

# Air Force Materiel Command

---



## Common Support Equipment (CSE) Solutions

(Create Uncommon Acquisition and  
Sustainment Challenges)

CMSgt Steve Hesterman  
Lead Command CSE Manager  
HQ AFMC/A4MM

15 June 2015

---

***Integrity ★ Service ★ Excellence***



# Overview

---

- **Intro to Common Support Equipment**
- **Lead Command Roles & Responsibilities**
- **Common Support Equipment Challenges**



# Support Equipment Categories

## Automatic Test Equipment (ATEs)



&

Test, Measurement, & Diagnostic Equipment

## Aerospace Ground Equip



## Propulsion Equipment



## Munitions Materiel Handling Equipment





# Common vs. Peculiar Defined

	<b><u>Common</u></b>	<b><u>Peculiar</u></b>
<b>Supports</b>	More than One Weapon System	One Weapon System
<b>Funded</b>	Centrally (AFMC is Lead Command)	By Weapon System (Weapon System Lead Command is Lead)
<b>Managed By</b>	Support Equipment & Vehicles & Automatic Test Systems Divisions	Peculiar Weapon System Program Office



# Common or Peculiar?

## Common



MD-1 Universal Towbar  
(Supports F-16, A-10, C-130,  
Global Hawk, etc.)

## Peculiar



C-17 Peculiar Towbar



# Common or Peculiar?

## Peculiar



PD-501 Air Conditioner  
(Supports B-2 Only)

## Common



ACU-808 Large Air Conditioner  
(Supports: B-1B, C-32, E-3,  
E4B, E-8C, RC-135)





# Common or Peculiar?

## Trick Question - Kind of...



New Universal Hydraulic Test Stand – Supports all 1- and 2-hydraulic system aircraft



Legacy Hydraulic Test Stand Supports F-16, A-10, C-130, and C-5 aircraft



# Common or Peculiar So What??

## Lamborghini Countach



Manufactured: 1974-1990

Total Produced: 2,042 (Lifetime)

Manufactured: 1998-2006

Total Produced: 561,249 (in 2002)

## BMW E46





# Common or Peculiar So What??

---

## The Rule of One



- One** Enterprise Solution
- One** Supply Chain
- One** Management Team
- One** Fix for Obsolescence
- One** System to Upgrade
- One** Bill to Pay



# Common or Peculiar So What??

## AFI 63-101/20-101

20 June 2013

**6.17. Support Equipment/Automated Test Systems (SE/ATS).** Application of standardized Support Equipment/Automated Test Systems (SE/ATS) is **preferred to provide efficiency and reduce cost**. The PM shall **minimize** the proliferation of **system-unique equipment** at all levels while ensuring the maintenance and deployment requirements of existing and developing systems are met.

6.17.1. The **PM shall** acquire SE/ATS which is, to the maximum extent possible, common and interoperable with other Services and across multiple systems and munitions. **System unique SE/ATS shall be developed or procured only as a last alternative**, after coordination with the SE/ATS PGM and consideration of SE/ATS that is already in the USAF or DoD inventory.

6.17.2. The **PM shall**:

6.17.2.1. Select SE/ATS based on cost benefit analysis over the system life cycle, reliability, CBM+ compliance, standardization, and field hardness, size, mobility, and environmental needs.

6.17.2.2. **Coordinate SE/ATS development, procurement, and modification requirements with the SE/ATS PGMs, who will ensure that DoD processes for SE and ATS selection are followed.** The SE/ATS PGMs will provide any applicable SE/ATS-specific contract data requirements for incorporation when PMs are authorized to procure unique/peculiar SE/ATS.

**Takeaway:** Teamwork with SE/ATS needs to start early in RFP development and continue through system fielding



# Common or Peculiar Determination

---

The Support Equipment Recommendation Data (SERD) process is designed to prevent the introduction of unnecessary equipment into the Air Force inventory

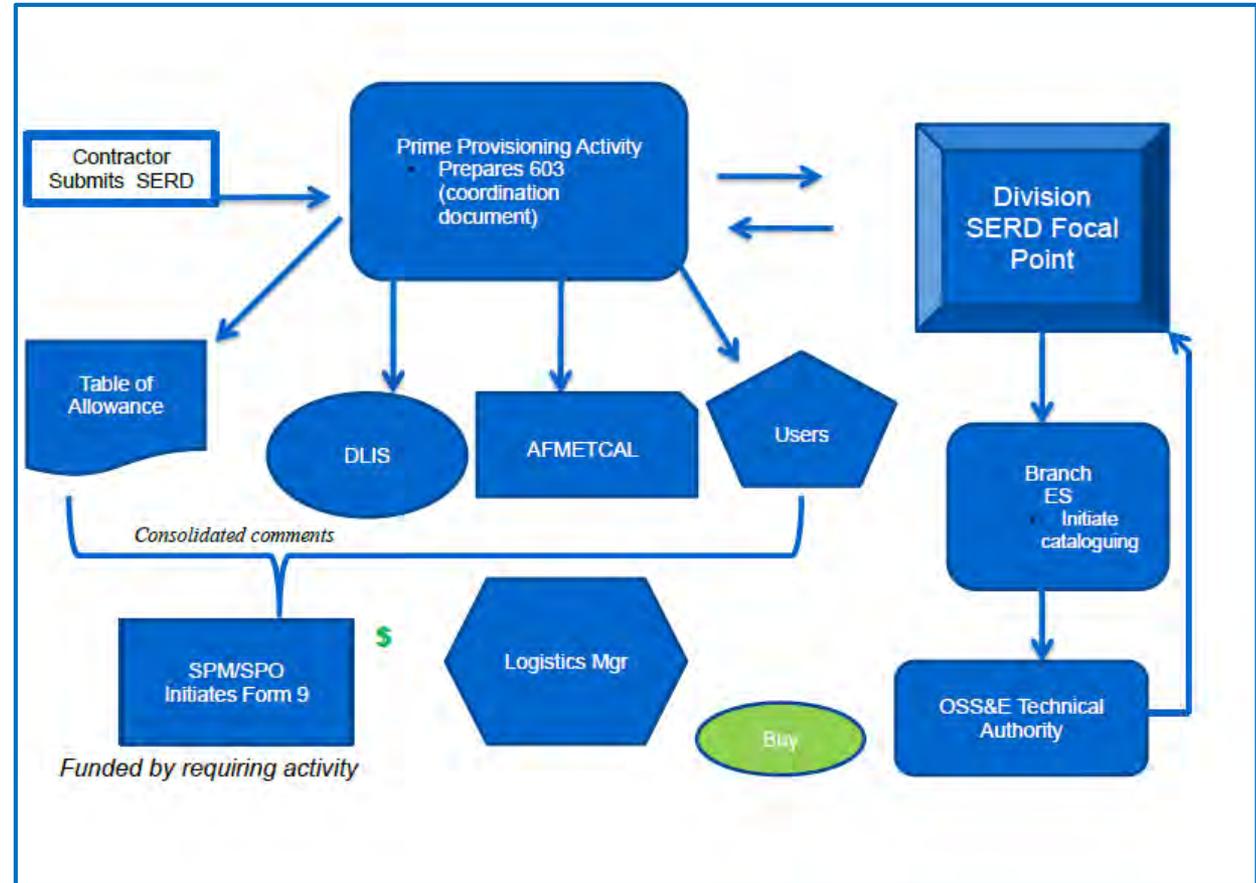
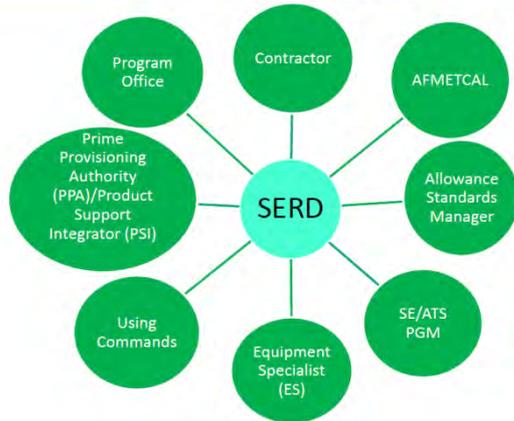
- SERD Process Provides:
  - Validation that proposed support equipment is not duplicating capabilities of existing equipment
  - Ensured accountability of support equipment added to the AF inventory



# Common or Peculiar Determination

## Key Players in the SERD Process

AFLCMC... Providing the Warfighter's Edge



<https://cs1.eis.af.mil/sites/age/SERD/Forms/AllItems.aspx>



# Common Roadmap ATS – Family of Testers

Versatile Depot  
Automatic Test System



Joint Service Electronic  
Combat Systems Tester



Multi-Use System  
Test Next  
Generation



**Goal:** Standardize and Reduce  
Systems to Achieve Economic &  
Logistics Efficiency



# Common Roadmap Smart Equipment Replacements

Universal Hydraulic  
Test Stand



72kW Flight Line  
Generator



250kW Ground  
Power Unit



**Goal:** Standardize and Reduce  
Systems to Achieve Economic &  
Logistics Efficiency



# Lead Command Role

---

## Lead Command Roles & Responsibilities



# Lead Command Role: Represent User Communities





# Lead Command Role: Manage & Sustain

## Automatic Test Equipment



&  
Test, Measurement, & Diagnostic Equipment



1,050 Unique NSNs\*



11,065 Unique NSNs

## Aerospace Ground Equipment



8,038 Unique NSNs

## Propulsion Equipment



4,393 Unique NSNs

## Munitions Materiel Handling Equipment



227 Unique NSNs

**Total: 24,773 Unique NSNs / 214K items**

\*NSN = National  
Stock Number



# Lead Command Role: Prioritize

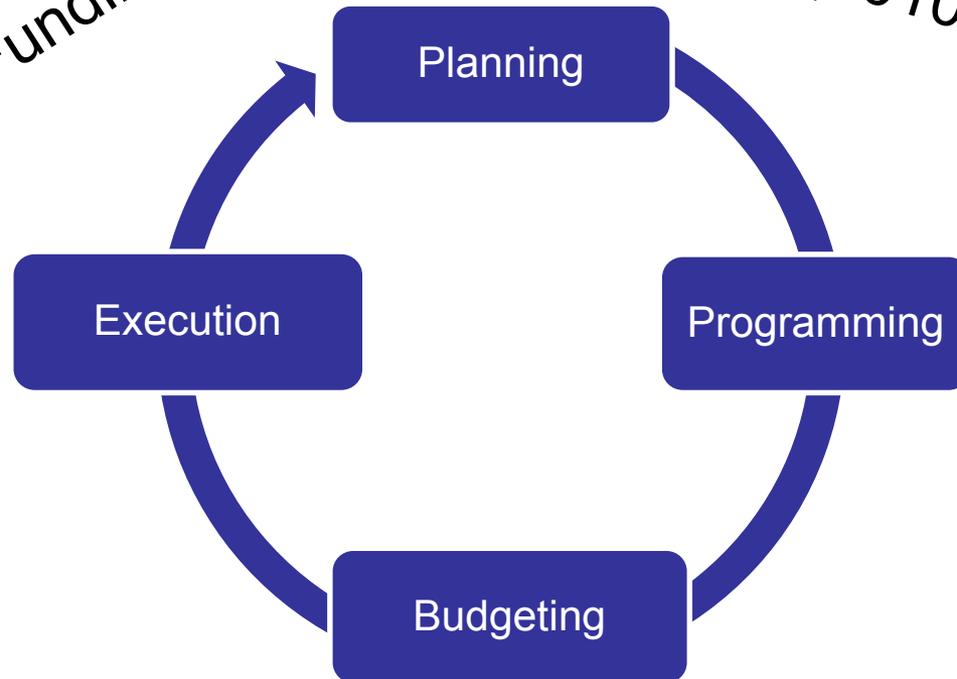




# Lead Command Role: Funding Advocate

Operations &  
Maintenance  
(3400 Funding)

Investment  
(3010 Funding)





# Lead Command Role: Initiate Programs

Federal Business Opportunities

FEDBIZOPPS.GOV

Home Getting Started General Info Opportunities Agencies Privacy

Buyers: [Login](#) | [Register](#) Vendors: [Login](#) | [Register](#) Accessibility

**Request for Information for Engine Test Stand**

Solicitation Number: FA8519-14-R-40000  
Agency: Department of the Air Force  
Office: Air Force Materiel Command  
Location: PK/PZ - Robins AFB

Notice Details Packages Print Link

Original Synopsis  
Mar 14, 2014  
2:29 pm

[Return To Opportunities List](#) [Watch This Opportunity](#)  
[Add Me To Interested Vendors](#)

Solicitation Number: FA8519-14-R-40000 Notice Type: Sources Sought

**Synopsis:**  
Added: Mar 14, 2014 2:29 pm  
The request for information is for the purpose of obtaining information relative to an upcoming procurement action in the Support Equipment and Vehicles Division at Robins AFB in relation to Engine Test Stands.

Companies are encouraged to provide responses to this questionnaire but are advised that their participation is voluntary and no reimbursement of any kind will be provided. A company's participation in the market research via this questionnaire does not obligate the Government to enter into any contractual agreement, either formally or informally, with a company.

**Responses are requested by 14 Apr 2014, 12:00 PM (EDT)**

ALL FILES

- [RFI Questions](#)
- Mar 14, 2014
- [RFI Questions doox](#)
- [PWS RFI.doc](#)
- [PD RFI.doc](#)

GENERAL INFORMATION

Notice Type: Sources Sought

Posted Date: March 14, 2014

Response Date: Apr 14, 2014 12:00 pm Eastern

Archiving Policy: Automatic, 15 days after response date

Archive Date: April 29, 2014



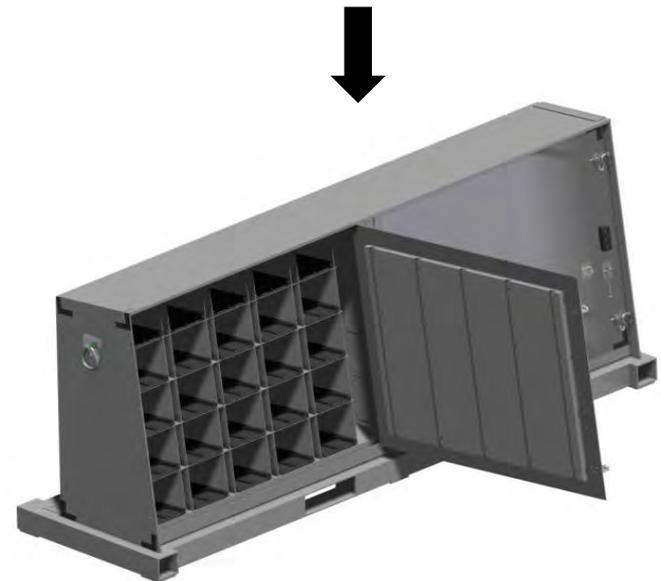
# Lead Command Role: Innovate

## Common ALE-40 Countermeasures Transportation Module



## Solution:

Develop Peculiar Solution  
that fits F-35...and all other  
countermeasures\* \* Except F-22  
(Future Replacement for ALE-40)



## Problem:

Does not fit F-35  
Countermeasures



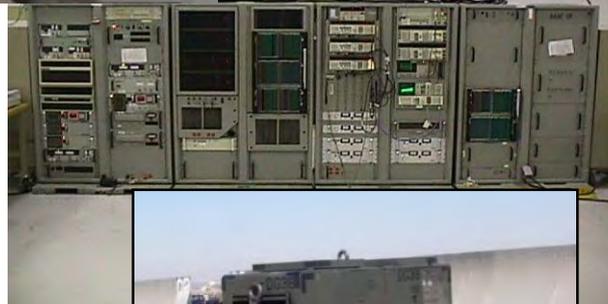
---

# Common Support Equipment Challenges



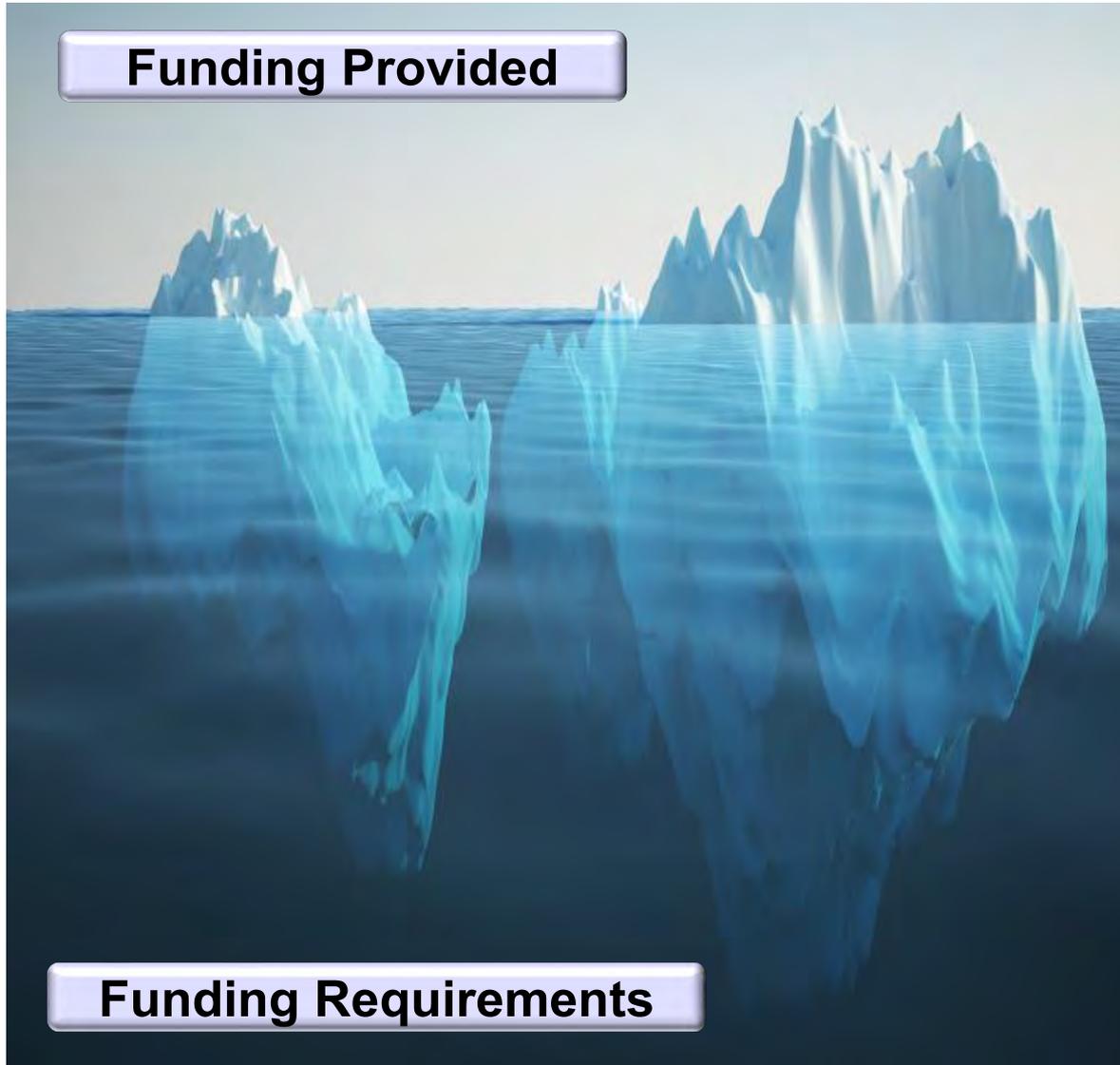
# Challenges: Limited Budgets

Too many broken pieces to fund...





# Challenges: Limited Budgets



**How Much is Below  
the Waterline?**

## The Funding Gaps

SE&V: \$672M

ATS: \$568M

(\$1.2B Over the FYDP)



# Challenges: Changing requirements

## Over Time...

Systems Change

Interfaces Change

Procedures Change

Technologies Change





# Challenges: Diminishing Sources of Supply

## What Do These Two Have in Common?

**MHU-141 Weapons Trailer**



**AMC Spirit (cira 1979-1983)**



### Answers:

**Age (~40 years),  
Braking System,  
&**

**Both Manufacturers are  
Out of Business**





# Challenges: Aging Equipment

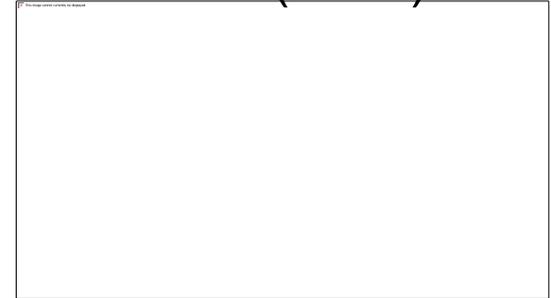
## MC-1A High Pressure Air Compressor



## AC-130A (1966)



## F-4C (1960)



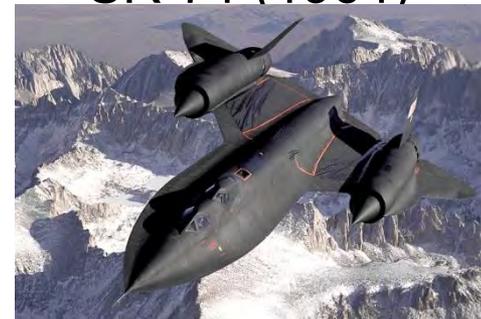
## F-111A (1964)



## KC-130F (1962)



## SR-71 (1964)





# Challenges: Knowledge Gap

---

## **Wanted:**

### **Missing Information**

Equipment Impacts on  
Mission

Equipment Problems

Equipment Workarounds

Equipment Concerns

## **Reward:**

### **Better Mission Support**



# WIFM Takeaways

---

- 1) **Common Equipment Cuts SPO Workload and AF Cost**
- 2) **Consider the Logistics Effects of Purchase Decisions**
- 3) **Initiate 'Common Equipment' Process Early (Pre-RFP)**
- 4) **Lead Command, ATS and SE&V Divisions will help**
- 5) **Communication is Key**
- 6) **Communication is Key**
- 7) **Communication is Key**



# Points of Contact

---

## AF Common Support Equipment Manager

**CMSgt Steve Hesterman AFMC/A4MM**

**AF Common Support Equipment Manager**

**DSN 674-0085**

## Support Equipment & Vehicles Division

**Debra Napier AFLCMC/WNZ**

**Chief, Program Integration Section**

**DSN 497-3807**

## Automatic Test Systems Division

**Michael Beasley**

**Chief, Depot/F-16 ATS Branch & Policy**

**DSN 472-3747**

