



# AIR FORCE LIFE CYCLE MANAGEMENT CENTER



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

*PROPULSION DIRECTORATE*



**F108-100  
Industry Day  
9 January 2017**

---

*Integrity - Service - Excellence*

FOR OFFICIAL USE ONLY



# Disclaimer



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

- **The information presented in this briefing is estimated and in no way obligates the government financially or otherwise to fulfill these estimates**
- **Additionally, government employees participating in this industry day are not warranted contracting officers and as such any suggestions or statements provided by them are not legally binding**



# Overview



---

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

---

- **Purpose of Industry Day**
- **Estimated Engine Remanufacture Requirement**



# Purpose of Industry Day



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

- **Govt. requires Second Source for whole engine remanufacture including Quick Engine Change kit**
  - Provides Govt. with additional production capability
  - Enables Govt. to increase quantity of F108 engines with upgraded engine core
- **Provides government with market research information**
- **Informs commercial engine remanufacturing entities of potential government contract**
- **Places potential vendors on notice to submit Source Approval Requests (SARs)**
  - Submit SAR packages to Tinker Small Business Office



# Estimated Engine Remanufacturing Requirement



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

- **Engine configurations to be remanufactured**
  - F108-100 with potential to include F108-201
- **Remanufactured engines shall have upgraded cores**
  - 3D Aero compressor
  - HPT durability improvements
- **Contract type**
  - Requirements based
  - Up to 20 engines a year
- **Length of contract**
  - 4 years (1 year basic with three 1 year options)
- **Estimated contract award date**
  - 1 October 2019



# Engineering Considerations



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

- **SAR Master / SARLites – RQR-PSD-1**
  - **Master SAR for F108-100**
    - **Master Data**
    - **Data for whole engine disassembly/assembly, engine test, and all repairs not included in SAR Lites**
  - **SAR Lites for all modules, sensors, and repairable components not indentured to a module (see NSN breakdown on following slides)**
  - **Travelers must be to OEM tech data**
  - **Reminder: Travelers are locked at SAR approval**
    - **Any changes must be approved by AF cognizant engineer prior to use**



# Source Approval Request Breakdown



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

| Modules | NSN              | Pri P/N       |   | Criticality | Notes                   |
|---------|------------------|---------------|---|-------------|-------------------------|
| Master  | 2840-01-475-2555 | 9995M60G01    | Engine, Gas Turbine                     | CSI C       | Master                  |
| 1       | 2840-01-139-6655 | 301-285-260-0 | Fan and Booster                         | CSI C       |                         |
| 2       | 2840-01-139-6615 | 305-957-803-0 | #1 & #2 Bearing Support Assy            | CSI C       |                         |
| 3       | 2840-01-352-8066 | 9995M18G06    | Inlet Gearbox                           | CSI C       |                         |
| 4       | 2840-01-262-1952 | 305-957-604-0 | Fan Frame Assy                          | CSI C       |                         |
| 5       | 2840-01-351-3399 | 9995M23G11    | Compressor Rotor                        | CSI-C       |                         |
| 6       | 2840-01-251-1127 | 9995M12G05    | Comp Front Stator - Titanium            | CSI-S       |                         |
| 6       | 2840-01-306-5533 | 9995M26G05    | Comp Front Stator -Steel                | CSI-S       |                         |
| 7       | 2840-01-305-7287 | 9995M25G05    | Comp Rear Stator                        | CSI-S       |                         |
| X       | 2840-01-454-7243 | 9995M73G01    | Combustion Assy                         | CSI S       | NHA Core Assembly       |
| 8       | 2840-01-262-0495 | 9529M99G09    | Combustion Case - Cast                  | CSI-C       | NHA Combustion Assembly |
| 9       | 2840-01-242-8336 | 1493M63G05    | Comb Chamber Assy                       | CSI S       | NHA Combustion Assembly |
| 10      | 2840-01-502-9475 | 9995M14G15    | HPT Nozzle Assy                         | CSI S       | NHA Combustion Assembly |
| 11      | 2840-01-139-2392 | 9995M22G07    | HPT Rotor Assy                          | CSI C       |                         |
| 12      | 2840-01-502-6780 | 9995M27G20    | HPT/LPT Nozzle Shroud Assy              | CSI S       |                         |
| 13/15   | 2840-01-229-5786 | 301-482-303-0 | Union of Frame Assy and LP Turbine assy | CSI-S       |                         |
| 14      | 2840-01-189-2941 | 301-316-158-0 | LP Shaft Assembly                       | CSI S       |                         |
| 16      | 2840-01-189-2936 | 305-100-112-0 | Transfer Gearbox                        | CSI C       |                         |
| 17      | 2840-01-139-4075 | 305-100-208-0 | Accessory Gearbox                       | CSI C       |                         |



# Source Approval Request Breakdown



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

| NSN              | Pri P/N                     |                     | Criticality | Notes  |
|------------------|-----------------------------|---------------------|-------------|--|
| 2840-01-356-3538 | 1663M91G04                  | SEAL,AIR,AIRCRAFT G | CSI S       | NHA Fan Major Module (No NSN)                          |
| 6695-01-322-5208 | 301-773-301-0               | TRANSDUCER,MOTIONAL | CSI S       | NHA Fan Major Module (No NSN)                          |
| 6680-01-191-9345 | 320-090-102-0               | SPEED SENSOR,TURBIN | CSI S       | NHA Fan Major Module (No NSN)                          |
| 2840-01-182-9910 | 9339M40G05                  | SEAL,AIR,AIRCRAFT G | CSI C       | NHA Fan Major Module (No NSN)                          |
| 2840-01-626-8175 | 1276M84G12                  | SUPPORT,COMPRESSOR  | CSI-S       | NHA Core Assembly (No NSN)                             |
| 4710-01-185-3830 | 9236M60G08                  | TUBE ASSEMBLY,METAL | CSI-S       | NHA Core Assembly (No NSN)                             |
| 2840-01-196-6003 | 9513M16G04                  | MANIFOLD,AIR        | CSI-S       | NHA Core Assembly (No NSN)                             |
| 4810-01-460-3279 | 7061M31G05                  | VALVE ASSEMBLY      | CSI-S       | NHA Core Assembly (No NSN)                             |
| 2840-01-139-2208 | 9971M46P07 /<br>1211175-007 | ACTUATOR,VARIABLE B | CSI-S       | NHA Core Assembly (No NSN)                             |
| 2915-01-148-5517 | 301-779-402-0               | HEATER,SERVO FUEL   | CSI S       | NHA Assessor Gear Box                                  |
| 2945-01-443-7993 | 301-572-033-0               | LUBRICATION UNIT    | CSI S       | NHA Assessor Gear Box                                  |
| 2915-01-139-6647 | 301-776-115-0               | PUMP,FUEL,JET ENGIN | CSI-C       | NHA Assessor Gear Box                                  |
| 2935-01-148-5714 | 301-771-402-0               | COOLER,LUBRICATING  | CSI-S       | NHA Assessor Gear Box                                  |
| 2840-01-183-7067 | 301-334-417-0               | SEAL RING,LABYRINTH | CSI-S       | NHA Engine   |
| 2840-01-183-2366 | 301-350-240-0               | SUPPORT,BEARING,AIR | CSI-S       | NHA Engine   |
| 2840-01-182-7095 | 301-465-215-0               | CONE,INLET,AIRCRAFT | CAI         | NHA Engine   |
| 2840-01-184-8624 | 301-522-316-0               | SUPPORT,COMPRESSOR  | CAI         | NHA Engine   |
| 2840-01-185-1812 | 301-546-107-0               | PLUG,SHAFT          | CSI-S       | NHA Engine   |
| 2840-01-529-4685 | 337-108-502-0               | SEPARATOR,AIR-OIL,G | CSI-S       | NHA Engine   |
| 2915-01-286-5565 | 7084M61G06                  | CONTROL,POWER MANAG | CSI S       | NHA Engine. Test/adjustment in CMM, repair is OEM only |
| 2915-01-139-6618 | 9178M37P02                  | SENSOR,COMPRESSION  | CSI S       | NHA Engine   |
| 2840-01-184-8963 | 9514M54G02                  | DUCT,TURBINE,AIRCRA | CAI         | NHA Engine   |
| 2925-01-425-7087 | 9974M82P03                  | STATOR,ENGINE GENER | CSI S       | NHA Engine   |
| 2915-01-209-9046 | 9278M96P10                  | FUEL CONTROL,MAIN,T | CSI S       | NHA Engine. OEM Repair                                 |





# Engineering/Logistic Considerations



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

- **No GFM will be provided**
- **No PMA replacement parts**
- **Use of Commercially Used Overhauled components**
  - **Case-by-case basis**
  - **No LLPs (w/exception of Fan Shaft)**
- **QEC kit TBD; SAR approval resides with KC-135 Systems Program Office**

# *PROPULSION DIRECTORATE*

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



# U.S. AIR FORCE

FOR OFFICIAL USE ONLY