OKLAHOMA CITY
AIR LOGISTICS CENTER

TEAM TINKER

T56 Series 3.0 and Series 3.5
Competitive Depot Contract
Industry Day
30 Nov 16

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Integrity - Service - Excellence
Welcome

- Sign-in
- Restrooms
- Tornado / Fire Evacuation
- Question Forms
- Open Communication is Encouraged
Agenda

0945 – Sign-In / Welcome and Introductions

1000 – T56 Program, Source Approval Request (SAR) Submittals & Preliminary Contract Briefing

1115 – Questions/Answers Review

1130 – Break for Lunch

1230 – Individual Pre-Scheduled Side Meetings

1630 – Industry Day Conclusion
Disclaimer

Any presentation points in the following briefing or any ensuing discussions DO NOT constitute direction to the contractor.

Following is preliminary information only.

All information provided is subject to change.

Government is not currently soliciting proposals.

All questions must be submitted in writing.
   - Official written responses will be posted on FedBizOps website with non-attribution.
   - Verbal questions and answers are not binding.
Overview

• Program Description
• Requirements Overview
• Preliminary Acquisition Overview
• Preliminary Solicitation Overview
• Preliminary Source Selection Milestones
• Source Approval Request (SAR) Requirements
• Questions/Answers
Program Description

- T56 engine is a single spool, constant speed, gas turbine power section connected to a reduction gear assembly by a torque meter shaft and supporting structure (see upcoming slides for further description)

- Supports Air Force, Navy, and Coast Guard Requirements
    - Contingency Support: Engines - to include Quick Engine Change (QEC) Kit
    - Contingency Support: Power Section
    - Management of Items Subject to Repair (MISTR) – Major Modules and Components
  - Navy – T56-14, -16, -425 configurations
    - MISTR items
  - Coast Guard – T56-A-15 configuration
    - MISTR items
    - QEC kit w/out engine (Nacelle)

- Supports six different Major Commands and multiple variations of the C-130H aircraft
  - AMC, ANG, AFRC, AFSOC, ACC, PACAF, AFMC
Program Description (cont’d)
Program Look Ahead

Potential changes to future Air Force requirements

- Reduced flying hours
- C-130H aircraft retirements
- Conversion to C-130J aircraft

Series 3.5 modification
- Currently implemented on LC-130H ANG Fleet – potential for future fleet modification expansions

Projected T56 retirement: 2040

Requirements based on known data at time of RFP
Program Description (cont’d)
Air Force Mission

Maintenance Concept

Three Levels of Maintenance
- Depot, Intermediate, and Organizational level repairs
- Repairs performed at lowest level possessing capability

No fixed time to remove T56 engines for repair
- > 90% of engine removals are unscheduled

USAF Scheduled Maintenance Items:
- Turbine Rotor - 6000 hr Maximum Operating Time
Maintenance Concept (cont’d)

- Whole Engines repaired at Field Units and Centralized Repair Facilities (CRFs)
  - Repaired under RCM Workscope Concept using Workscope Cost Optimization Tool (USAF CPIN Software)
    - Identifies most favorable repairs for customer
    - Optimal combination of time on wing and repair costs
  - Contingency support CLINs added to RFP for whole engine (including QEC) and power section workloads
- Field Units and CRFs also perform minor overhaul of major modules permitted if “Time Since Overhaul” under limits of 2J-T56-53
- Maintenance of Accessories based on Test and Repair “On Condition” (MATROC) concept
- All other items depot “Remanufactured” (overhauled)
Major Repair Items

Whole Engine
- Everything but the prop
- The whole engine consists of a Quick Engine Change Kit assy and an axial-flow, gas turbine power section connected to a reduction gear through a torquemeter assembly and tie struts.
- Repaired IAW TO 16W14-12-3 and 2J-T56-56

Power Section
- The power section consists of the compressor assembly, combustion and turbine assembly, accessories drive gearbox, and oil, fuel, ignition, control, and cooling air systems.
- Overhauled IAW TO 2J-T56-53

PS, Torquemeter, RGB inside QEC cowling
**Reduction Gearbox**

- The Reduction Gearbox (RGB) consists of the following major components: RGB assembly, eyebolts, tie struts, prop control intermediate link rod, and RGB mounted prop control hardware.
- Overhauled IAW TO 2J-T56-53

**Torquemeter**

- The torquemeter assy consists of the following major components: the shaft assemblies, safety coupling, housing, pickup, and anti-ice shroud assembly.
- Overhauled IAW TO 2J-T56-53
Major Repair Items

Compressor Module
- The Compressor Module includes the following major components: Compressor rotor, case and vane assy, air inlet housing, diffuser, accessory drive gearbox with oil pumps, anti ice valves, bleed air valves, fuel nozzles, fuel manifolds, air and oil tubes and hoses, engine mount, and prop and engine control hardware.
- Overhauled IAW TO 2J-T56-53

Turbine Module
- The turbine module includes the following major components: Turbine rotor, turbine cases, vanes, turbine shaft coupling and adapter, thermocouples and thermocouple harnesses
- Overhauled IAW TO 2J-T56-53
Pre-Contract Award Qualification Requirements

[Pre-Contract Award Qualification Requirements established IAW FAR Part 9.2 – details covered in SAR Requirements Briefing]

Two Part Source Approval Request (SAR) Process

I. PRE-AWARD: Proof of Capability
   - Evidence of Same (T56 Series 3.0 / 3.5) or Similar Experience
   - Submit Documentation IAW QR’s

II. POST-AWARD: Source Demonstration of critical processes during transition phase-in
   - Substantiation of Repairs IAW Approved Repair Process Sheets on USAF Exhibits
   - Gov’t intent to waive post award demonstrations if company is a Rolls Royce FMC, AMC, or AMOF

All Vendors Must Submit a Source Approval Request (SAR) Package and be an approved source to be eligible for contract award.

Contract Award will not be held for SAR package reviews
Reviews can take from 6 to 18 months
Requirements Overview

• Supply Chain Management

• Data Deliverables

• Transition Phases
Requirements Overview

Supply Chain Management

- **Contractor Furnished Material (CFM)**
  - Defense Logistics Agency (DLA) managed items to be managed as CFM (*Consumable Items - No mandate to use DLA*)

- **Government Furnished Material (GFM)**
  - OC-ALC Managed Parts (*Reparable Items*)

- **Establish Inventory Accounts**
  - Consolidated Repair Inventory (CRI)
  - Accounts to store serviceable GFM

- **Forecasted Best Estimated Quantities (BEQs) yearly** – Quarterly to monthly delivery orders expected
Requirements Overview (cont’d)

Data Deliverables
(Not all Inclusive)

- Production Reports
  - Required for Bi-weekly meetings

- Commercial Asset Visibility AF (CAVAF)
  - GFM receipt, usage, and scrap / condemnations

- Comprehensive Engine Management System (CEMS)
  - Official AF database to track engines and selected parts for service life management purpose
  - Source of Repair (SOR) required to use CEMS for reporting engine, module and component installation status and service life

Both CAVAF and CEMS require background checks / CAC card access – CEMS access only granted to U.S. Nationals
Data Deliverables (cont’d)

Joint Deficiency Reporting System (JDRS)
- Used for reporting and management of deficiency resolution
- Used for both Product Quality Deficiency Reports (PQDR) and Material Deficiency Reports (MDR)

Reliability Date Retrieval and Analysis Reports
- Teardown Condition Inspection Reporting
- Accomplished for Induction of every major CLIN
- Primary Failed Item Identification & Condition Documentation
Requirements Overview (cont’d)

Transition Phases

Å PWS will include requirements for Transition Phase-In and Phase-Out Plans

Å Phase-In to reach 45 day IOC and 90 day FOC
  Å Identify risks and mitigation strategies
  Å Qualification
  Å Hiring of Personnel
  Å Critical Process demonstrations
  Å Systems connectivity / access
  Å Movement of GFE (if applicable)

Å Phase-Out Possibilities – Options may be exercised with or without SecAF DSOR decision

Å SOR Transition to new vendor
  Å Movement of GFE, GFM, Maintenance Records

Å SOR Transition to government facility
  Å Movement of GFE phased plan when WIP is completed
    “With” and “Without GFE” pricing in option years
  Å Training
Preliminary Acquisition Overview

• Full and Open Competition
  • NAICS Code 336412 (Small Business Size Standard of 1000 employees or less)
  • Walsh Healey Public Contracts Act/Services Contract Labor Standards
  • Subcontracting Plans Will Be Required and Reviewed

• Contract Type
  • FAR Part 15
    • Single Award Indefinite Delivery/Indefinite Quantity (ID/IQ)
    • Firm Fixed Price (FFP) for End Item CLINs
    • Over and Above FFP labor wrap rate
Preliminary Acquisition Overview (cont’d)

Period of Performance

Four-year basic ordering period with one 2-year option and one 1-year option and a 6 month extension of services clause

Government Furnished Equipment (GFE) to be offered for basic period

Pending determination of SecAF Depot Source of Repair (DSOR) decision:

If future SOR determined to be organic, GFE will begin movement to OC-ALC (if applicable) in a phased approach

If future SOR determined to be contract repair, option years may be exercised with continued use of GFE

FAR 52.217-8 Option to Extend Services (6 Month Maximum)

Total ordering period 7 years 6 months
Preliminary CLIN Structure

ÅFFP
  ÅTransition/Phase-in
  ÅIndividual Repair Items
  ÅData (Contract Data Requirements List)

ÅOver and Above (O&A)
  ÅFFP Labor Wrap Rate
  ÅTransition/Phase-out
Preliminary Evaluation Overview

Lowest Priced Technically Acceptable Award (LPTA)

- Based on Technically acceptable proposals with acceptable past performance
- Technical proposals limited to 75 pages
- Past performance based on recent three years of history
- GFE usage FAR rental agreement formula added to total evaluated bid price
- Transportation (to / from Tinker to award location) value added to total evaluated bid price
- Must be an approved SAR to be eligible for award
  - Even OEM / AMC, AMOFs, FMCs etc., must submit SAR package to become an approved source
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Source Approval Requests for the T56-A-15 & T56-A-15A

30 NOV 2015

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All contractors performing T56 upgrade, overhaul, and repair services must be qualified prior to contract award by the USAF engineering support activity (AFLCMC/LPSE)

- Pre-Contract Repair Qualification Requirements (RQRs) are established and posted to FedBizOps:
  

Current Qualification Requirement is RQR-1 T56 Revision 1, dated 2 Feb 12

- For the current requirement, a Source Approval Request (SAR) is only required to be submitted for Power Section, Torquemeter, and Reduction Gear-Box assemblies

- SAR submittals will apply to T56-A-15 and T56-A-15A
Module and Reparable Item Approvals

Approval for repair of the top level assembly will approve a source for repair of all indentured repairable subassemblies and components for each engine section.

- Source will be added to USAF approved repair source list for all reparables based on a single SAR package for each engine section.

- Expect a SAR package for each engine section (3 each packages: RGB, Torquemeter, and Power Section).

- SAR approval authorizes repair for all components of each engine section approved.
T56 Sections

- Reduction Gear Box
- Torquemeter
- Power Section

T56
T56 Sections

- Reduction Gearbox
  - PN 23080237  NSN 2840-01-492-9017

- Torquemeter
  - PN 6897603  NSN 2840-01-111-4765

- Power Section
  - (T56-A-15)  PN 6842602  NSN 2840-01-321-1665
  - (T56-A-15A)  PN 23086196  NSN 2840-01-658-5872
**SAR Submittals**

RQR-1 T56 provides for a two part qualification process

- Part I: Documentation of experience and capability
- Part II: Substantiation of repair procedures by source demonstration

- Part II not required for Rolls Royce FMC/AMC/AMOF
- Part II compliance may (government’s option) require a site survey visit of contractor facilities per RQR-1 T56
POST-AWARD

PART II - PROCESS DEMONSTRATIONS

Process demonstrations conducted during 45-day IOC and 90 day FOC -- Post Award Transition Phase-In

- 50 Sensitive & 15 Critical Processes Identified

- Substantiation of Contractor repair processes
  - Sensitive Processes: Review of Contractor repair documentation, tooling, process orders, and lab reports as required
  - Critical Processes: Same to include on-site review

- Engineering approval required for each process prior to production authorization

- Gov’t intent to waive Part II for Rolls-Royce AMC, AMOF, or FMC companies
SAR Submittals

SARs shall be submitted to Tinker AFB Small Business Office:

AFSC/SB
3001 Staff Drive, Ste 1AG85A
Tinker AFB, OK  73145-3009

For questions and assistance contact Small Business development point of contact:

Ms. Laurel Chambers at 405-739-7243
QUESTIONS?