Parts on the Shelf and Contracts in Place

748th Supply Chain Management Group

PTAC Symposium/Hill AFB Industry Day

Col Kieran Keelty
748 SCMG/CC

448 SCM/OMO-Hill OPSEC/Security review completed 15 Jan 2020 (MJM)

23 January 2020
Overview

- Introduction to the 748 SCMG
- Top Challenges
- Need for Change
- Supply Chain Risk Management
- Other Opportunities
- Q&A
748th Supply Chain Management Group (Hill AFB, UT)

Buy/Repair Historical Budget

<table>
<thead>
<tr>
<th>Buy</th>
<th>Contract Repair</th>
<th>Organic Repair</th>
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</thead>
<tbody>
<tr>
<td>$296M</td>
<td>$332M</td>
<td>$376M</td>
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</tbody>
</table>

Providing Supply Chain Life Cycle Sustainment Support for:

- Intercontinental Ballistic Missiles (414 SCMS)
- Space & Command, Control, Communications and Intelligence (415 SCMS)
- Aircraft Structural and Avionics Systems (416 SCMS)
- Landing Gear (417 SCMS)
- Secondary Power Systems (419 SCMS)

Supplying Warfighter Dominance
Mature weapon systems…
…sometimes very, very mature

### Average Weapon System Age at Retirement

<table>
<thead>
<tr>
<th>System</th>
<th>Projected Retirement</th>
<th>Age at Retirement</th>
</tr>
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<tbody>
<tr>
<td>Minuteman III</td>
<td>2035</td>
<td>55</td>
</tr>
<tr>
<td>MILSTAR</td>
<td>2024</td>
<td>30</td>
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<tr>
<td>MUTES</td>
<td>2035</td>
<td>44</td>
</tr>
<tr>
<td>CRC</td>
<td>2035</td>
<td>49</td>
</tr>
<tr>
<td>GPS MCS</td>
<td>2035</td>
<td>40</td>
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### Average Aircraft Age at Retirement

<table>
<thead>
<tr>
<th>Aircraft Type</th>
<th>Number of Aircraft</th>
<th>Projected Retirement</th>
<th>Age at Retirement</th>
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<tbody>
<tr>
<td>A-10</td>
<td>347</td>
<td>2040</td>
<td>~59.3</td>
</tr>
<tr>
<td>B-1</td>
<td>66</td>
<td>2040</td>
<td>~52.1</td>
</tr>
<tr>
<td>B-2</td>
<td>20</td>
<td>2058</td>
<td>~64.2</td>
</tr>
<tr>
<td>B-52</td>
<td>76</td>
<td>2040</td>
<td>~79</td>
</tr>
<tr>
<td>C/KC-135</td>
<td>417</td>
<td>2045</td>
<td>84</td>
</tr>
<tr>
<td>C-130E</td>
<td>46</td>
<td>2012</td>
<td>49</td>
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<tr>
<td>C-130H</td>
<td>268</td>
<td>-</td>
<td>-</td>
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<tr>
<td>C-130J</td>
<td>68</td>
<td>-</td>
<td>-</td>
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<tr>
<td>C-5A/C</td>
<td>59</td>
<td>2011, 2012, 2040</td>
<td>39.5, 40.5, 68.5</td>
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<td>44/6</td>
<td>2040</td>
<td>54</td>
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<td>-</td>
<td>-</td>
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<td>F-15</td>
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<td>2016-2025/2020</td>
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<td>36/37</td>
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<td>166</td>
<td>2033-2049</td>
<td>27-43</td>
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<td>2042</td>
<td>57.7</td>
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<td>2035</td>
<td>62</td>
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<td>AC-130H</td>
<td>8</td>
<td>2018</td>
<td>48</td>
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<tr>
<td>T-38</td>
<td>494</td>
<td>2026</td>
<td>~60</td>
</tr>
</tbody>
</table>

748 SCMG Top Challenges

- Landing Gear- Outside Secondary Processes (OSP)
  - Comprehensive Landing Gear Integrity Program (C-LGIP)
  - Castings & Forgings
- Diminishing Manufacturing Sources and Material Shortages (DMSMS)
- Management of sub-tier vendors
- Late Proposals / Late Deliveries / No-Bid Solicitations

Supplying Warfighter Dominance
The Need for Change

- SCS Artificial Islands (2015)
- Third Offset Strategy (2016)
- The Big Hack: How China Used a Tiny Chip to Infiltrate U.S. Companies (2018)
- AF to extend lives of some KC-135s (2019)
- In testimony, Shanahan underlines it’s ‘China, China, China’ (14 Mar 19)

Supplying Warfighter Dominance
Great Power Competition, Military – Civilian Fusion

- Under great power competition, we see the fusion of military and commercial sectors, where adversaries are weaponizing commercial activity as means of degrading US Military capability. Examples include:
  - Russia’s cornering of rare earth element markets and the use of cartel-like actions
  - China’s practices of commercial entity exploitation
    - Weaponized Mergers & Acquisitions (M&A)
    - Pressuring companies to transfer technology to Chinese partner companies as part of doing business with China
    - Exploiting networks of scientific, academic, and business contacts to steal IP and technology secrets
    - Controlling ports via targeted ownership and insertion of Chinese-owned technology coupled with physical access to goods in transit
    - Exploitation of DoD commercial supply chains to introduce counterfeit parts
  - All of these actions are focused on Anti Access / Area Denial & Disruption, which are kinetic warfare-based strategies now entering the commercial domain

Supplying Warfighter Dominance
The domain of warfare is expanding well beyond the battlefield to create a new contested space!

1. Warfare on the Battlefield
2. Warfare Against Supply Lines Feeding the Battle
3. Warfare Against War Supporting Production Capability
4. Warfare Against the Industrial Base to Shape War

Risk Lurking in the Industrial Base

Supplying Warfighter Dominance
Establishing Enterprise SCRM

- Establishing enterprise SCRM will...
  - Give us a capability to address the weaponization of the commercial space
  - Allow Sr Leaders to incorporate supply chain risk into the decision making
  - Allow us to better manage the commercial industrial base
  - Offer the ability to drive down program costs

The Enterprise SCRM Vision...

“Provide Air Force acquisition programs, technology areas, and commodity areas with secure and resilient sources of supply that: *protect our assets (physical & IP), support the continuity of our operations, provide economic efficiency* to meet operational needs.”
748 SCMG Future Opportunities

- Strategic, Outcome Based Contracts vs Multiple Transactional Instruments
- Artificial Intelligence/Machine Learning
- Other Transaction Authority (OTA)
Additional Opportunities

- The SASPO Website Provides Multiple Lists of Other Possible Business Opportunities
  - Reverse Engineering Opportunities
  - Target list - Items with Government owned data and limited sources
  - G Coded List - Items with full and open competition and do not require a Source Approval Request (SAR)
    - The website is publicly available at:

- Encourage our industry partners to share what other opportunities or strategies would incentivize them to bid on our requirements
  - “Zero to Minimum Order Quantity” Initiative
  - White Papers
ENGINEERING EFFORTS FOR THE FUTURE
Technical Interests/Activities

- Artificial Intelligence – Market Research
- RF Signature Analysis – Electronic Counterfeit Parts Detection
- Magnetron Sputtering – Restoration of Dimensional Surfaces for Aluminum Landing Gear Components (inside diameters)
- Advanced Analytics – Sustainment Data Analysis (evaluation of failure, removals and upgrades)
The Customer/Requirement Holder

- 414th SCMS ICBM
- 415th SCMS SPACE/C3I
- 416th SCMS AIRCRAFT
- 417th SCMS LANDING GEAR
- 419th SCMS POWER SYSTEMS
Management of items to include:

- Nuclear Weapon Related Material (NWRM) parts
  - Accountable for all NWRM parts
- Missile assemblies/components
- Launch Facility parts
- Missile Alert Facility parts
- ICBM peculiar support equipment parts
- Tractor/trailer parts for ICBM transportation

Buy/Repair Budget approximately ~$40M

NSNs managed ~9,000
ICBM Boot

**Opportunity**
- Provide continued sustainment of ICBM fleet
- Conduct First Article testing
- Participate in design reviews
- Conduct qualification testing
- NSN: 5975 00 460 1151 /
  - P/N: 57333-507-1
  - Note: Specification (Spec) is classified

**Schedule**
- RFP Release: Feb 19
- Contract Award: Apr 20
- Period of Performance: Apr 20 – Sept 20

**Contract Information**
- Anticipated Contract Strategy:
  - ~ $30k
  - Full and Open Competition
- Anticipated Contract Type:
  - FFP
  - POC: Mr. Scott Chadwick

Supplying Warfighter Dominance
ICBM Boot

**Opportunity**
- Provide continued sustainment of ICBM fleet
- Conduct First Article testing
- Participate in design reviews
- Conduct qualification testing
- NSN: 5975 00 239 9366 /
  - P/N: 57339-507-1
- **Note: Specification (Spec) is classified**

**Schedule**
- RFP Release: Feb 19
- Contract Award: Apr 20
- Period of Performance: Apr 20 – Sept 20

**Contract Information**
Anticipated Contract Strategy:
- ~ $170k
- Full and Open Competition

Anticipated Contract Type:
- FFP
- POC: Mr. Scott Chadwick

Supplying Warfighter Dominance
ICBM Cable Assembly

**Opportunity**
- Provide continued sustainment of ICBM fleet
- Conduct parts obsolescence solutions
- Conduct First Article testing
- NSN: 6150 01 515 4081 / P/N: 25-93762-1

**Schedule**
- RFP Release: 8 Jun 17, no bid
- Contract Award: ASAP
- Period of Performance: ~6mo-12mo after contract award

**Contract Information**
- Anticipated Contract Strategy:
  - ~ $3k-$5k
  - Full and Open Competition
- Anticipated Contract Type:
  - FFP
  - POC: Mr. Scott Chadwick
**ICBM Circuit Card**

**Schedule**
- RFP Release: May 20
- Contract Award: Aug 20
- Period of Performance: ~6mo-12mo after contract award

**Opportunity**
- Provide continued sustainment of ICBM fleet
- Conduct First Article testing
- NSN: 5998 01 581 0426 / P/N: ESCTS1310-1

**Contract Information**
Anticipated Contract Strategy:
- ~ $5k-10k
- Full and Open Competition

Anticipated Contract Type:
- FFP
- POC: Mr. Scott Chadwick

*Not Actual Part*
ICBM Cable Assembly

**Opportunity**
- Provide continued sustainment of ICBM fleet
- Conduct First Article testing
- NSN: 6150 00 488 4583 / P/N: 25-64722-1

**Schedule**
- RFP Release: May 20
- Contract Award: Aug 20
- Period of Performance: ~6mo-12mo after contract award

**Contract Information**
Anticipated Contract Strategy:
- ~ $30k-$40k
- Full and Open Competition

Anticipated Contract Type:
- FFP
- POC: Mr. Scott Chadwick

Supplying Warfighter Dominance
ICBM Cable Assembly

Opportunity

- Provide continued sustainment of ICBM fleet
- Conduct First Article testing
- NSN: 6150 01 229 5639 / P/N: 25-90379-9

Schedule

- RFP Release: May 20
- Contract Award: Aug 20
- Period of Performance: ~6mo-12mo after contract award

Contract Information

Anticipated Contract Strategy:
- ~ $35k-$45k
- Full and Open Competition

Anticipated Contract Type:
- FFP
- POC: Mr. Scott Chadwick

Supplying Warfighter Dominance
Management of components in support of:
- 26 Space and Command, Control, Communications, and Intelligence (C³I) Systems
  - Space -- fixed and mobile terminals for satellite C², Launch and Test Range Systems
  - C³I -- long range radar surveillance, battlefield management, and aircrew training

Global impact for National Security Council and Unified Combatant CCs

Buy/Repair Execution approximately $45M/year

NSNs managed:
- ≈ 9,700 active (of ≈ 12,700 managed) within 174 Federal Stock classes
- Engineering Authority for ≈ 200K DLA managed items

‘60/’70s Technology + Low Density/Low Demand = Diminishing Manufacturing Sources and Material Shortages & Obsolescence Issues

Supplying Warfighter Dominance
Mini-MUTES XM302 Transition Module (A3 Card)

**Opportunity**
- NSN 5998-01-498-8206 (MFG PN 3050945-120) is a Circuit Card used on the Mini-MUTES.
- The Manufacturer (Harris (CAGE 66948)) is out of business.
- Currently seeking a supply/repair source for this Circuit Card due to all sources no longer having capabilities to repair/supply this asset.

**Schedule**
- Anticipated RFP Release: June 2021
- Contract Award: TBD
- Period of Performance: TBD

**Contract Information**
- Anticipated Contract Value: $1,000,000
- Type of Contract: Full and Open Competition
- POC for the Effort: Rick Beery

Supplying Warfighter Dominance
Mini-MUTES XM302 Transition Module (A3 Card)

**Opportunity**
- NSN: 5996-01-598-5465 (MFG PN B60A40AC) Analog Servo Amp subassembly that supports the Joint Threat Emitter.
- Manufacturer (Advanced Motion Controls no longer supports)
- Currently seeking a supply/repair source for these Servo Amplifiers due to all sources no longer having capabilities to repair/supply this asset

**Schedule**
- Anticipated RFP Release: June 2021
- Contract Award: TBD
- Period of Performance: TBD

**Contract Information**
- Anticipated Contract Strategy:
  - Full & Open Competition
  - $5,000 ea.
- Anticipated Contract Type: FFP
- POC: Dustin Troyer 801-777-2996

Supplying Warfighter Dominance
Management of items to include:

- Aircraft Structures, Avionics, and Electronics
  - A-10, F-16, T-38, T-7A, F-4
  - Supporting F-35 SCM Assessments
  - Trainers (Simulators)
  - Support Equipment (Weapon Systems Unique)
  - Munitions (Support Equipment)

- Buy/Repair Execution Approx $674M+

- NSNs Managed - ~7,500 Items/$6.2B
  - Buy, Repair, Distribution, Disposal
  - Engineering Authority
  - Technical Support
  - Modifications
A/OA-10C Video Camera

**Opportunity**
- Become qualified vendor/source
  - Provide full repair of A10C Video Camera (P/N 93-2010)
- Requires reverse engineering capabilities

**Schedule**
- RFP Release: March 2020
- Contract Award: July 2020
- Period of Performance: 5 years

**Contract Information**
- Anticipated Contract Strategy:
  - ~$1.5M
  - Full and Open Competition
- Anticipated Contract Type:
  - Firm Fixed Price
- POC: Charles Reveal, 801-777-7406

Supplying Warfighter Dominance
416 SCMS – GUMAE
F-16 Fuel Cell

**Opportunity**
Qualify to Manufacture F-16 Fuel Cell
- Difficult to Manufacture
- High Condemnation Rates
- Higher Procurement Rates to Meet Current and Future Demand
- Deliver New Technical Data Package
- Lockheed Martin Specification Drawing
  - 16VB004001-3, 16VB004002-7

**Schedule**
- Sources Sought
  - 1560-01-322-9987 Aug 2019 Open
- Contractor Response Suspense: 15 Sept. 2020
- Contract Award: Q1, FY2021
- Period of Performance: Sept 2021 – June 2026

**Contract Information**
Current Contract Strategy
- Minimum QTY 1, Max QTY TBD
- Indefinite Delivery/Indefinite Quantity

Anticipated Contract Length:
- 5 year

POC: Don Willmoth, 801-777-8692

Supplying Warfighter Dominance
Management of items to include:

- **Struts, Wheels, Brakes, and Related Items**
  - **Heavy Weight**
    - Cargo/Tanker: C-5, C-130, and KC-135
    - Bomber/AWACS: B-1B, B-52, B-2, and E-3
  - **Light Weight**
    - Fighter: F-16 and F-15
    - Attack/Trainer: A-10, T-38, F-4, F-5, Helos and Anti-skid

- **Buy/Repair Execution approximately $355M**
- **NSNs managed ~2700**
LHE Zn-Ni Plating

**Schedule**
- TDP updates initiated in 2014 for LHE Zn-Ni
- Allows use of Cad-plate until more vendors are capable
- Currently preferred on almost all landing gear component procurements

**Opportunity**
- New manufacture
  - All Cad plated components
- No qualification required
- Air Force drawings (Distro A):
  - 201027456 (plating)
  - 201027457 (solutions)

**Contract Information**
- Sub-contract work with landing gear manufacturers

Supplying Warfighter Dominance
Management of items to include:

- Secondary Power System Management
  - APU s, GTEs, ADGs, AMADs, etc.
  - Supporting 12 Aircraft Weapon Systems
  - World-wide distribution
  - Engineering authority
  - Technical order management

Buy/Repair Execution
Approximately $180M

NSNs managed ~430

Supplying Warfighter Dominance
T-38 Gearbox Repair & Overhaul

**Opportunity**
- Repair & Overhaul of T-38 Gearbox
- Seeking 2nd source to supplement organic Depot to meet field demands
- Complete R&O IAW Air Force Technical Orders
  - Shipping/receiving, disassemble, clean, inspect, repair/replace parts, assemble, and test of T-38 Gearboxes

**Schedule**
- Contract Award: Estimated June 2021
- Period of Performance: 5 years
- Potential sources must demonstrate capability and be fully qualified/approved by AF prior to being allowed to bid

**Contract Information**
- Anticipated contract strategy
  - $2.4M per year
  - Overhaul ~104 gearboxes per year
  - Open Competition to approved vendors

POC: Timothy Broussard, PM, 801-775-3292

Supplying Warfighter Dominance
…Thank you for what you do, and for what you’re going to do, to keep Aircraft flying, missiles in silos ready to go, and Space and Command, Control, and Communications systems operating in support of this mission!

Questions / Discussion
748th Supply Chain Management Group

The Supply Chain Delivers …

Warfighter Dominance
Air Force Sustainment Center

Small Business Program

Mr. James Dean
AFSC/SB-Hill
Role of the SB Office
(Performs these services for AFSC, AFLCMC, and AFNWC)

- Maximize SB Participation
  - Engage early with our acquisition teams
  - Provide Input on RFIs/Sources Sought Synopsis, if requested
  - Make Set-Aside Recommendations
  - Acquisition Strategy Panels
  - Publicize SB Programs

- Counsel Contractors – Small Business Advocate
  - Advise what the Base/Complex/Supply Chain procure
  - Coordinate Inquiries/Guidance Requests

- Small Business Administration (SBA) Liaison
  - Acquisition Strategy (NAICS; SB Set-Aside; Subcontracting Plans)
  - Size Challenges

Ref: DOD Directive 4205.01; AFI 90-1801; DFARS 219.201 & PGI 219.201; and AFFARS 5319.201
Questions?

www.afsc.af.mil/units/sbo/index.asp