

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

1.0	INTRODUCTION.....	2
2.0	SCOPE	2
3.0	PROGRAM MANAGEMENT	3
3.1	Task Management.....	3
4.0	DATA MANAGEMENT	4
4.1	Maintenance Records.....	4
4.2	Technical Manuals.....	4
4.3	Aircraft Logs and Maintenance Records Storage.....	5
4.4	Government Furnish Data	5
5.0	MAINTENANCE	5
5.1	Aircraft Handling.....	7
5.2	Aircraft Fueling and Defueling	7
5.3	Notification of Completion.....	8
6.0	ENGINEERING	8
7.0	FACILITIES AND EQUIPMENT.....	9
7.1	Hangar Facilities.....	9
7.2	Bonded Storage	10
7.3	Ground Support Equipment (GSE).....	10
7.4	Test Equipment	10
7.5	Contracting Officers Technical Representative's (COTR) Office.....	11
8.0	SECURITY REQUIREMENTS.....	11
9.0	LOGISTICS.....	11
9.1	Service Bulletin Kits.....	12
10.	QUALITY MANAGEMENT	12
10.1	Acceptance Inspections, Flight Readiness Reviews, and Documentation.....	12
10.2	Weight and Balance	13
10.3	Foreign Object Damage/Debris (FOD) Control Program.....	13
10.4	Tool Control Program	13
11.0	SAFETY AND HEALTH MANAGEMENT	13
	APPENDIX 1 – APPLICABLE DOCUMENTS	15
	APPENDIX 2 – ACRONYMS	15
	APPENDIX 3 – DEFINITIONS	17

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

1.0 INTRODUCTION

This Statement of Work (SOW) sets forth the requirements for the maintenance of the National Aeronautics and Space Administration (NASA), Johnson Space Center's Boeing Aircraft Fleet (NBAF). NBAF includes two Boeing B-747 and one DC-9 aircraft which operate as Public Use Aircraft. NBAF engine configurations include Pratt & Whitney JT9D-7 and JT8D-9 engines.

NASA's maintenance concept incorporates Boeing and Pratt & Whitney Service Letters (S/L's), Aircraft Service Changes (ASC's), Service Bulletins (S/B's), and Federal Aviation Administration (FAA) Airworthiness Directives (AD's) along with NASA prescribed maintenance. Maintenance requirements include aircraft inspection, scheduled and unscheduled maintenance, Aging Fleet inspections, and structural inspections. The reliability and safety of the NBAF depends on the maintenance and compliance of these tasks.

2.0 SCOPE

The intent of this contract is to cover work that exceeds the capacity, capability, or, facility of NASA and its support Contractors. While most of the maintenance and repair service capability will be completed at the Contractor's facility, there may be an occasional need for the Contractor to perform work at NASA facilities, and other locations where NASA typically operates its aircraft.

The Contractor shall provide all labor, materials, and facilities necessary to perform NBAF maintenance requirements. Maintenance requirements include aircraft inspection, scheduled and unscheduled maintenance, preventative maintenance, rebuilding, and alterations of aircraft, aircraft components, and support equipment, structural inspections and repairs, testing, paint stripping and painting, and Aging Fleet Corrosion Prevention and Control Program task cards on NASA aircraft and "on-aircraft" engine-related maintenance.

The Contractor shall provide all equipment and tooling necessary to perform scheduled and unscheduled maintenance, structural inspections and repairs, testing, paint stripping and painting, and Aging Fleet Corrosion Prevention and Control Program task cards. The Contractor shall furnish all tooling and specialized support equipment, necessary to perform the requested maintenance, service, and/or repairs.

The Contractor shall provide engineering services in support of the NBAF to effect repairs or modifications to aircraft or equipment that have not been previously identified in NASA Technical Orders, DOD Technical Orders, manufacturer's repair manuals, or routine aircraft maintenance. Engineering requirements shall include a full range of aeronautics-related engineering disciplines including structural, mechanical, aeronautical, and electrical engineering.

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

3.0 PROGRAM MANAGEMENT

The Contractor shall develop and implement a program management plan and procedures to fulfill the requirements of this contract in accordance with Data Requirements Description (DRD) 01 - Program Management Plan. The Contractor shall develop and implement management functions to ensure that all work activities are accomplished in accordance with contract provisions. The Contractor shall provide and maintain management systems for the planning, organization, control, and reporting of all activities required by this contract. These systems shall assure accomplishment of program technical and schedule requirements, and cost objectives.

The program management plan shall define and document the Contractor's policy for quality, including objectives for quality and commitment to quality. The quality policy shall be relevant to the organizational goals and expectations. This policy shall be understood, implemented, and maintained at all levels of the Contractor's organization. The Program Management Plan shall be updated, as appropriate, to reflect changes in work under the contract.

The Contractor shall interface with various NASA organizations, other NASA Contractors, and appropriate regulatory bodies in the performance of this contract.

The Contractor shall conduct an annual Program Management Review (PMR) to provide an overall status of the work under the contract. PMRs shall include the NASA contract management team, Aircraft Operations management personnel, and the Contractor's upper management.

During existence of a task order, the Contractor shall provide a monthly Financial Management Report in accordance with DRD 02 - Financial Management Report.

3.1 Task Management

The Contractor shall develop and implement a task order plan for each task order issued under the contract in accordance with DRD 03 - Task Order Plan.

The Contractor shall conduct monthly management reviews to status the progress of scheduled activities and identify potential problems. The monthly management reviews shall only occur when NASA aircraft is at the Contractor's facility. The monthly management review meetings may be conducted either in person or by telephone. In a 3-month period, only one such meeting shall be conducted by telephone, the remaining two meetings shall be at the Contractor's facility.

During existence of a task order, the Contractor shall conduct unscheduled management reviews as directed by NASA.

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

The Contractor shall provide monthly task order status reporting in accordance with DRD 04 - Labor Hour and Materials Report.

4.0 DATA MANAGEMENT

4.1 Maintenance Records

The Contractor shall document all maintenance tasks performed on each aircraft at the completion of each task order in accordance with DRD 05 - Aircraft Maintenance Documentation. All aircraft maintenance records shall be maintained during the contract period and shall be delivered to NASA at the completion of the contract or at any time during the contract period as requested by NASA.

The Contractor shall document all maintenance tasks performed on NASA aircraft and weight and balance computations following aircraft maintenance in accordance with FAA regulations and DRD 05 - Aircraft Maintenance Documentation.

4.2 Technical Manuals

The Contractor shall provide access to technical reference publications in each area that affects quality. The Contractor's technical library shall provide access to Boeing Aircraft and Pratt & Whitney Engine technical information in support of the NBAF.

4.2.1 Technical Manual Updates

The Contractor shall provide updates for all documentation that is affected by incorporation of each S/B, S/L, AD, and NASA, generated revisions as defined in specific Task Orders. Updates shall be delivered to NASA electronically in either Microsoft (MS) Word or Portable Document Format (PDF). A minimum of one copy of each revision for the Maintenance, Wiring Diagram, Weight and Balance, and Operations Manual are required. The original native files (i.e., dwg, wmf, etc.) for all revisions are also required. This documentation shall include, but is not limited to:

1. Maintenance Manual
2. Operations Manual
3. Modification Drawings
4. Weight and Balance
5. Wiring Diagram Manual
6. Illustrated Parts Catalog (IPC)

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

4.3 Aircraft Logs and Maintenance Records Storage

The Contractor shall ensure the security of the aircraft logs and records while in the control of the Contractor. The storage shall be secured and environmentally controlled to the same standards as the office space. Records removed from storage shall be logged out and logged back in upon their return. All records kept at the Contractor's facility shall be delivered to NASA at the end of the contract. The Contractor shall provide all other documentation to NASA, such as performance data, as defined in specific Task Orders.

4.4 Government Furnished Data

NASA will provide any NASA-specific technical data not available from commercial sources for fulfillment of the task order and the Contractor shall return the data to NASA upon the completion of the contract.

5.0 MAINTENANCE

The Contractor shall perform aircraft inspections, scheduled and unscheduled maintenance, preventative maintenance, rebuilding, alterations of aircraft and support equipment, structural inspections and repairs, testing, paint stripping and painting, and Aging Fleet Corrosion Prevention and Control Program task cards.

The Contractor shall perform scheduled and unscheduled maintenance, preventative maintenance, removal and reinstallation for all "on-aircraft" engine-related maintenance activities.

The Contractor shall remove, disassemble, inspect, repair, overhaul, adjust, test, assemble, and re-install components as required to perform NBAF aircraft maintenance. The Contractor shall perform all maintenance in compliance with FAA Federal Aviation Regulations or applicable NASA technical data, as appropriate.

The Contractor shall be required to perform engine runs to include low and high power runs on any NBAF aircraft engines.

The Contractor will be required to remove and reinstall engines on NBAF airplanes. The Contractor shall be required to either ship an engine to a facility identified by NASA for repair when required under a NBAF Task Order or prepare the engine for shipment to a facility as directed by the CO for repair under a NASA contract.

The Contractor shall provide fully-trained, qualified, and certified personnel to perform work under this contract. The Contractor shall identify the training, qualifications, and certification requirements of all personnel in a Training, Qualification, and Certification Program (TQCP). The individuals shall be qualified and certified in accordance with FAA FAR Part 65, Certification: Airmen Other Than Flight Crewmembers.

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

The Contractor performing aircraft inspections, scheduled and unscheduled maintenance, preventative maintenance, rebuilding, alterations of aircraft, aircraft components, and support equipment, structural inspections and repairs, testing, paint stripping and painting, and Aging Fleet Corrosion Prevention and Control Program task cards on NASA aircraft and “on-aircraft” engine-related maintenance shall hold the following limited ratings in accordance with FAA FAR Part 145 for the specific NASA type aircraft in work:

Airframe

- Class 2: Composite construction of large aircraft
- Class 4: All-metal construction of large aircraft

Radios

- Class 1: Communication equipment
- Class 2: Navigation equipment
- Class 3: Radar equipment

Instrument Ratings – All models

- Class 1: Mechanical
- Class 2: Electrical
- Class 3: Gyroscopic
- Class 4: Electronic

Accessory

All makes and models

The Contractor shall perform “on–aircraft” maintenance and replacement of accessories on Pratt & Whitney JT8D and JT9D series engines in accordance with applicable manufacture’s maintenance manual.

The Contractor shall comply with all of the Aging Fleet terminating action structural inspections. The Contractor shall comply with the applicable Corrosion Prevention and Control Program (CPCP) as required by each aircraft type.

The Contractor shall provide general and specific corrosion control activities for aircraft and aircraft components. These activities include aircraft cleaning, paint removal, corrosion removal, surface preparation prior to painting, and surface painting. Aircraft corrosion control activities shall be accomplished in accordance with the applicable type aircraft manufacture directives.

Non-destructive Testing (NDT) shall be performed in accordance with the National Aerospace Standard (NAS) for Certification and Qualification of NDT Personnel, NAS 410.

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

Aircraft interior installation and refurbishing must comply with FAA approved flammability testing outlined in FAR Part 25 section 25.853.

The Contractor shall provide Quality Assurance Inspectors to support the NASA contract. The Quality Assurance Inspector shall have the same qualifications and certifications as the maintenance technicians. Inspectors may also work as maintenance technicians; however, they shall not be permitted to certify their own work. All work on NASA's aircraft shall be controlled by job inspection documentation. Jobs shall be closed only after final inspection and approval by a certified inspector.

5.1 Aircraft Handling

The Contractor shall ensure that aircraft are serviced, handled, parked, and moored in accordance with Boeing Maintenance Manuals, and applicable aircraft technical directives.

- a) The Contractor shall position fire extinguishers, provide fireguards, and wing walkers in accordance with applicable aircraft technical data.
- b) The Contractor shall perform all aircraft ground handling and towing operations in accordance with applicable aircraft technical data.
- c) The Contractor shall provide flight line services for fueling, liquid and gaseous oxygen, oils hydraulics pneumatics, when required.

5.2 Aircraft Fueling and Defueling

The Contractor shall provide fueling and defueling of the aircraft from an on-airfield fuel vendor authorized by the local airport authority. If this is not possible, with concurrence of the COTR, an off airfield fuel vendor may be used. Whichever method of servicing is used, the Contractor shall follow this guideline:

NASA aircraft shall only be serviced with JP-8, JP-5 or Jet-A fuel or other fuel specified in the aircraft technical directives as approved by NASA.

All fuel receipts must state clearly the vendor's name and location, the date, the amount of gallons serviced, and the price per gallon. Fuels shall be up-loaded into the aircraft in accordance with the applicable aircraft maintenance manual procedures.

Defueling of aircraft shall be accomplished in accordance with the applicable aircraft maintenance manual procedures. The number of gallons removed shall be recorded to assure that upon refueling the aircraft, NASA will not be charged for that quantity of fuel.

Fuel for NASA support aircraft shall be made available when required.

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

5.3 Notification of Completion

The Contractor shall provide NASA a minimum of five days' notice of the need for a functional check flight and three days' notice of when the aircraft will be ready for delivery to the Government.

6.0 ENGINEERING

The Contractor shall provide engineering services in support of the NBAF to effect repairs or modifications to aircraft or equipment that have not been previously identified in NASA Technical Orders, DOD Technical Orders, manufacturer's repair manuals, or routine aircraft maintenance. Such support shall be provided to maximize aircraft or equipment availability.

The Contractor shall be responsible for the design, documentation, fabrication, integration, installation, testing, and updating engineering documentation for modifications and repairs to all aircraft, aircraft systems, ground support equipment, specialized test equipment, and other support equipment required to operate and maintain aircraft.

The Contractor shall prepare and provide a schedule for design, engineering, fabrication, modification, and testing activities. The initial schedule and any adjustments to the schedule, for each project, shall be coordinated with and approved by the COTR.

The Contractor shall provide engineering services required for NASA aircraft identified in this contract. Engineering services and technical expertise required shall include:

- a. Aircraft maintenance engineering for aeronautics, avionics, electrical, mechanical, structural systems and components.
- b. Engineering support for aircraft weight and balance determination.
- c. Aircraft and aircraft systems ground testing.
- d. Report preparation.
- e. Preparation of engineering drawings.
- f. Documentation and configuration control.
- g. Engineering support for flight readiness, operational readiness, and test readiness reviews.
- h. Engineering liaison services with NASA/Government/Commercial engineering and technical personnel.
- i. FAA Designated Engineering Representative (DER) services.
- j. Aircraft and aircraft systems flight testing and support.

The Contractor shall perform engineering analyses and inspections/tests required to verify operation and safety of modifications and repairs as follows:

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

- a. Perform operational analyses of in-flight data to evaluate aircraft and systems performance and to identify flight anomalies.
- b. Perform troubleshooting with schematics and diagnostic aids as required to support maintenance personnel.
- c. Perform analysis to develop aircraft weight and balance requirements.
- d. Perform failure modes and effects analysis (FMEA).
- e. Perform hazard analysis.
- f. Perform analysis of aircraft performance and flying qualities in accordance with the applicable aircraft performance manual.
- g. Perform assessment of the aeronautical impact of aircraft modifications on aircraft stability, control, and performance.
- h. Perform assessment of aeronautical loading on aircraft structures and flight controls.

The Contractor shall provide engineering services to evaluate Aircraft Service Changes and Customer Bulletins.

The Contractor shall provide engineering services to recommend and evaluate aircraft technical data revisions.

7.0 FACILITIES AND EQUIPMENT

The Contractor shall provide facilities to accommodate Boeing aircraft for modification, maintenance, paint stripping and painting. Organizations shall be certified (FAR Part 145) to maintain specific aircraft.

7.1 Hangar Facilities

The Contractor shall provide hangar facilities large enough to accommodate any of the NBAF aircraft.

If a service bulletin requires that the aircraft be jacked, the aircraft shall be positioned completely within the confines of the hangar facility such that the hangar door can be fully closed. At no time shall the aircraft be left outside the hangar on jacks, either for lifting or for stability. If one or more landing gear are removed, the landing gear will be replaced with either another gear or a dummy gear prior to the aircraft being moved outside.

The hangar shall provide a safe and secure working environment. The facility shall provide adequate power, lighting, and environmental controls to maintain and test all NASA aircraft included within the scope of this contract. Storage facilities, including but not limited to material storage and repair and bins of expendable hardware, shall be in place. Tool storage and control facilities shall reside within the hangar or in the immediate vicinity of the hangar. The Contractor shall have a fire suppression system that shall provide adequate protection of the aircraft while in the hangar and fire

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

protection for each aircraft while on the flight line. Fire prevention shall include proper storage of combustible materials away from the aircraft and cleanup of spills of a hazardous nature. A fire extinguishing system shall be installed, and fire-fighting capability shall be available at all times both on the hangar floor and on the flight line. A properly trained and qualified fire department shall be in place at the airport facility. The Contractor shall provide an aircraft paint facility large enough to accommodate the stripping and painting of NASA's aircraft.

7.2 Bonded Storage

The Contractor shall maintain an environmentally protected and secure bonded storage area. This area shall be kept clean, dry and shall protect Government Furnished Material (GFM) from any environmental damage. Items placed in this storage area shall be inventoried, tagged, and neatly stored. GFM provided under this contract shall be stored and segregated from other equipment. Additionally, all salvageable parts and components removed from the aircraft shall have all openings sealed to prevent the entrance of foreign matter or loss of fluids. The Contractor shall ensure that all parts, fasteners, components, and panels removed from the aircraft shall be tagged with an appropriate means of identification and traceability.

7.3 Ground Support Equipment (GSE)

The Contractor shall provide the following GSE for each NASA aircraft type:

- a. Jacks
- b. Maintenance Stands
- c. Pneumatic start unit
- d. Electrical power unit
- e. Tow tractor and tow bar
- f. Wheel and tire removal equipment
- g. Oil and hydraulic servicing equipment
- h. Engine removal and installation equipment
- i. Heavy GSE needed for the removal and installation of the landing gear
- j. Special tools required for the maintenance and testing of the 747 and DC-9 aircraft and associated equipment.

7.4 Test Equipment

The Contractor shall provide test equipment for the repair and certification of all NBAF aircraft. All test equipment shall be properly maintained and calibrated in accordance with the applicable equipment specification. Records of maintenance and calibration shall be available for NASA review. The Contractor shall record on the maintenance document, any piece of calibrated equipment used in the performance of maintenance on the aircraft.

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

7.5 Contracting Officers Technical Representative's (COTR) Office

The Contractor shall provide a private office space for the COTR to work during visits. This space must be a secure office with access to the following office equipment:

- a. Telephone with local and long-distance capability
- b. High-speed internet connection
- c. Copy machine
- d. Desk and chair
- e. Fax machine
- f. Printer with 11"x17" print capability

8.0 SECURITY REQUIREMENTS

Because of NASA Aircraft's unique missions, some of these aircraft are classified as National Resources of the United States of America. Accordingly, the following protective standards shall apply:

- a. Aircraft accessibility – The aircraft shall be parked in an area enclosed by a security fence with personnel access controlled. An airport perimeter fence will satisfy this requirement. An area extending outward from the aircraft at least 20 feet in all directions shall be identified with ropes and stands to prevent unauthorized personnel from approaching the aircraft.
- b. Security Guards – The aircraft shall be parked in a controlled access area that is under 24-hour surveillance, by closed-circuit surveillance cameras or by a roving security guard.
- c. Night Parking Area Lighting – The aircraft shall be parked in an area illuminated to a degree such that the surveillance cameras or assigned security guard can observe anyone attempting to approach the aircraft.
- d. Armed Security – The Contractor shall have the ability to obtain certified armed security forces if requested by NASA.

9.0 LOGISTICS

The Contractor shall perform provisioning, receipt and inspection, packing, shipping, delivery, redistribution, and disposal functions in the performance of this contract. The Contractor shall ensure compliance with all applicable government forms and procedures relative to the handling, packaging, and transporting of Government property.

The Contractor shall supply all materials that are required for the performance of this contract except that which is provided as GFM. The installation components, assemblies, and materials shall conform to those specified in each service bulletin. The Contractor shall ensure that "counterfeit" hardware is not purchased or installed on NBAF aircraft. If it is determined that this has occurred, the Contractor shall notify the Contracting Officer (CO)/COTR within 24 hours of discovery.

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

The Contractor shall ensure that NASA's Logistic Inventory does not possess the needed serviceable part, prior to procurement of the item. The Contractor shall contact the COTR to determine if a required part is available through NASA resources. The Contractor shall buy only the needed amount of parts or services required to complete the task unless the cost savings is better for a greater quantity (screws, fasteners, etc.). All unused assets shall be stored at the Contractor's facility for use on future Task Orders or returned to NASA upon request.

9.1 Service Bulletin Kits

The Government will furnish S/B kits (standard Boeing part number identified kits) to the Contractor. NASA will either deliver the S/B kits with the aircraft or have them shipped by the supplier directly to the Contractor's facility. The Contractor shall retain the kits until used as mandated by the Task Order. All used GFM remains the property of NASA and the Contractor shall package and load it into the aircraft or as directed by the COTR. In the event that the Government cannot furnish the S/B kits, the Contractor shall procure the kit(s). If this occurs, the Contractor shall comply with the following procedures:

1. Contact the Boeing Company to determine the lead-time required to procure the kit(s) and the associated cost(s).
2. Advise the COTR of the requirement for the kit(s), the availability, and associated cost.
3. Obtain written authorization from the CO prior to purchase of the kit(s).

10. QUALITY MANAGEMENT

The Contractor shall establish and maintain a Quality Management System (QMS) that complies with American National Safety Institute (ANSI)/ASQC Q9001-2000, Quality Management Systems - Model for Quality Assurance in Design, Development, Production, Installation, and Servicing.

10.1 Acceptance Inspections, Flight Readiness Reviews, and Documentation

The Contractor shall perform acceptance inspections, documentation reviews, and flight readiness reviews as specified in the individual Task Orders.

A Department of Defense (DD) Form 250 shall be used to certify the Government's acceptance of work and can be signed at the Contractor's facility if a separate acceptance or functional check flight is completed before the final departure of the aircraft. However, if the acceptance and departure flights are combined, then the DD Form 250 will be signed at the first destination and a copy will immediately be sent to the Contractor.

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

10.2 Weight and Balance

The Contractor shall perform all associated calculations to establish revised basic weight, arm data, moment data, center of gravity in moments, and center of gravity in percent in accordance with the applicable aircraft weight and balance directives.

10.3 Foreign Object Damage/Debris (FOD) Control Program

The Contractor shall establish a Foreign Object Control Program. The program shall include the following:

1. Aircraft technicians shall conduct a FOD walk-down of the parking area prior to NASA aircraft arrival.
2. Aircraft technicians shall conduct daily FOD walk-downs in the area of the NASA aircraft ramp.
3. Aircraft technicians shall conduct a FOD walk-down of the parking area prior to NASA aircraft departure.

The Contractor shall immediately report any FOD incident to the CO and the COTR.

10.4 Tool Control Program

The Contractor shall have a tool control program in effect at their facility acceptable to NASA.

1. All tools shall be clearly marked with a company identification number or personnel name or number if privately owned
2. The toolbox inventory shall be kept in the applicable toolbox
3. The toolboxes shall be inventoried at the beginning and again at the end of each shift in which they were used
4. Contractor-owned or special tools shall be controlled in a similar manner and by a designated company representative or department
5. Calibrated tools and equipment shall be maintained in accordance with established aircraft industry standards
6. If a tool is lost, the Contractor shall locate the tool to ensure that the aircraft is airworthy.

11.0 SAFETY AND HEALTH MANAGEMENT

The Contractor shall prepare a safety and health plan in accordance with the requirements of NPR 8715.3, "NASA Safety Handbook".

The Contractor shall notify the Contracting Officer and Contracting Officer Technical Representative (COTR) of any mishap resulting in damage or loss of NASA assets or

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

which result in injury, illness, damage, or loss attributable to NASA assets governed by this contract. NASA reserves the right per NPR 8621.1 Revision B, "NASA Mishap Reporting, Investigating, and Recordkeeping," to convene an investigation board or committee.

The Contractor shall immediately notify the Contracting Officer and COTR of Types A, B, and C property damage and types A or B injuries or illnesses. The Contractor shall submit NASA Form (NF) 1627, NASA Mishap Report within 24-hours to the JSC Safety Office.

All other initial notifications shall occur when the 24-hour report of the mishap is sent electronically using the NF 1627 to the JSC Safety Office. A final report will be submitted not later than ten working days after the mishap unless waived by the Contracting Officer and JSC Safety.

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

APPENDIX 1 - APPLICABLE DOCUMENTS

Federal Aviation Regulation (FARs) Part 145, Part 65
Special Federal Aviation Regulations (SFARs)
National Aerospace Standard (NAS) for Certification and Qualification of NDT
Personnel, NAS 410
ANSI/ASQC Q9001-2000, Quality Management Systems - Model for Quality Assurance
in Design, Development, Production, Installation, and Servicing

APPENDIX 2 – ACRONYMS

A – Airframe License (FAA)
A/A – American Airlines
AC – Advisory Circular (FAA)
A/C – Aircraft
AD(s) – Airworthiness Directive(s) (FAA)
AFB – Air Force Base
AGE – Aerospace Ground Equipment
AHRS – Attitude/Heading Reference System
ANSI – American National Safety Institute
AOD – Aircraft Operations Division
APU – Auxiliary Power Unit
ASC – Aircraft Service Change
BVS – Best Value Selection
CAD – Computer Aided Design
CB – Customer Bulletin
CFR – Code of Federal Regulation
C/W – Complied With
CO – Contracting Officer
COTR – Contracting Officer’s Technical Representative
CPCP – Corrosion Prevention and Control Program
DER – Designated Engineering Representative (FAA)
DOD – Department of Defense
DOT – Department of Transportation
DRD – Data Requirements Description
DRL – Documentation Requirements List
ECN – Equipment Control Number
EHP – Environmental Health Program
EPA – Environmental Protection Agency
FAA – Federal Aviation Administration
FAR – Federal Aviation Regulation or Federal Acquisition Regulation
FCC – Federal Communication Commission
FCF – Functional Check Flight

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

FMC – Fully Mission Capable
FMI – Fleet Modification Instruction
FOD – Foreign Object Damage/Debris
FOL – Forward Operating Location
GFE – Government Furnished Equipment
GFM – Government Furnished Material
GSA – Government Services Administration
GSE – Ground Support Equipment
HAR – Hazard Analysis Report
IA – Inspector Authorization (FAA)
IATA – International Air Transportation Association
IAW – In Accordance With
ICAO – International Civil Aviation Organizations
ICC – Interstate Commerce Commission
IPC – Illustrated Parts Catalog
JAL – Japan Airlines
MIP – Maintenance Inspection Point
MRB – Maintenance Review Board
MSDS – Material Safety Data Sheet
NAS – National Aerospace Standard
NASA – National Aeronautics and Space Administration
NCW – Not Complied With
NDI – Non-Destructive Inspection
NDT – Non-Destructive Technician
NTSB – National Transportation Safety Board
ODO – Operations Duty Officer
P – Powerplant License (FAA)
PDF – Portable Document Format
PI – Production Inspector/Inspection
QA – Quality Assurance
QS – Quality System
QSA – Quality System Audit
R&U – Redistribution and Utilization
SB – Service Bulletin
SL – Service Letter
SOW – Statement of Work
SRM – Structural Repair Manual
TMR – Technical Manual Revision
TQCP – Training, Qualification, and Certification Plan
WBO – Weight and Balance Officer
WBS – Work Breakdown Structure

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

APPENDIX 3 – DEFINITIONS

Air Abort - A discrepancy causing an aircraft to return (land) after takeoff without completing its mission.

Bench Check - Any action by maintenance in determining the condition, status of an item, or determination of capability or lack of capability to return an item removed for a malfunction or alleged malfunction to a serviceable status.

Certification - The formal process of a knowledgeable third-party evaluation and approval of a person's knowledge, skills, and competence to perform a function in comparison to established criteria.

Configuration Control Panel Directives (CCPD) - The CCPD is the vehicle used by NASA management to approve and validate the concept behind flight critical configuration changes to all NASA aircraft and their associated support systems. Modifications to GSE will also require a CCPD.

Check or Inspect - A thorough examination of the items to determine identity, security, condition, and operation.

Correction of Discrepancies - Test, repair, overhaul, or replace as defined and authorized by the applicable technical data.

Discrepancies - All items noted and recorded that do not conform to the requirements or specifications.

Engineering Work Order (EWO) - The purpose of the EWO is to provide: (1) authorization to perform specific tasks (2) historical data records, and (3) in-process inspection verification.

Functional Check Flight (FCF) - A flight flown after major maintenance or modification to perform an operational check of the affected aircraft system and aircraft handling characteristics.

FCF Release - After successful completion of all maintenance actions, which require an FCF, an aircraft will be released for routine flight.

Fleet Modification Instructions (FMI) - A modification to be incorporated on an entire aircraft fleet.

Flight Readiness Review (FRR) - The Contractor reviews all maintenance and modifications with NASA management, maintenance, engineering, and quality assurance before the aircraft is released for flight.

Functional or Operational Check (or Test) - The testing and checking of function and operation of the component either on the aircraft or in shops, using equipment, procedures, and limits in the applicable technical data.

Ground Abort - A discrepancy discovered on the ground after the aircraft has been assigned, delaying or canceling flight.

Ground Support Equipment - Equipment and personnel necessary to service,

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

repair, operate, and test aircraft.

Hand Tool - A tool commonly used on aircraft such as screwdrivers, wrenches, sockets, etc. which may be easily purchased from a local vendor.

Maintenance- The inspection, overhaul, repair, preservation, and the replacement of parts, but excludes preventive maintenance.

Maintenance, Preventive- Simple or minor preservation operations and the replacement of small standard parts not involving complex assembly operations.

Major alteration- An alteration not listed in the aircraft, or aircraft engine, --(1) That might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or (2) That is not done according to accepted practices or cannot be done by elementary operations.

Major repair- A repair: (1) That, if improperly done, might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or (2) that is not done according to accepted practices or cannot be done by elementary operations.

Material Review Board (MRB) - The objective of the MRB is to provide technical repair instructions when no other technical data is available or the existing technical publications, engineering drawings, or procedures are inadequate (does not apply to FAA-certified aircraft).

Nonconformance - Items audited and found to be an unsatisfactory process or procedure as it applies to the quality system (QS).

On-Aircraft – Aircraft or Component maintenance that is performed on the aircraft in support of the overall task driven aircraft maintenance for overhaul and inspection.

On-the-job training (OJT) - Non-classroom training that focuses on performing actual job tasks to build skill proficiency. OJT is done under the guidance of someone experienced and fully qualified in that job or task.

Operational Check Flight - The airborne operational check of any system, which cannot be fully checked for proper operation on the ground.

Potentially Hazardous Item - An end item, element, system, subsystem, article, or component with the potential for exposure of personnel, facilities, equipment, or the environment to hazards arising from performance of work, use, handling, manufacturing, packaging, transportation, storage, inspection, or disposal.

Qualifications - Training or competencies, which provide an individual the necessary skills, knowledge, or credentials to perform a specific function.

Quality System (QS) - The organizational structure, procedures, processes, and resources needed to implement quality management.

Service Change - Any modification performed on the aircraft that changes the

SECTION C
Statement of Work
NBAF Heavy Maintenance Contract

original design or when required by the aircraft manufacture to include Aircraft Service Changes, Airworthiness Directives (AD), Customer Bulletins (CB), Engineering Work Orders (EWO), Fleet Modification Instructions (FMI), Service Bulletins (SB), Time Change Technical Orders (TCTO), etc.

Serviceable Condition - The condition of an item that is capable of performing its purpose and function to the requirements for which it is originally intended.

Servicing - The replenishing of all fluids, fuel, oil, water methanol, etc., as well as cleaning the aircraft exterior and interior, cleaning food dispensing equipment, ice chests, coffee pots, hot cups, chemical toilets, etc., as required. This may also include storage of meals on the aircraft.

Technical Manual Revision (TMR) - NASA requirement to change the manufacture's technical data.

Training - The process of providing knowledge and skills to individuals to better enable them to perform their current duties or future duties. Training may include job-specific training such as a series of instructions or proficiency demonstrations leading to a qualification.

Work Instruction - Documents that describe how to accomplish specific job activities needed to ensure consistent working methods and achieve the required NASA quality standard.

Work Request - A work requirement that is provided in writing to the Contractor in accordance with the task order provision of this contract.