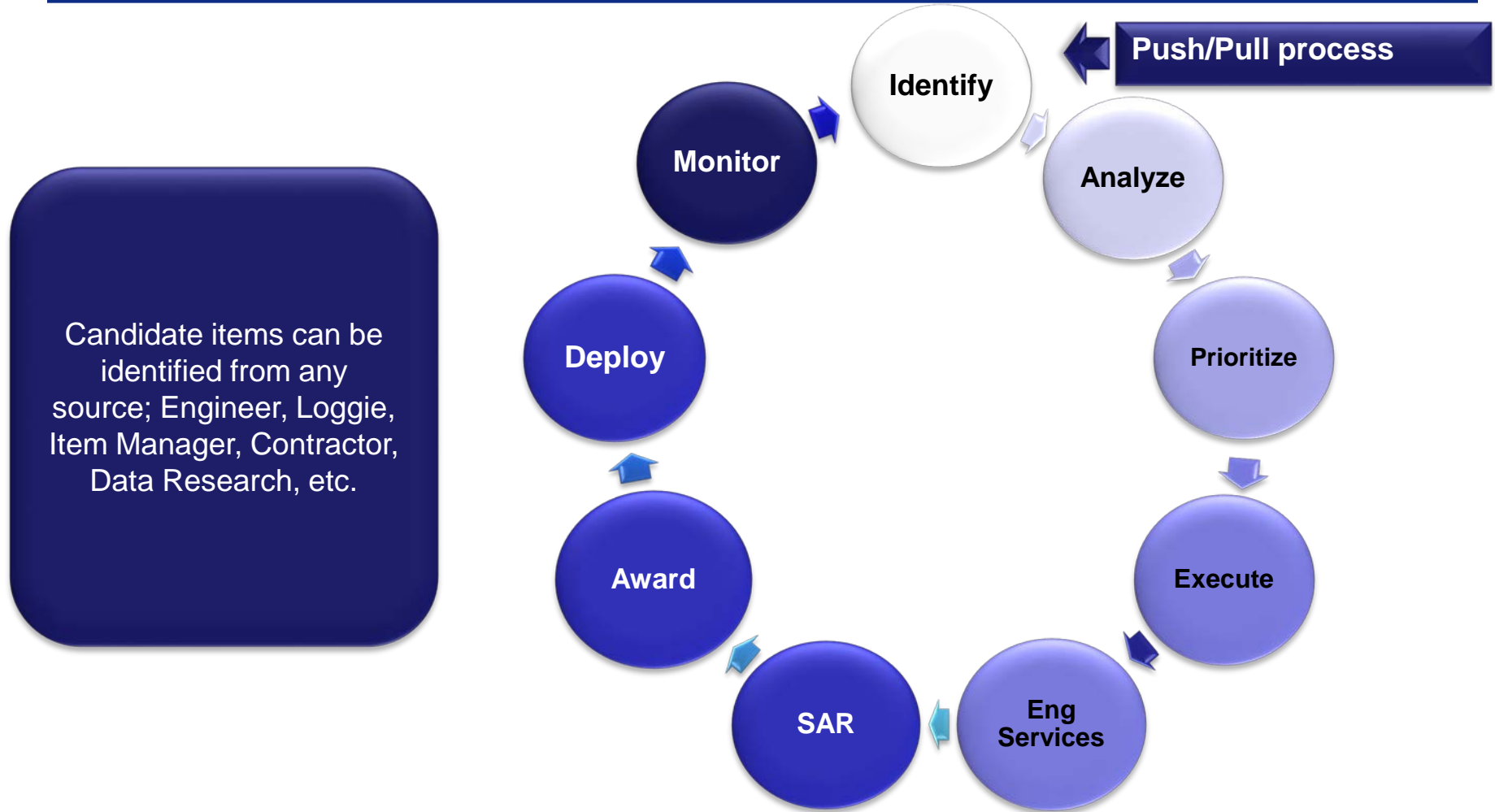
448 SCMW RE / RD Plan



- 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

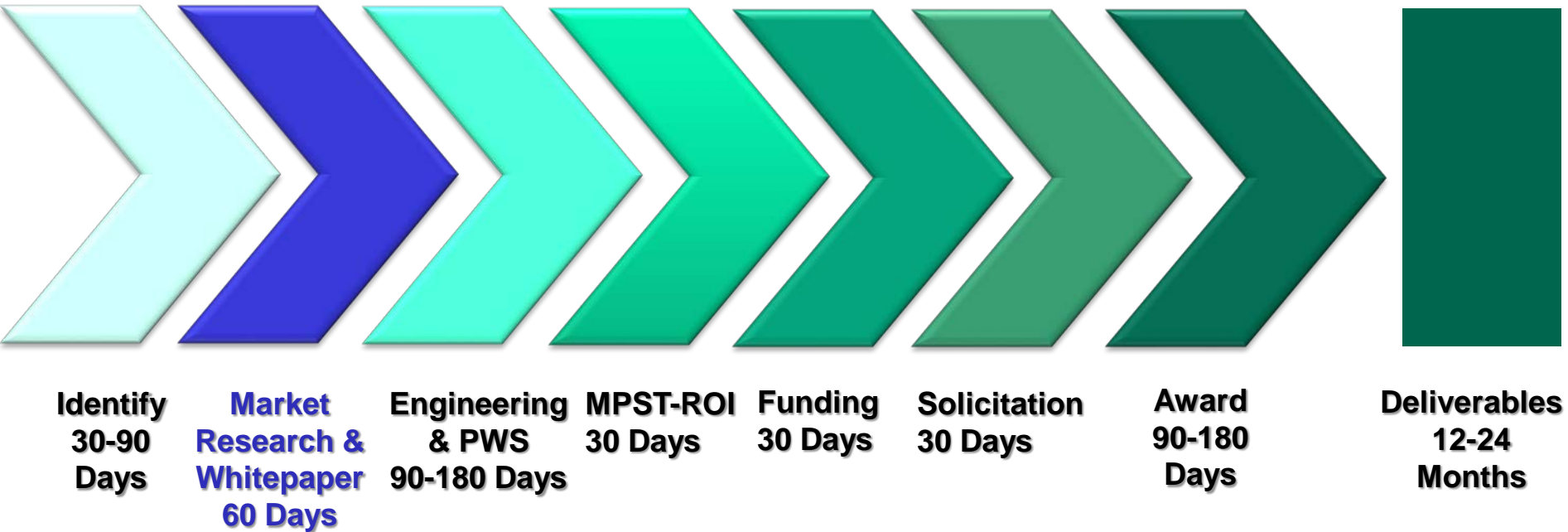


Increase Supportability ★ Increase Availability ★ Increase Competition ★ Reduce Costs

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



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



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



Reverse Engineering Candidates

Breaking Barriers ... Since 1947



Infrared Receiver

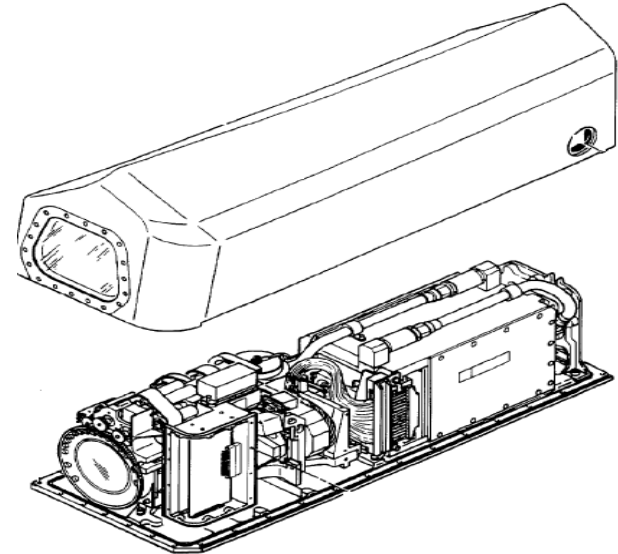
Repair Development
Robins AFB



Description

TMS: F-15
Noun: Infrared Receiver
Common Noun: Fixed Image Navigation Set
NSN: 5855-01-413-8962AY
PN: 717612000-249
407 SCMS

☐ 761 ☐ 762 ☐ EDL ☐ RDL ☐ Print



Details

- Carcass constrained item do to parts obsolescence
- Contract/Organic repair / Very limited F condition assets in the rotary pool
- Piece parts supportability not meeting repair production requirements/field demands / very limited repair capability for delaminated circuit cards

Status

- Funds unavailable to support buy requirement to upgrade to 3rd gen FINS
- Piece parts encountering product quality issues
- Repair shop has increased working level to decrease backorders / all available repairable assets inducted...backorders continue to rise



Maritime A/D Converter

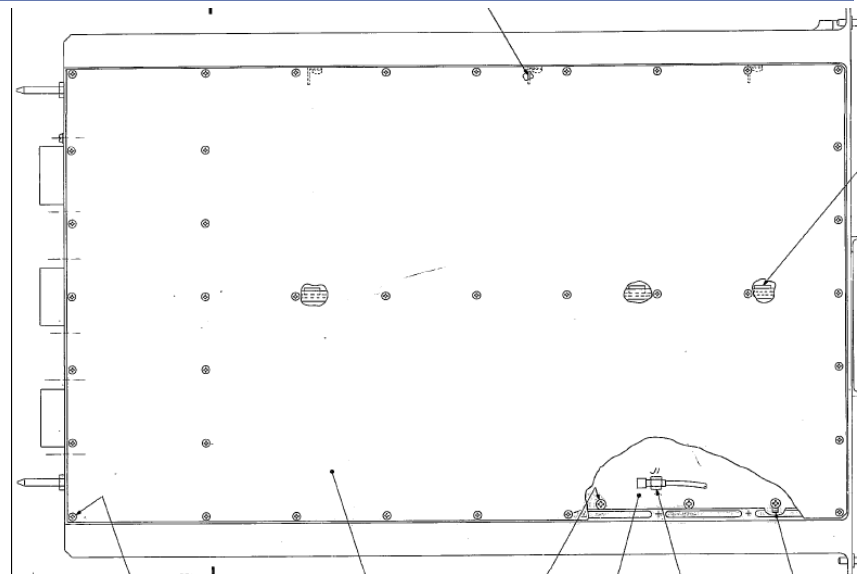
Replacement
Robins AFB



Description

TMS: E-3 AWACS APY-1/2 Radar
Noun: Maritime A/D Converter
NSN: 5841-01-108-5653
PN: 668R162G01
407 SCMS

☐ 761 ☒ 762 ☐ EDL ☐ RDL ☐ Print



Details

- Currently 1 serviceable asset and 4 unserviceable assets in AF Supply
- No longer procurable, contract repair
- Top level drawing
- Distribution Statement C

Status

- OEM experiencing component obsolescence affecting repair



Data Com A/ D Converter

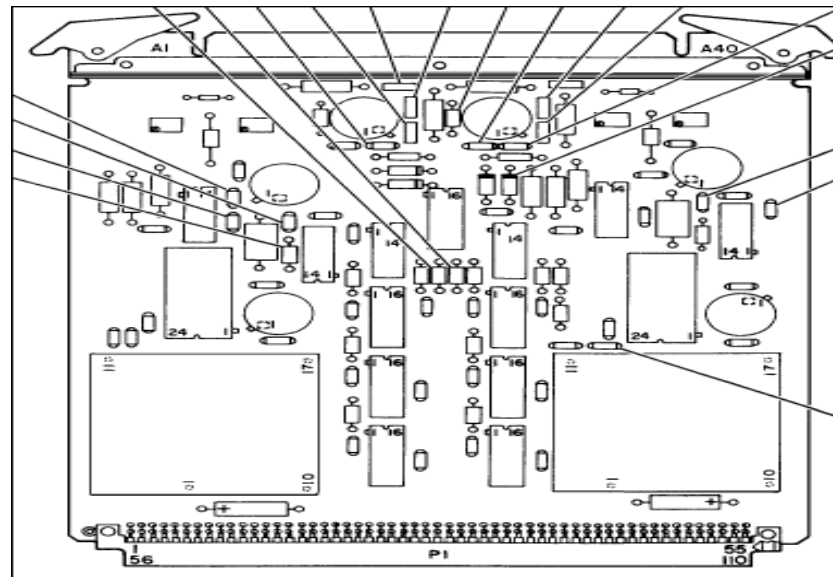
Replacement
Robins AFB



Description

TMS: E-3 AWACS APY-1/2 Radar
Noun: Data Com A/ D Converter
NSN: 5998-01-563-4836CW
PN: 3D62393G01
AMC: 4R
Distribution Statement: D
407 SCMS

○ 761 ● 762 ● EDL ● RDL ● Print



Details

- Currently 0 serviceable and 1 unserviceable asset in AF Supply
- No longer procurable, organic depot repair
- Top level drawing

Status

- Depot experiencing component obsolescence affecting repair



RF Monitor

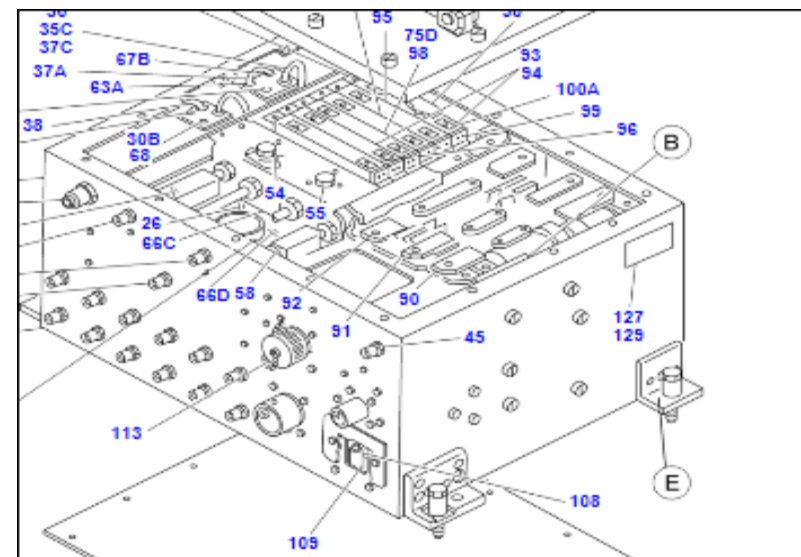
Replacement/RAM-C
Robins AFB



Description

TMS: E-3 AWACS APY-1/2 Radar
Noun: RF Monitor
NSN: 5841-01-118-7007
PN: 684R598G01
407 SCMS

○ 761 ● 762 ○ EDL ○ RDL ○ Print



Details

- Currently 12 serviceable assets and 19 unserviceable assets in AF Supply
- No longer procurable, contract repair
- Top level drawing
- Distribution B&D

Status

- OEM experiencing component obsolescence affecting repairs
- Some component parts experiencing significant cost increases



Oscillator

Replacement
Robins AFB



Description

TMS: E-3 AWACS APY-1/2 Radar

Noun: Oscillator

NSN: 5955-01-034-9567CW

PN: 583R324A04

AMC: 3Q

Distribution Statement D

407 SCMS

☐ 761 ☒ 762 ☐ EDL ☐ RDL ☐ Print

No Picture available

Details

- Currently 7 serviceable assets and 0 unserviceable assets in AF Supply
- No longer procurable, contract repair
- Source Control Drawing

Status

- OEM experiencing component obsolescence affecting repair



Trigger Pulse Amplifier

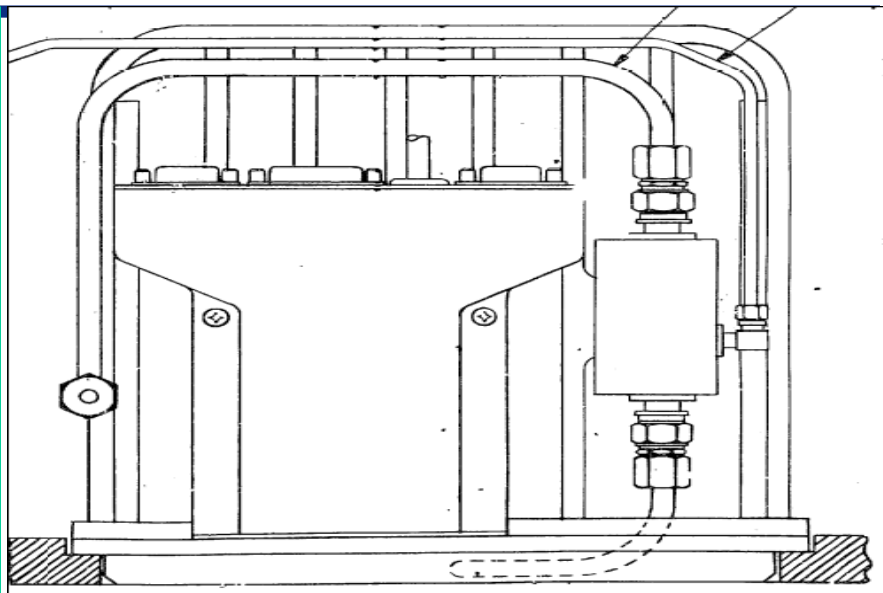
Replacement
Robins AFB



Description

TMS: E-3 AWACS APY-1/2 Radar
Noun: Trigger Pulse Amplifier
NSN: 5996-01-112-6542
PN: 711R334G01
407 SCMS

○ 761 ○ 762 ● EDL ● RDL ● Print



Details

- Currently 0 serviceable assets and 65 unserviceable assets in AF Supply
- No longer procurable, organic depot repair
- History of tester issues also affects repair turnaround.
- Top level drawing
- Distribution Statement B

Status

- Depot experiencing component obsolescence affecting repair
- Previous redesign and flight test ready prototype available but contains DMS issues
- Complete previous redesign and field it.



Transmit Angle Control

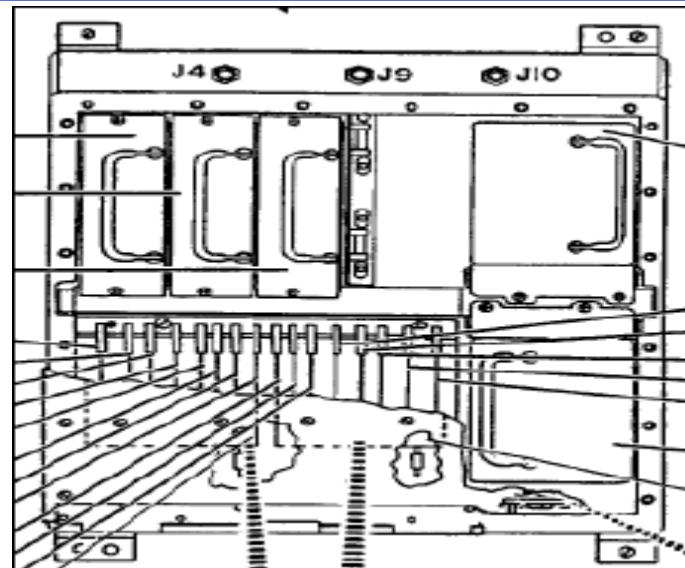
Replacement
Robins AFB



Description

TMS: E-3 AWACS APY-1/2 Radar
Noun: Transmit Angle Control
NSN: 5841-01-452-0518
PN: 792R374G01
Distribution Statement C
407 SCMS

○ 761 ● 762 ○ EDL ○ RDL ○ Print



Details

- Currently 9 serviceable assets and 6 unserviceable assets in AF Supply
- No longer procurable, contract repair
- Top level drawing

Status

- OEM experiencing component obsolescence affecting repair turn around time.



Slip Ring Assembly

Alternate Source
Robins AFB



Description

TMS: E-3 AWACS APY-1/2 Radar

Noun: Slip Ring Assembly

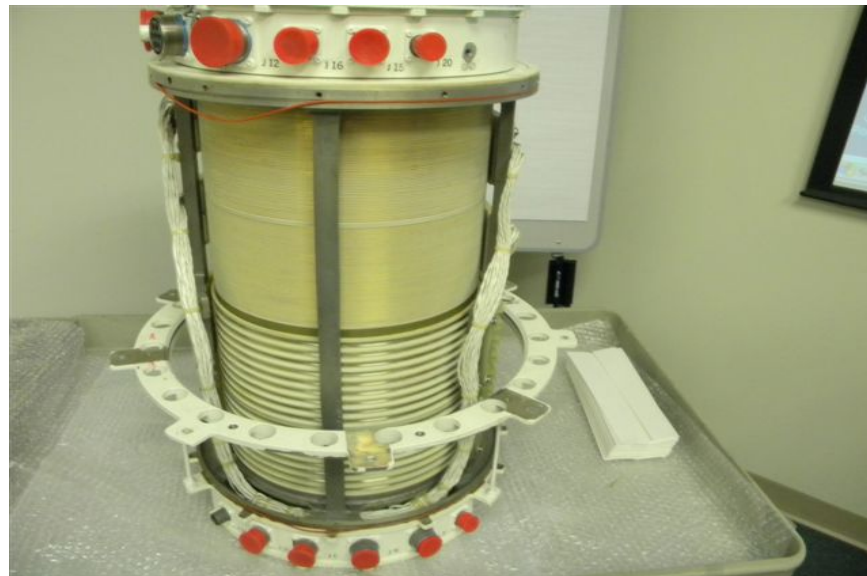
NSN: 5985-01-521-3681CW

PN: 6430-0000

Distribution Statement D

407 SCMS

☐ 761 ☐ 762 ☐ EDL ☐ RDL ☐ Print



Details

- Part of RF Rotary Coupler, PN: 1905CF, NSN: 5985-01-593-8954 subassembly.
- Slip ring is removed and sent to OEM for repair or manufacture
- Top level drawing
- No drawing on Slip Ring

Status

- OEM has long lead time for repair
- Seeking an alternate source for repair and manufacture.



PSDU

Replacement
Robins AFB



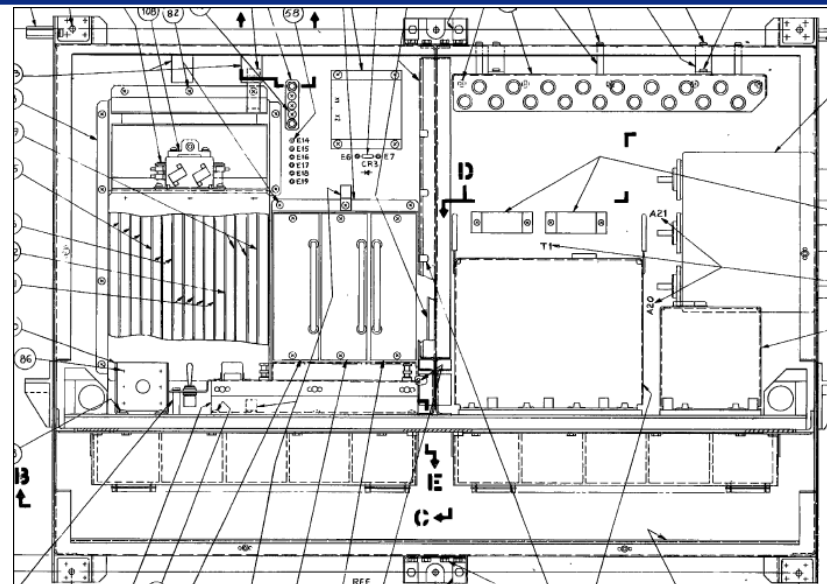
Description

TMS: E-3 AWACS APY-1/2 Radar
Noun: Phase Shifter Driver Unit (PSDU)
NSN: 5841-01-597-5751CW
PN: 707R158G02
Distribution Statement D
407 SCMS

○ 761 ○ 762 ○ EDL ○ RDL ○ Print

Details

- Currently 0 serviceable assets and 2 unserviceable assets in AF Supply
- No longer procurable, contract repair
- Top level drawing



Status

- OEM experiencing component obsolescence affecting repair



TADIL-A Modem

Replacement
Robins AFB



Description

TMS: E-3 AWACS

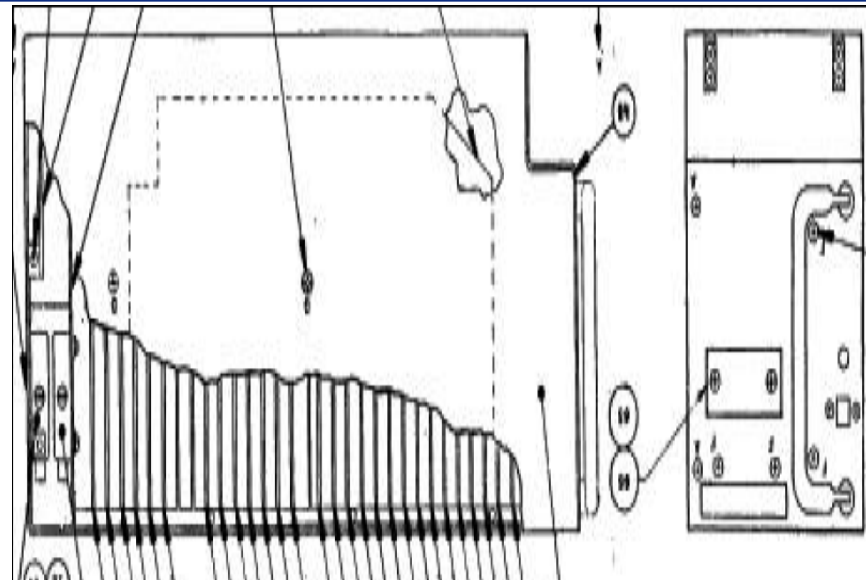
Noun: Tactical Digital Information Link (TADIL-A Modem)

NSN: 7050-01-015-4311

PN: 622-1399-001

407 SCMS

☐ 761 ☐ 762 ☒ EDL ☐ RDL ☐ Print



Details

- Currently 0 serviceable assets and 32 unserviceable assets in AF Supply
- No longer procurable, contract repair
- Top level drawing

Status

- OEM experiencing component obsolescence affecting repairs.
- Previous redesign accomplished but under required weight.



Transducer

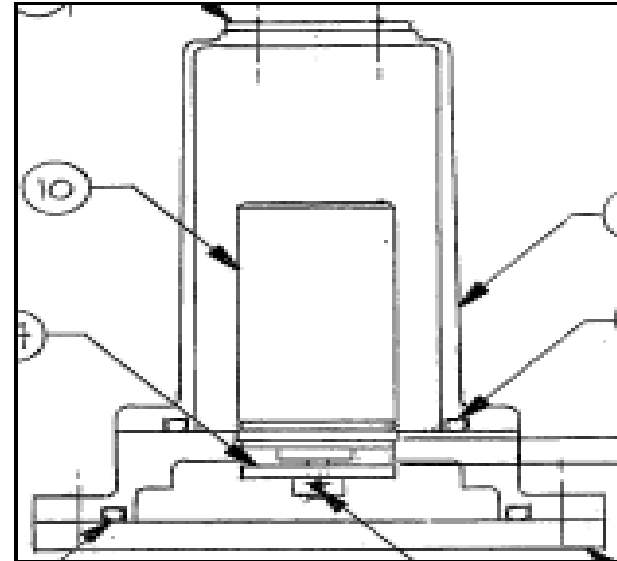
Replacement/RAM-C
Robins AFB



Description

TMS: E-3 AWACS
Noun: Transducer
NSN: 7025-01-045-0828JZ
PN: 204-18344-6
Distribution Statement C
407 SCMS

☐ 761 ☐ 762 ☐ EDL ☐ RDL ☐ Print



Details

- Currently 1 serviceable assets and 3 unserviceable assets in AF Supply
- No longer procurable, contract repair
- Top level drawing

Status

- OEM experiencing component obsolescence affecting repair



WRT-701X Navigational Receiver Transmitter

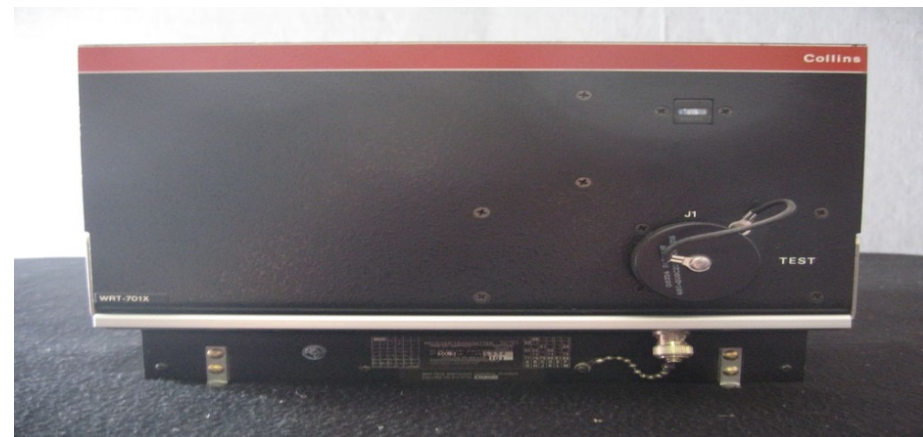
Alternate Source
Robins AFB



Description

TMS: KC-135/E-8
Noun: WRT-701X Navigational RX/TX
NSN: 5841-01-432-3798
PN: 622-5132-401
407 SCMS

● 761 ● 762 ○ EDL ○ RDL ○ Print



Details:

- CLS repaired: FA8517-15-D-0006 by Rockwell
- Currently zero serviceable assets with 63 B/O's
- Asset is not procurable
- Organic repair stand up not possible—TDP not for sale
- Asset faces several DMSMS issues

Status

- Repair contract is in place with follow on in work--asset is carcass constrained
- A contract buy for 58 assets to add to spares pool is in work (FD20601800151)



APQ-166 Reflector

Repair Development
Robins AFB



Description

TMS: B-52 APQ-166
Noun: Reflector, Antenna
NSN: 1280-00-732-6349
PN: 3780-1175G1
407 SCMS

No Picture available

☐ 761 ☐ 762 ☐ EDL ☐ RDL ☐ Print

Details

- Currently 1 Serviceable asset in supply
- Currently 6 Unserviceable assets in supply
- Develop capability to repair and accomplish complete overhaul

Status

- Antenna shops follows the procedure listed below

IAW T.O. 11B46-6-5-3, para 5.4.2 states:

"5.4.2 Reflector Repair. If Reflector damage does not warrant complete replacement of the reflector, the following procedure shall be used for repair of minor damage. Reflectors which can be repaired should be routed to plastic shop for repair. Repair reflector using TO 1-1-24 is a guide



APQ-166 Pressurization Unit

Reverse Engineering
Robins AFB



Description

TMS: B-52 APQ-166
Noun: Pressurization Unit
NSN: 1280-00-898-3679
PN: 101-352
407 SCMS

No Picture available

● 761 ○ 762 ○ EDL ○ RDL ○ Print

Details

- 26 Serviceable units in the field
- 19 units in repair at Robins repair facility
- Parts issues with the switches, dehydrator assembly, and valves
- D200A is reporting a buy, but OEM reports they do not have all of the drawings needed to produce new assets

Status

- Parts issues being worked through the PNSSR process
- No Bid



Electrical Plug-In-Unit

Reverse Engineering
Robins AFB



Description

TMS:F15 ESTS Tester
Noun: Electronic Plug-In-Unit
NSN: 6625-01-434-1238
PN: 1140A-SY12
410 SCMS

☐ 761 ☐ 762 ☐ EDL ☐ RDL ☐ Print



Details

- Currently 0 Serviceable assets in supply
- Current Contract Repair (NGC)
- Repair TAT 210 Days
- Total BOs 15, MICAPs 9, Aging 364 days
- F-Cons 8, QDR 2

Status

- OEM no longer produce this item
- End of life was 2014 on current version
- Lack of Spars due to high condemnation rates



Electronic Plug-In-Unit

Reverse Engineering
Robins AFB



Description

TMS:F15 ESTS Tester
Noun: Electronic Plug-In-Unit
NSN: 6625-01-432-9004
PN: A31U29830
410 SCMS

☐ 761 ☐ 762 ☐ EDL ☐ RDL ☐ Print



Details

- Currently 0 Serviceable assets in supply
- Current Contract Repair (NGC)
- Repair TAT 120 Days
- Total BOs 20, MICAPs 11, Aging 252 days
- F-Cons 17, QDR 4
- Replaced During Mid-Life upgrade FY18

Status

- IPT is pursuing the purchase of surplus stock to meet the requirement until the mid-life upgrade is fielded.



Computer System

Reverse Engineering or Repair
Robins AFB



Description

TMS:F15 ESTS Tester
Noun: Computer System
NSN: 7010-01-568-0005
PN: 150-037458
410 SCMS

☐ 761 ☐ 762 ☐ EDL ☐ RDL ☐ Print



Details

- Currently 0 Serviceable assets in supply
- Currently No Source of Repair
- Total BOs 2, MICAPs 1, Aging 264 days
- F-Cons 5, QDR 0

Status

- Computer is currently 14 years old with no source of repair.
- IPT is investigating DMISA repair with ESTS shop at Nellis.
- This item is a single point of failure for the entire test set.



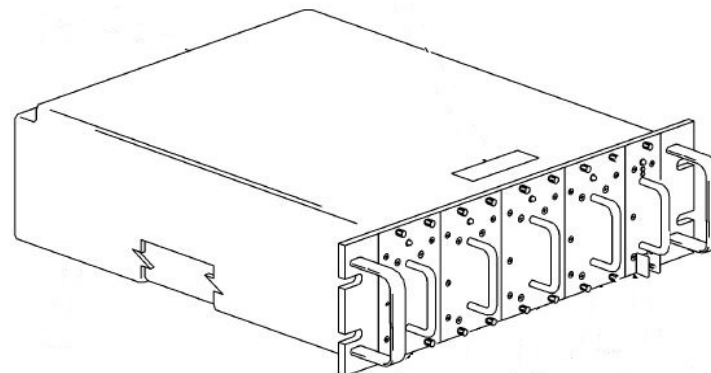
Electrical Chassis

Reverse Engineering
Robins AFB



Description

TMS: F15 ESTS Tester
Noun: Electrical Chassis
NSN: 5975-01-528-9305
PN: 5211605-04
410 SCMS



☐ 761 ☐ 762 ☐ EDL ☐ RDL ☐ Print

Details

- Currently 0 Serviceable assets in supply
- Current Contract Repair (NGC)
- Repair TAT 250 Days
- Total BOs 3, MICAPs 1, Aging 233 days
- F-Cons 1, QDR 1

Status

- AC power assembly chassis that houses four independently programmable power supply modules (ACPS1 through ACPS4) and a power supply controller module (PSCTRL).
- Currently have 1 carcass.



Electrical Chassis

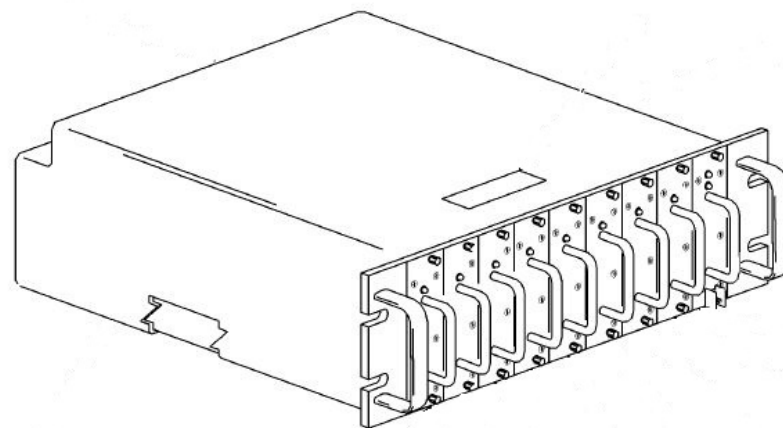
Reverse Engineering
Robins AFB



Description

TMS: F15 ESTS Tester
Noun: Electrical Chassis
NSN: 5975-01-527-5428
PN: 5211605-03
410 SCMS

☐ 761 ☐ 762 ☐ EDL ☐ RDL ☐ Print



Details

- Currently 0 Serviceable assets in supply
- Current Contract Repair (NGC)
- Total BOs , MICAPs , F-Cons 0, QDR 1

Status

The Turn- Around- Time (TAT) 200 IAW Contract.



Data Transfer Unit

Repair Development
Robins AFB



Description

TMS:

Noun: Data Transfer Unit (DTU)

NSN 7025016580455GC(Master)

PN 30192-0501 (Master)

NSN: 7025-01-481-7741

P/N: 30192-0201

411 SCMS

☐ 761 ☐ 762 ☐ EDL ☐ RDL ☐ Print



Details

- Next Higher Assembly is the Integrated Vehicle Health Management System on board the HH-60G Helicopter
- Repair contract is Sole Source to the OEM
- Seeking alternate sources of repair to meet demand
- Back orders and MICAPs continue to accrue
- Data proprietary to Original Equipment Manufacturer
- Air Force Maintenance Tech Order: 1H-60(H)G-2-15-1

Status

- One of each asset sent to Robins AFB Depot EMXG team on 17 Aug 2017 to evaluate cost and schedule to develop Organic Depot Level Repair capability
- Estimated response from EMXG by 17 Oct 2017
- Monthly Demand Rate: 0.67



Remote Data Concentrator

Repair Development
Robins AFB



Description

TMS:

Noun: Remote Data Concentrator (RDC)

NSN: 1680-01-500-6388GC

P/N: 30201-0501

411 SCMS



○ 761 ○ 762 ○ EDL ○ RDL ○ Print

Details

- Next Higher Assembly is the Integrated Vehicle Health Management **System** on board the HH-60G Helicopter
- Repair contract is Sole Source to the OEM
- Seeking alternate sources of repair to meet demand
- Back orders and MICAPs continue to accrue
- Data proprietary to Original Equipment Manufacturer
- Air Force Maintenance Tech Order: 1H-60(H)G-2-15-1

Status

- One of each asset sent to Robins AFB Depot EMXG team on 17 Aug 2017 to evaluate cost and schedule to develop Organic Depot Level Repair capability
- Estimated response from EMXG by 17 Oct 2017
- **Monthly Demand Rate: 0.67**



Control Display Unit

Repair Development
Robins AFB



Description

TMS:

Noun: Control Display Unit (CDU)

NSN: 1680-01-533-8587GC

P/N: 10150-024

411 SCMS

○ 761 ○ 762 ○ EDL ○ RDL ○ Print

Details

- Next Higher Assembly is the Integrated Vehicle Health Management System on board the HH-60G Helicopter
- Repair contract is Sole Source to the OEM
- Seeking alternate sources of repair to meet demand
- Back orders and MICAPs continue to accrue
- Data proprietary to Original Equipment Manufacturer
- Air Force Maintenance Tech Order: 1H-60(H)G-2-15-1

TO 1H-60-956

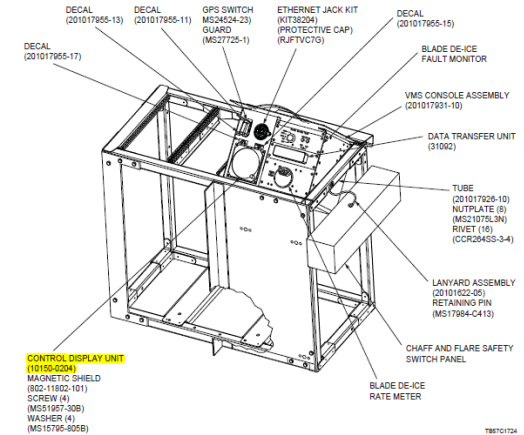


Figure 37. Flight Engineers Console Installation.

Status

- One of each asset sent to Robins AFB Depot EMXG team on 17 Aug 2017 to evaluate cost and schedule to develop Organic Depot Level Repair capability
- Estimated response from EMXG by 17 Oct 2017
- Monthly Demand Rate: 1



Additional Reverse Engineering Candidates

Breaking Barriers ... Since 1947



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



#10 Spacer

Reverse Engineering
Tinker AFB



Description

TMS: P103
Noun: #10 Spacer
NSN: 2840-01-305-5305
PN: 364805P20

● 761 ○ 762 ● EDL ○ RDL ○ Print



Details

- Currently 29 Serviceable assets in supply
- #10 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
- No source to produce parts once assets are exhausted
- Develop capability to manufacture

Status

- Material Review Board history reflects parts failing dimensional and visual inspection

Status



#11 Spacer

Reverse Engineering
Tinker AFB



Description

TMS: P103
Noun: #11 Spacer
NSN: 2840-01-305-5306
PN: 364806P20



● 761 ○ 762 ●○ EDL ● RDL ○ Print

Details

- Currently 104 Serviceable assets in supply
- #11 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
- No source to produce parts once assets are exhausted
- Develop capability to manufacture

Status

- Material Review Board history reflects parts failing dimensional inspection but has been acceptable for use by engineering

Status



#12 Spacer

Reverse Engineering
Tinker AFB



Description

TMS: P5/9/102C/103
Noun: #12 Spacer
NSN: 2840-01-305-5308
PN: 762379P20

● 761 ○ 762 ● ○ EDL ○ RDL ○ Print



Details

- Currently 87 Serviceable assets in supply
- #12 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
- No source to produce parts once assets are exhausted
- Develop capability to manufacture

Status

- Material Review Board history reflects parts failing dimensional and visual inspection (for pitting).

Status



#15 Spacer

Reverse Engineering
Tinker AFB



Description

TMS: P103

Noun: #15 Spacer

NSN: 2840-01-305-5307

PN: 413918P20

● 761 ○ 762 ●○ EDL ○ RDL ○ Print



Details

- Currently 54 Serviceable assets in supply
- #15 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
- No source to produce parts once assets are exhausted

Status

- Material Review Board history reflects parts failing dimensional inspection but has been acceptable for use by engineering

Develop capability to manufacture *Born in the Barriers ... Since 1947*



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

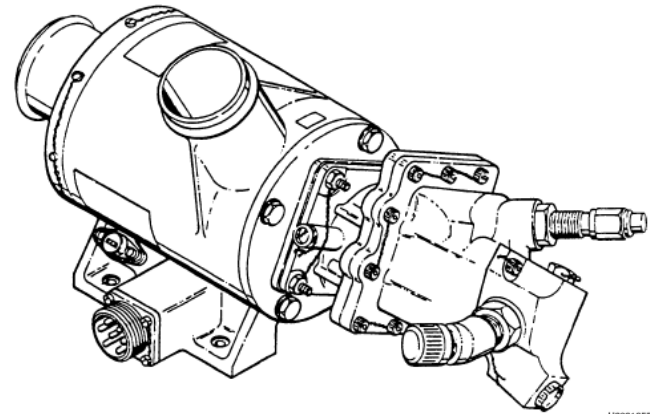
Reverse Engineering
Tinker AFB



Description

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

TO 9H4-3-67-3



HQ201385

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.



Heat Exchanger

Reverse Engineering
Tinker AFB



Description

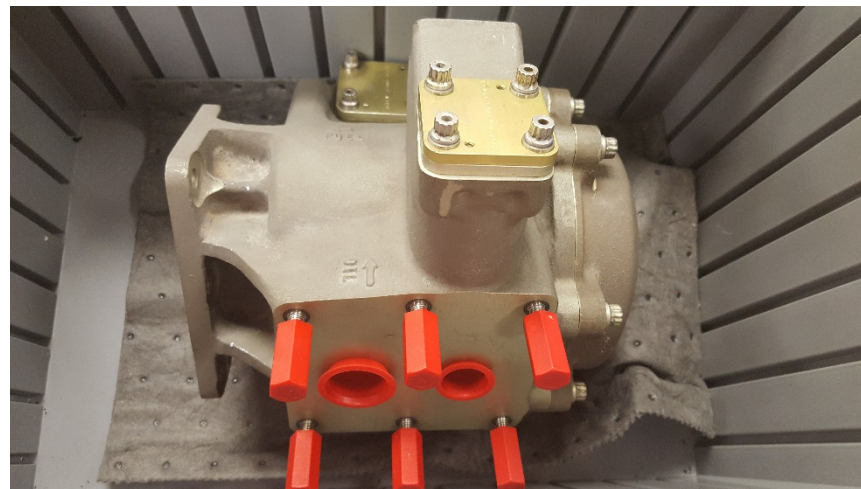
TMS: F108

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



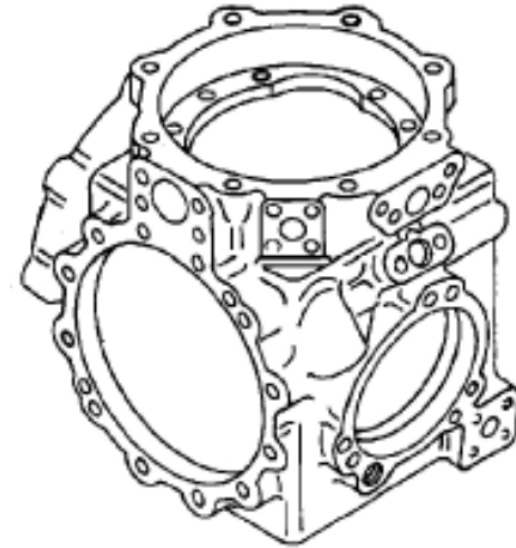
Transfer Gearbox

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.



Repair Development Candidates



Digital Keyboard Interface Card A-10 Central Display Unit



Repair Development
Hill AFB

Description

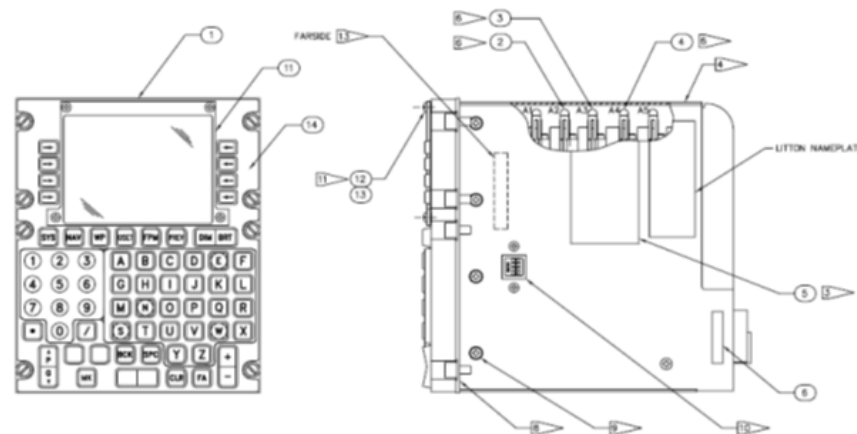
TMS: A-10

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)



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



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 Source Candidates



ICBM - Zero to One Initiative

Reverse Engineering/Repair Development
Hill AFB



- 414th 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

Alternate Sources
Tinker AFB



- 44 Air Force Managed Items
 - Alternate Sources
- 418 DLA Managed Items
 - Alternate Sources
- 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



Additive Manufacturing Projects

Breaking Barriers ... Since 1947



F101 / F110-100 / F118 Forward Sump Cover



New Manufacture

AFLCMC... Providing the Warfighter's Edge

TMS: F101 / F110-100 / F118

Noun: Forward Sump Cover

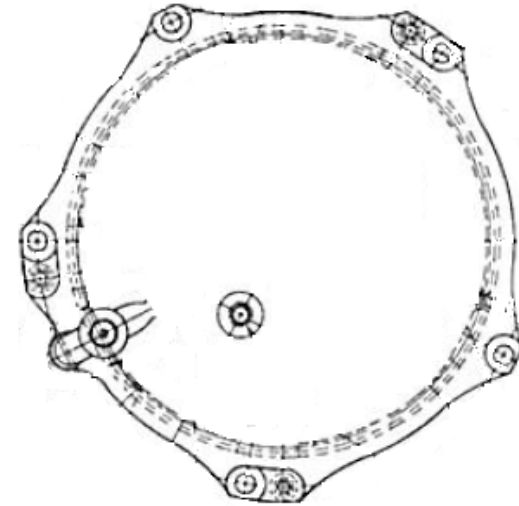
NSN: 2840-01-465-4606

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

AFLCMC... Providing the Warfighter's Edge

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

AFLCMC... Providing the Warfighter's Edge

TMS: F110-100

Noun: Main Fuel Pump Housing

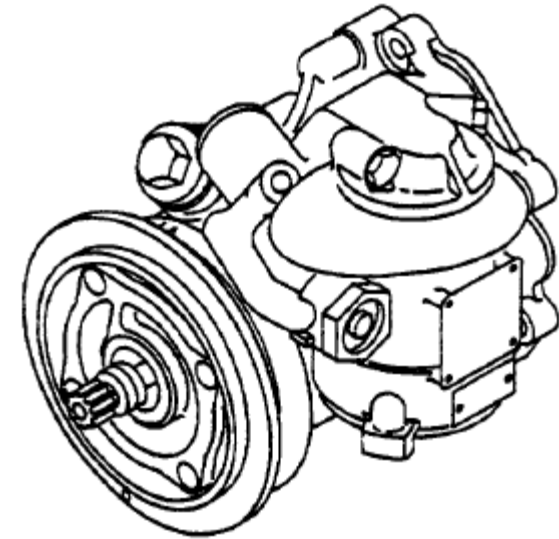
NSN: 2915-01-313-8129

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

AFLCMC... Providing the Warfighter's Edge

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

AFLCMC... Providing the Warfighter's Edge

TMS: F101

Noun: No. 5 Bearing Housing

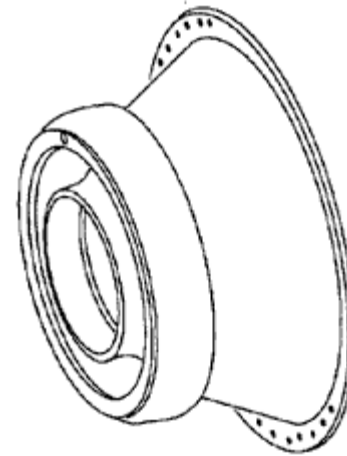
NSN: 2840-01-174-5731

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

AFLCMC... Providing the Warfighter's Edge

TMS: F101

Noun: IGV Inner Shroud

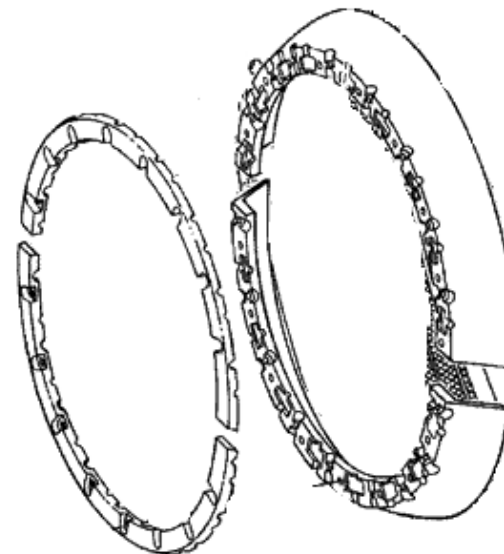
NSN: 2840-01-196-3716 / 2840-01-173-7430

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

AFLCMC... Providing the Warfighter's Edge

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

AFLCMC... Providing the Warfighter's Edge

TMS: F101 / F110-100 / F118

Noun: Fan Shaft Cover

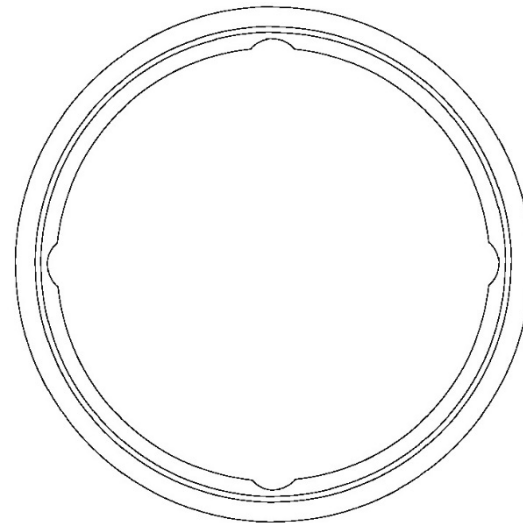
NSN: 2840-01-447-2703

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

AFLCMC... Providing the Warfighter's Edge

TMS: F100-100

Noun: W1 Electrical Cable (Black)

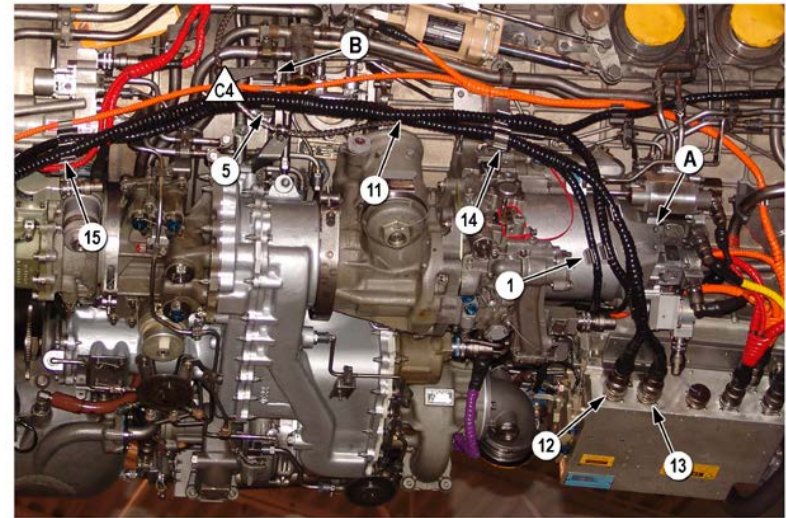
NSN: 6150-01-428-4493

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



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



FINAL COMMENTS

Breaking Barriers ... Since 1947



Source Approval Request (SAR) Training

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

28 Sep 17

Mr. Steve Logan

Presented by: Mr. Randy Harris

AFLCMC/LPE (Propulsion Engineering)

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

Email: 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



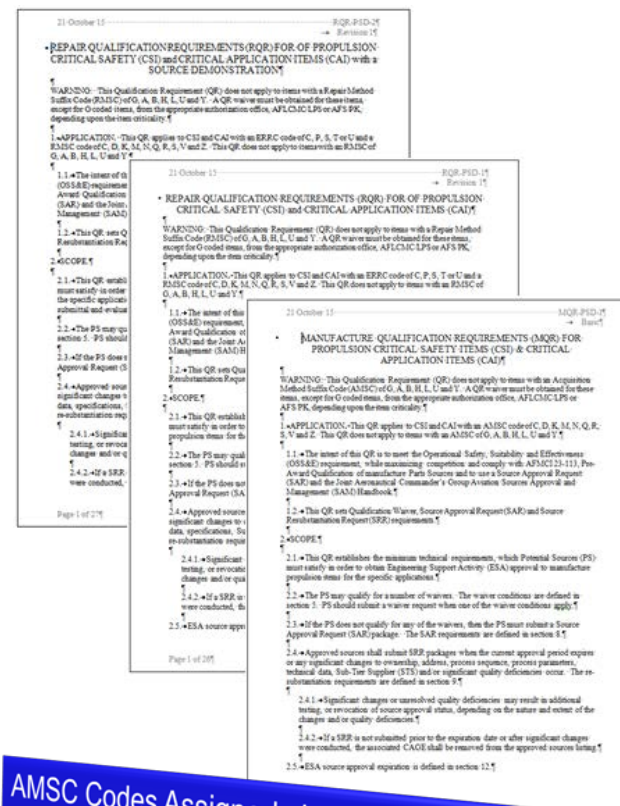
- CAGE
 - DD form 2345
- Quality Management System
 - AS 9100 or ISO 9001 Certification
- Significant Industrial Process Certification
 - Internal Processes must be NADCAP or OEM Certified
 - Non-destructive Inspection (NDI) Level III for any Method Used
- Sub-Tier Supplier Shall Have
 - CAGE
 - AS 9100 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

AFLCMC... Providing the Warfighter's Edge

- 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*

DISTRIBUTION A Approved for Public Release



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

- 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.

		Qualification Waiver Criteria							
Element	Title	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	M (MASTER) S (SAR LITE)
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.

- 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)

DoD Site Survey Number:		START DATE:	COMPLETE DATE:
DoD Site Survey Number = (CAGE Code) - (Lead Service AR/AF/NA/DC) - (month and last two digits of year) e.g. 81996-AF-0314.			
DoD Self-Assessment Number:		Date:	
DoD SA Number = (CAGE Code) - (Self-Assessment SA) - (month and last two digits of year) e.g. 81996-SA-0314.			
INSTRUCTIONS: 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.			
CHECKLIST ITEMS 2 THROUGH 5			
References and Artifacts: 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.			
Dates: When entering dates in the form use the following format. DD MMM YY			
Art/Pass: Fill in check box in Art Column if Artifact is provided. Pass Column is reserved for government use only.			
Tab: 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.			
COMPANY NAME:		COMPANY CAGE:	
ADDRESS:		PHONE:	
CONTRACT/SOLICITATION/ETC. NO.	PCO	NSN or PART NUMBER(S)	
COMPANY POINTS OF CONTACT	TITLE	E-MAIL	
GENERAL INFORMATION			
PRODUCTS OR SERVICES OFFERED			
TOTAL PLANT AREA SQUARE FEET		NO. OF BUILDINGS	
IS FACILITY OWNED OR LEASED?			
NO. OF PRODUCTION EMPLOYEES		NO. OF DESIGN ENGINEERS	
NO. OF PROCESS ENGINEERS		QUALITY ASSURANCE PERSONNEL	
OTHER PERSONNEL			
EDUCATION AND EXPERIENCE LEVEL (Average years)			
PRODUCTION		ENGINEERS	
		QUALITY	



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		
<u>VENDOR SITE SURVEY REPORT</u>		
Survey Finding Number:		Classification -
INSTRUCTIONS: 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.		
Finding Number = (Survey Number) - (sequential number, beginning with 01) e.g. 81996-AR-0804-05.		
Finding Classifications:		
Critical - 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.		
Major - A nonconformance, other than critical, that is likely to result in failure or to materially reduce the usability of the supplies or services for their intended purpose.		
Minor - 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.		
Observation - 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.		
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



#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/>



Questions?

448th Supply Chain Management Wing



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