

**Welcome to the Johnson Space Center
Aircraft Maintenance, Logistics, Integration,
Configuration Management and Engineering (ALICE)
Industry Day**



**January 21, 2016
Ellington Field, Building 273
9:00 A.M.**

Welcome to ALICE Industry Day
Justin Mason
Contracting Officer



Safety and Administrative Information



- Exits
- Emergencies
- Restrooms



Agenda

Speaker	Subject
Justin Mason, Contracting Officer	Welcome to Industry Day
Debra L. Johnson, Director, Office of Procurement	Welcome
Brian Kelly, Director, Flight Operations Directorate	Organizational Vision and Objectives
Charles T. Williams, Senior Small Business Specialist	Small Business Overview
Justin Mason, Contracting Officer	Current and Anticipated Contract Overview
Suzan P. Thomas, Labor Relations Officer	Labor Relations
Greg Johnson, Chief Aircraft Operations Division	Aircraft Operations Division (AOD) Overview
Gary W. Ash, Procurement Development Team (PDT) Chair	Current Technical Overview and Future Projections
Justin Mason, Contracting Officer	Procurement Schedule and Question/Answer



Disclaimer



- These slides are for information and planning purposes only. No solicitation exists at this time
- This presentation shall not be construed as a commitment by the Government or as a comprehensive description of any future requirements
- If a solicitation is released, it will be synopsisized in the FedBizOpps website



Goals of Industry Day

- Promote competition on the proposed acquisition
- Develop industry understanding of the Government's current vision and objectives
- Provide industry with the opportunity to meet with the Government early enough in the procurement process to provide input into the ALICE procurement strategy
- Encourage offerors to submit questions and comments in writing via the ALICE website or in person during Industry Day. The Government will respond in writing to all questions submitted by posting them to the ALICE procurement websites



Responses to Questions

- Verbal questions will be answered following the presentation. Responses to verbal questions will not be considered official. The verbal questions received from Industry will be followed up in writing
- Questions submitted in writing will be answered and posted to the procurement website and will be considered official responses. If a difference exists between verbal and written responses to questions, the written responses shall govern

Welcome

Debra L. Johnson
Director, Office of Procurement

Organizational Vision and Objectives

Brian Kelly

Director, Flight Operations Directorate

Welcome

Charles Williams
Senior Small Business Specialist
Office of Procurement



Industry Assistance Office Contact Information



- Charles T. Williams
Senior Small Business Specialist
- Rose A. Herrera
Small Business Specialist
- Irene Oakley-Johnson
Contract Specialist
- Main phone number:
(281) 483-4512
- Location:
Building 1, Suite 453
- Address:
NASA Johnson Space Center,
Industry Assistance Office
Mail Code: BA
2101 NASA Parkway
Houston, TX 77058
- All emails should be sent to: jsc-industry-assistance@mail.nasa.gov

Current and Anticipated Contract Overview

**Justin Mason
Contracting Officer**



Industry Day Overview

- The purpose of this Industry Day is to help industry understand the Government's existing requirements and vision for the ALICE contract
- Clarifications concerning the way in which we conduct business today will be answered in the Question and Answer period
- A copy of this presentation is posted on the ALICE website: <http://procurement.jsc.nasa.gov/ALICE/>
- All ALICE procurement questions shall be forwarded to jsc-alice@mail.nasa.gov



Current Contract Overview

- Contract Name: Aircraft Maintenance and Operations Support
- Contract number: NN12JC05C
- Prime Contractor: DynCorp LLC
- Contract Type:
 - Hybrid- Cost contract with fixed price elements and an award fee structure
- Period of Performance:
 - June 1, 2012 – May 31, 2017
- Current Contract Value:
 - \$185.4 Million
- Potential Contract Value :
 - \$250 Million (Inclusive of Options)
- Description:
 - Provides aircraft maintenance services for NASA aircraft
 - Services include: 3 tiered (operational, intermediate, and depot) maintenance, repairs, flight operations, aircraft modification(s), logistics and engineering support



Current Contract Overview

Locations:

- Johnson Space Center
 - Ellington Field, Houston, TX
 - El Paso, TX
- Langley Research Center, Virginia
- Other
 - Facilities/locations inside the Continental United States (CONUS)
 - Facilities /locations outside the Continental United States (OCONUS)



Current Contract Overview

- Services provided include:
 - Administration
 - Maintenance
 - Engineering
 - Logistics
 - Quality
 - Flight Operations



Anticipated Contract Overview

- The following information is pre-decisional
- The information is intended to obtain Industry's comments regarding the anticipated contract. Therefore, your input is both desired and requested
- If there are any differences between what is presented herein and the final RFP, the final RFP shall govern



Anticipated Contract

- Solicitation Number: NNJ1656087R
- NAICS Code: 488190 “Other Support Activities for Air Transportation”
- Size Standard: \$32.5 Million
- Set-Aside for Small Business: No
- Period of Performance:
 - Phase in: April 1, 2017 – May 31, 2017
 - Contract Period of Performance: June 1, 2017 – May 31, 2022



Anticipated Contract

- Places of Performance
 - Johnson Space Center,
 - Ellington Field, Houston, TX
 - El Paso, TX
 - Langley Research Center
 - Other locations as required: CONUS and OCONUS
- Contract Type: TBD



Special Consideration

NOTE TO PROSPECTIVE OFFERORS

Prospective offerors are reminded not to contact incumbent personnel (either directly or through electronic means) during duty hours or at their place of employment, as such contacts are disruptive to the performance of the current contract



Labor Relations

Suzan P. Thomas
JSC Contractor Industrial Labor
Relations Officer



Collective Bargaining Agreements (CBAs)

- Title: Collective Bargaining Agreement Between DynCorp International LLC – JSC Aviation Maintenance and Modification Program and the International Association of Machinists and Aerospace Workers AFL-CIO, District Lodge 37
 - Period of Performance: 9/1/15 through 7/31/18
- Title: Collective Bargaining Agreement Between DynCorp International LLC – NASA Aircraft Maintenance & Operational Support (AMOS) El Paso and the International Association of Machinists and Aerospace Workers AFL-CIO, District Lodge 776, Local 2341
 - Period of Performance: 9/1/15 through 8/31/19



General CBA Requirements

- The CBAs are posted in the ALICE Technical Library
- The Contracting Officer will include the applicable CBAs in the solicitation and contract
- Contractors are required to work with the union as long as the union is representative of the covered employees
- FAR 22.1002-3(a), Wage determinations based on collective bargaining agreements: "Successor contractors performing on contracts in excess of \$2,500 for substantially the same services performed in the same locality must pay wages and fringe benefits (including accrued wages and benefits and prospective increases) at least equal to those contained in any bona fide collective bargaining agreement entered into under the predecessor contract."



General CBA Requirements, Continued



- The contractor must pay *wages and fringe benefits* at least equal to those contained in the CBAs for the first contract year
 - The *terms and conditions* of the CBAs are not applicable to the ALICE contract
- If a non-exempt labor category is not covered by the CBA, then the minimum wages and fringe benefits will be stated in the wage determination
 - The Contracting Officer will determine the applicable Wage Determinations and incorporate them into the ALICE contract
- Questions & answers are posted to the ALICE website to fully explain the CBAs' applicability to this acquisition



Labor Relations Points of Contact

Suzan Thomas	JSC Contractor Industrial Relations Officer	Suzan.P.Thomas@nasa.gov
David Wilson	JSC Contractor Industrial Relations Officer (Alternate)	David.J.Wilson@nasa.gov
Department of Labor	Wage and Hour Division, Clear Lake District Office	(281) 488-0690 1-866-4-USWAGE/ (1-866-487-9243)
Byron K. Williams	President and Directing Business Representative, IAMAW - District 37	bwilliams@iamawdl37.org 713-681-6786 (Office)
Jody Bennett	Aerospace Coordinator, IAMAW - District 776, Local 2341	jbennett@iamaw.org (817) 341-9551



Additional References

Reference	Location
FAR Part 22, Application of Labor Laws to Government Acquisitions	https://www.acquisition.gov/?q=/browse/far/22
NASA FAR Supplement Part 22, Application of Labor Laws to Government Acquisitions	http://www.hq.nasa.gov/office/procurement/regs/nfstocA.htm
FAR 52.222-41, Service Contract Labor Standards	https://www.acquisition.gov/?q=/browse/far/52
FAR 52.222-17, Nondisplacement of Qualified Workers	https://www.acquisition.gov/?q=/browse/far/52
Department of Labor, Wage and Hour Division, Prevailing Wage Resource Book (May 2015)	http://www.dol.gov/whd/recovery/pwrb/toc.htm



Aircraft Operations Division (AOD) Overview

Gregory C. Johnson
Chief, Aircraft Operations Division (CC)



JSC AOD Overview



- AOD manages 25 total aircraft of 4 different types in support of numerous missions to include Space Flight Readiness Training (SFRT). AOD also operates a small number of Unmanned Aerial Systems (UAS).
- AOD has a contractor and civil service workforce of maintenance, quality, engineering and operations professionals to fly, modify and maintain aircraft in support of these various missions.



VISION

The Flight Operations Directorate is the premier Flight Operations Team on and off the planet.

MISSION

To select and protect our astronauts and to plan, train and fly human space flight and aviation missions.

VALUES

Our values define who and what we are.

Our values are embodied in the “Foundations of Flight Operations”

In addition:

- We are all in, regardless of background and experience.
- We are innovative. We achieve results where others dream. We are hungry to improve. We demonstrate resolve.
- We are optimistic. We are inspirational. We have fun.
- We are responsible. We are guardians of the people’s trust and treasure.
- We operate with the utmost integrity and honor in everything we do!



FOUNDATIONS OF FLIGHT OPERATIONS

1. To instill within ourselves these qualities essential to professional excellence

Discipline...Being able to follow as well as to lead, knowing that we must master ourselves before we can master our task.

Competence...There being no substitute for total preparation and complete dedication, for flight will not tolerate the careless or indifferent.

Confidence...Believing in ourselves as well as others, knowing that we must master fear and hesitation before we can succeed.

Responsibility...Realizing that it cannot be shifted to others, for it belongs to each of us; we must answer for what we do or fail to do.

Toughness...Taking a stand when we must; and to try again and again, even if it means following a more difficult path.

Teamwork...Respecting and using the abilities of others, realizing that we work toward a common goal, for success depends upon the efforts of all.

Vigilance...Being always attentive to the dangers of flight; never accepting success as a substitute for rigor in everything we do.

2. To always be aware that, suddenly and unexpectedly, we may find ourselves in a role where our performance has ultimate consequences.
3. To recognize that the greatest error is not to have tried and failed, but that, in the trying, we do not give it our best effort.



JSC AOD Aircraft and Personnel



▪ Current AOD Aircraft

- T-38 – 18 operational, 2 in storage
- WB-57 High Altitude Research Aircraft – 3
- Gulfstream III – 1 (direct return, science mission support)
- B377 Super Guppy Large Cargo Transport (SGT) – 1
- UAS – 10 (varies according to missions)



JSC AOD Aircraft and Personnel



- AOD Personnel
 - Civil Servants
 - Aircrew – Pilots, flight engineers, sensor equipment operators, flight test engineers and flight test directors
 - Engineering, maintenance, quality, safety and administration
 - Program managers
 - Contractor
 - Aircrew – Pilots, flight engineers, sensor equipment operators
 - Engineering, maintenance, quality, safety and administration



JSC AOD Aircraft and Personnel



▪ Contractor Support Functions

- Aircraft maintenance – scheduled and unscheduled for each aircraft type
- Support shops – power plants, hydraulics, avionics, paint, airframes, ground power, life support
- Engineering
- Quality
- Logistics
- El Paso depot forward operating location (FOL)
- Management/Admin/Safety/Flight Crew/Schedulers



AOD Organization



Chief – Gregory Johnson

Projects /Business Mgmt

Aviation Safety Office

Quality Assurance

Engineering

Flight Operations

WB-57F



T-38N Space Flight Readiness Trainer



The McGraw-Hill Companies \$6.00 MAY 3, 2004

AVIATION WEEK & SPACE TECHNOLOGY

www.AviationNow.com/awst

ANA's 7E7 BUY Who's Next?

NASA's T-38 Upgrades Page 64

Exclusive Survey: Aerospace's Best Employers

Compliments from
AVIATION WEEK & SPACE TECHNOLOGY

Page 50



T-38N Space Flight Readiness Trainer





T-38 Aircraft Composition

- **T-38 N Aircraft Block 3** – 18 operational, 2 in storage
 - Electronic flight instrumentation system (EFIS)
 - Numerous safety upgrades to comply with Federal Aviation Administration (FAA) airspace & HQ NASA requirements
- **Simulator - 1**
 - Block 3 cockpit
 - No motion (fixed base)
 - Two seat configuration
 - Located on-site in Building 5



T-38N Block 3 Cockpit





T-38N Block 2/3 Modernization



- **Redesigned inlet** – better high density altitude takeoff performance
- **Redesigned ejector nozzle** – enables same cruise range with redesigned inlets
- **Zero – Zero Ejection Seat** - Martin Baker US16LN with inter seat sequencing
- **Weather radar**
- **Inertial reference system (IRS)**
- **Flight management system (FMS)**
- **Global positioning system (GPS)** with localizer performance with vertical guidance (LPV) approach capability
- **Terminal collision avoidance system (TCAS)**
- **Terrain avoidance and warning system (TAWS)**
- **Data link weather system**
- **Engine monitoring system** - for post flight analysis
- **Redesigned electrical system** - for redundancy



T-38 Mission

- Provide Full Mission Capable T-38N Aircraft
 - NASA / Contractor personnel
 - Maintenance (organizational, intermediate and depot)
 - Quality Assurance
 - Engineering support and modifications
 - Functional Check Flight (FCF) pilots

- T-38N SFRT Flight Program Management
 - Flight checkouts – Astronaut Candidates (ASCANS)
 - Ground school, T-38 system briefs
 - Familiarization
 - Night operations
 - Instrument
 - Formation
 - Aerobatics



G-III – Direct Return/Science Mission Support





B-377 Super Guppy Large Cargo Transport





WB-57F High Altitude Research Aircraft





NASA JSC AOD Safety Program



- NASA FOD has an unmatched safety record and program
 - Last Class A mishap was Nov 1982
 - Currently over 300,000 T-38 accident-free flight hours since last class A
 - Quarterly “all hands” safety meetings
 - Annual safety stand down
 - Active “close call” program
 - Active and frequent benchmarking
- NASA and USAF T-38 Class A mishaps per 100,000 flight hours (2000 - 2010):

▪ NASA	0.00 (0 Class A for 88,509 hrs)
▪ USAF	0.99 (13 Class A for 1,286,828 hrs)



NASA Oversight Reviews



- External Reviews

- NASA Inter Center Aircraft Operations Panel (IAOP)
 - Recent reviews Spring 2014
 - Upcoming review scheduled Spring 2016
- Voluntary Protection Program (VPP) Star initial certification – 2007
- VPP Star recertification - 2016
- NASA HQ Operational Safety Assessment (2014)
- NASA HQ Organizational Safety Effectiveness Survey (2015)



Summary



- AOD is a large and diverse organization that flies over 4500 flight hours a year in 4 different aircraft types. AOD flies the most sorties in all of the NASA Aviation Centers
- AOD supports organizational, intermediate and depot level maintenance in addition to maintaining a Forward Operating Location at El Paso, TX
- AOD has been and remains proactive in keeping safety and efficiency at the forefront of every operation
- AOD works closely with our primary customer the Astronaut Office anticipating changes in T-38 SFRT requirements



NASA Langley Flight Assets



Available platforms:

- Dassault HU-25C Guardian
- Cirrus SR22
- Beechcraft B200 King Air
- Beechcraft UC-12B Huron
- Cessna 206H Stationair
- Cessna LC-40 Columbia 300*



Note: *Currently in flyable storage



NASA Langley Flight Assets Additional Platforms



- Four aircraft committed to Interagency Agreement with Central Command (CENTCOM): Two Rockwell OV-10A Broncos and two OV-10G Broncos
- Three spare parts aircraft: Two Dassault HU-25A Guardians and one HU-25C Guardian



NASA Langley Flight Assets

- NASA Langley has a variety of platforms that can meet nearly any flight-test development and integration requirement in a cost-effective manner
- One-stop shop includes electrical/structural design, fabrication and integration of payloads, airworthiness certifications, and operations
- Public Use status of aircraft minimizes FAA certification process



NASA Langley Flight Assets (Cont.)

- Research hangar and ramp located adjacent to Langley Air Force Base
 - Easy access to 10,000-ft USAF runway via two NASA taxiways
 - Ramp adequate for aircraft up to C-17/Boeing 777 size
 - Large hangar bay - 300 ft x 300 ft x 65 ft (max. tail height) with foam fire suppression system
 - Multiple generators for ground electrical power
 - Shop air and electrical power available at multiple locations in hangar
 - Flight Operations Support Center (FOSC)
 - Flight Systems Integration Laboratory (FSIL)
 - Sheet-metal fabrication shop
 - External fuel storage area for Jet A/JP-8 and 100 LL Avgas



NASA Langley Flight Research Hangar





HU-25C Guardian (NASA 525)



- Acquired to support Science Mission Directorate funded missions



HU-25C Guardian



- Nadir hatch (19.7 x 32 in.)
- Port and starboard (3 x 1.5 ft) observation windows
- Unpressurized volumes for small payloads
- Under-wing and right-side hardpoints for pylons
- Used to support: ice mapping, atmospheric research, satellite instrument calibration, environmental fuel evaluation and advanced radar research



B200 King Air (NASA 529)



- Originally acquired to provide program support



UC-12B *Huron* (NASA 528)

- Originally acquired as spare parts aircraft for B200
- Transitioned to active aircraft status to support SMD-funded missions





Cirrus SR22 (NASA 501)



- Acquired to support SATS/ASP/ARMD



Cirrus SR22 UAS Surrogate Research Aircraft Autonomous Flight Lab



Capabilities:

- Onboard safety pilot enabling file and fly without FAA COA
 - Normal ATC procedures
 - Ability to fly in non-segregated airspace to test Sense and Avoid technologies
 - Segregated research power system
 - Video recording system
-
- Vision: Create an experimental test capability and environment to evaluate technologies and concepts to support UAS NAS integration and fundamental aerial autonomy research
 - Cost effective simulation-to-flight approach
 - Can be flown by pilot, ground control system or on-board computer controlled by rear-seat operator





Cessna 206H Stationair (NASA 504)



- Acquired to support AvSP/ARMD





Cessna 206H Stationair



Cargo pod installed beneath fuselage



Sensor pod installed on right wing strut

- Configured with rear-seat research operator station and General Aviation Baseline Research System: General purpose computers (GPCs)(2), audio and video recording, Athena ADAHRS, GPS positioning, ADS-B, independent research power from propeller heat circuit
- Two external pods available: center-line cargo pod and right wing strut pod
- Used for: UAS target aircraft, Synthetic Vision, Airborne Pilot Eye Tracker, Voice Activated Flight Planning, EPA Sensor Testing, and NASA atmospheric science



Cessna LC-40 Columbia 300 (NASA 507)



- Acquired to support Small Aircraft Transportation System project for NASA Aeronautics
- Placed in flyable storage during third quarter of FY08

Current Technical Overview and Future Projections

Gary W. Ash
PDT Chair

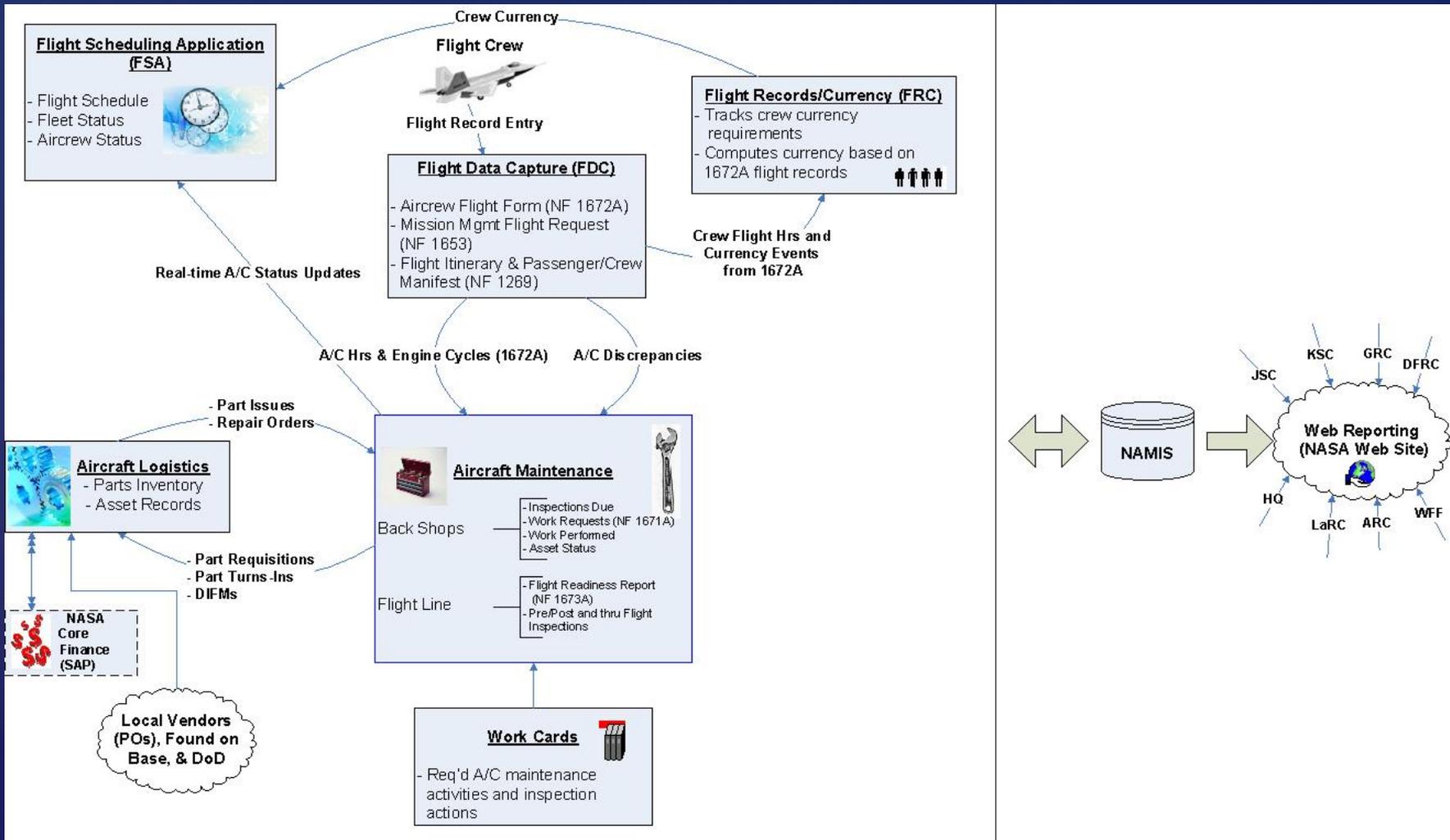


NASA Unique Processes

- **NASA Automated Database**
 - Track all scheduled and unscheduled maintenance
 - Over 60,000 line items of assets
 - Signature requirements unique to NASA (software driven)
 - Track specific check flight requirements – release / reject
- **Configuration Management**
- **Full Base Level Logistics Support**
 - Purchasing
 - Warehouse Management
 - DOD and Commercial Procurements
 - Supply Chain Management



NAMIS Functional Flow





AOD Unique Processes

- **Full In-house Engineering Support**
 - Mechanical, Electrical, Aerospace, Technical Writers
 - Aircraft Upgrades
 - Payload Integration/Airborne Science
 - Maintenance Engineering Support
 - NASA Unique Documentation
- **Maintenance/Engineering/OPS Reviews**
 - Flight Readiness Reviews
 - Test Readiness Reviews
 - Operational Readiness Reviews
 - Configuration Control Panel Directive Reviews



AOD Unique Processes (Cont.)

- **Multiple Type/Model/Series Aircraft**
 - Public use and Certificated
 - Operate primarily out of EFD
 - Unique – one of a kind aircraft
- **Three-Tier Maintenance Program**
 - Maintenance supports CONUS/OCONUS Operations
 - Organizational - “Flight line / Hangar”
 - Intermediate - “Back-shops” / Component level
 - Depot – overhaul and aircraft upgrades
- **Three-Tier Quality Program**
 - Production Inspectors – Contractor
 - Quality Control Inspectors – Full Time – Contractor
 - Quality Assurance Evaluators – Government



Reimbursable Projects

- **AOD operates these platforms as reimbursables:**
 - WB-57 – High Altitude Research Aircraft
 - Super Guppy – Oversize Cargo Transport
 - G-III – Research Platform
 - Reimbursable MX support to other Government organizations
- **Unique support requirements for reimbursables**
 - Have the capability to provide innovative solutions to complex problems
 - May provide other mission support



Reimbursable Projects

- **Reimbursable work supports a variety of customers and requires 'Quick Reaction Capability'**
- **Agile response to changing mission requirements:**
 - Operations – support scaled to mission demand
 - Engineering – ability to provide effective and timely solutions to aircraft / payload / mission requirements
 - Maintenance – support and capability scaled to meet mission demands
 - Logistics – ability to satisfy the demands of unique and dynamic activities
 - Procurement support
 - Sub-contract support
 - International logistics capability



Reimbursable Projects

- **WB-57, Super Guppy, possibly other aircraft**
- **Global deployments and international transport**
 - High-altitude life support
 - Large transport systems support
- **Program Support**
 - Administrative support
 - Program plans and controls, reimbursable management, scheduling, budget
 - Payload Integration
 - Project management
 - Security clearance requirements

Procurement Schedule and Q&A

**Justin Mason
Contracting Officer**



Request for Proposal

- **The Government intends to issue a Draft Request for Proposal (RFP)**
 - Following the release of the Draft RFP, Industry will have an opportunity to submit anonymous questions in writing so that the Government may officially respond
- **The Government intends to issue a Final RFP**
- **A detailed procurement schedule is located on the procurement website**

Question and Answer Period



One-on-One Communication with Industry



- 1/21/16 Building 273 Conference Room between 12:00-6:00 PM at your assigned time
- No more than 4 individuals may represent any party or team of parties
- Meetings will not exceed 25 minutes in length and will be scheduled to occur every 30 minutes



Site Visit Tours

- 1/21/16 Participants will meet in the Building 273 breakroom area 10 minutes prior to their assigned time
- No more than 4 individuals may represent any party or team of parties
- Tours are expected to be approximately 45 minutes in length



How To Get Connected

- **ALICE Procurement Website**
 - <http://procurement.jsc.nasa.gov/ALICE/>
- **Federal Business Opportunities**
 - Use the search tool to search for NASA and other Federal Government opportunities. You may also create an account to receive notifications for opportunities of interest.
 - <https://www.fbo.gov/>
- **JSC Procurement Website**
 - <http://procurement.jsc.nasa.gov/>
- **Industry Assistance – Bldg. 1- JSC**
 - jsc-industry-assistance@mail.nasa.gov
 - Procurement.jsc.nasa.gov/smbus.html

Thank you for attending!

Visit:

<http://procurement.jsc.nasa.gov/ALICE/>