Welcome to the NASA / Johnson Space Center Mission Systems Operations Contract (MSOC) Industry Day

November 3, 2015
NASA-JSC
Gilruth Center,
Alamo Ballroom
9:00 a.m. – 12:00 p.m.

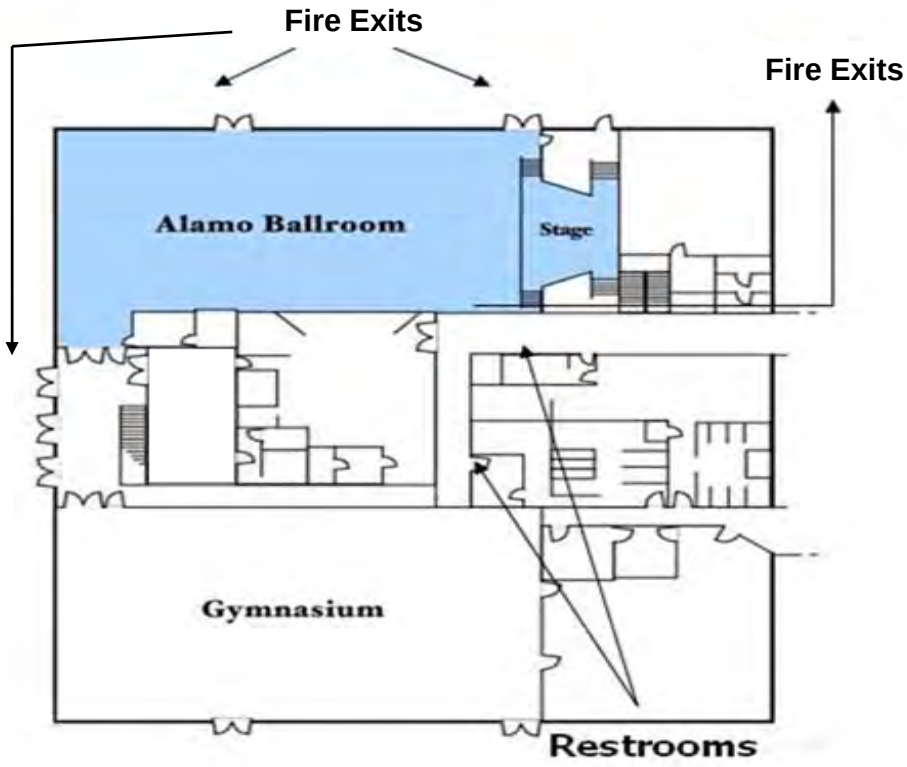
Welcome to the MSOC Industry Day

Scott A. Stephens,
Contracting Officer

Safety and Administrative Information

Restrooms can be found in the hallway outside this ballroom.

Fire exits are at the front entrance and side exit doors. In the event of a fire, you must move at least 75 ft. away from the building.



Agenda

Speaker	Subject
Scott A. Stephens, Contracting Officer	Welcome to Industry Day/Introductions
Debra L. Johnson, Director Office of Procurement	Welcome
Brian K. Kelly, Director Flight Operations Directorate	Organization Vision and Objectives
Charles T. Williams, Senior Small Business Specialist	Small Business Overview
James P. Lowery, Contracting Officer Technical Representative	Current Contract Overviews
Mitchell Macha, Procurement Development Team (PDT) Chair	Technical Overviews
Scott A. Stephens, Contracting Officer	Procurement Schedule

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 synopsized on the Federal Business Opportunities (FBO) website, on the NASA Acquisition Internet Service (NAIS) website, and on the MSOC Procurement website.

Goals of Industry Day

- Promote competition on the proposed acquisition
- Provide industry with the opportunity to meet with the Government early enough in the procurement process to provide input into the MSOC contract strategy
- Submission of MSOC Industry Day questions and comments to solicit feedback from industry
- Provide industry an overview of the FOD systems requirements and the current way that business is conducted
- Inform industry of the draft procurement schedule

Responses to Questions

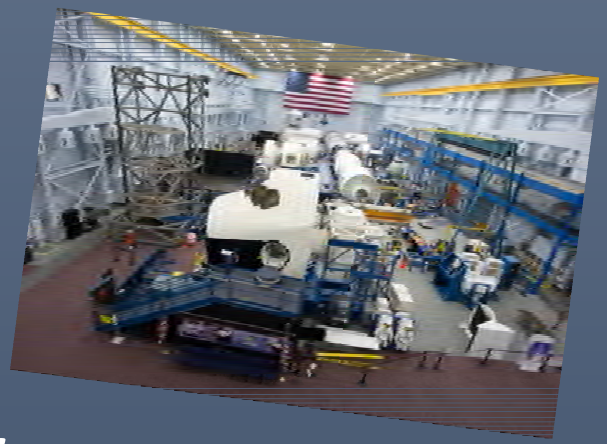
- All questions during the MSOC Industry Day will be submitted on index cards (provided) and will be anonymous unless you include your name/Company name.
- The responses to all questions submitted today will be posted at a future date on the MSOC Procurement website, FBO, and NAIS.

Welcome

Debra L. Johnson,
Director Office of Procurement

FOD Vision and Objectives

Brian K. Kelly,
Director
Flight Operations Directorate



Small Business Overview

Charles T. Williams,

Senior Small Business Specialist

Small Business Overview

- **JSC Industry Assistance Office**
  - Phone: 281-483-4512
  - E-mail: JSC-Industry-Assistance@mail.nasa.gov
- **Small Business Specialists**
  - Rose Herrera, JSC Small Business Specialist
    Phone: 281-244-5811
    Email: Rose.A.Herrera@nasa.gov
  - Charles T. Williams, Senior Small Business Specialist
    Phone: 281-483-5933
    Email: Charles.T.Williams@nasa.gov

Current Contract Overview

James P. Lowery,
Contracting Officer Technical Representative

Clarification

- NASA is planning to combine the contract requirements under the current Facilities Development and Operations Contract (FDOC) with the Space Vehicle Mockup Facility (SVMF) requirements of the Neutral Buoyancy Laboratory/SVMF Operations Contract (NSOC).
- This combination will constitute the requirements of the MSOC.

Current FDOC Contract Overview

- Contract Number: NNJ09HD46C
- Prime Contractor: Lockheed Martin Space Operations
- Contract Type: Cost Plus Award Fee
- Period of Performance: 01/01/2009 - 09/30/2016
  - Plus one 1 year option (10/01/2016 – 09/30/2017)
- Skills currently provided on contract include:
  - Software and hardware systems engineering, sustaining engineering, systems development/modification and maintenance for Mission Control Center Systems (MCCS) and Training Systems (TS)
  - Ground Controller real-time mission execution “Fly” activities
  - Spaceflight mission support for ground systems operations
  - Mission Systems support scheduling

Current NSOC Contract Overview

- Contract Number: NNJ10HD35C
- Prime Contractor: Raytheon Technical Services Company
- Contract Type: Cost Plus Award Fee/Incentive Fee
- Period of Performance: 10/01/2010 - 09/30/2017
  - Plus two 1 year options
    - 10/01/2017 - 09/30/2018
    - 10/01/2018 - 09/30/2019
- Skills currently provided for SVMF include:
  - Software and hardware systems engineering, sustaining engineering, systems development/modification and maintenance for mockups and Information Technology support systems
  - Spaceflight training and mission support operations
  - Event support and scheduling

Proposed Contract

- **NAICS Code and Size Standard**
  - The NAICS Code is 541712, Research and Development in the Physical, Engineering and Life Sciences exception (c), Space Vehicles and Guided Missiles, their Propulsion Units, their Propulsion Units Parts and their Auxiliary Equipment and parts
  - The size standard is 1000 employees
- **Period of Performance contemplated is:**
  - Phase In: TBD
  - Contract Start Date: 10/1/2017
  - Options: TBD
- **Contract Type: TBD**
- **Competition Basis**
  - Full and Open

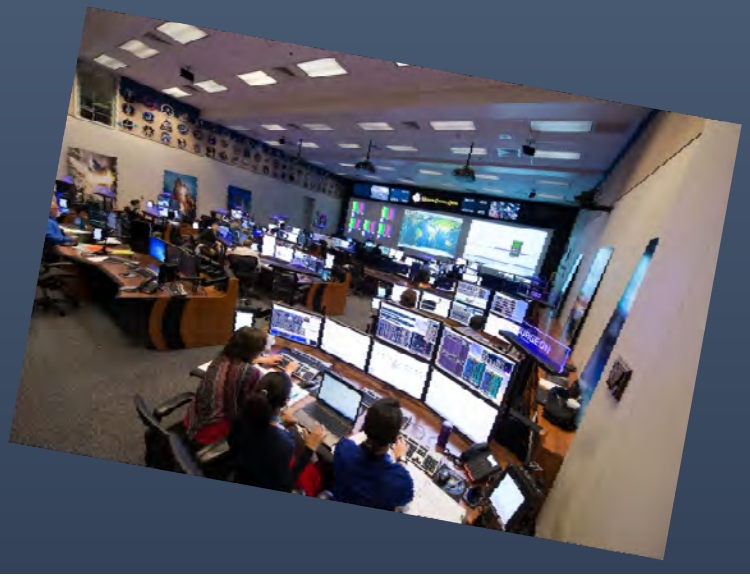
Special Consideration

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.
- Facility tours will not be offered as part of the MSOC Industry Day activities but will be offered as part of the anticipated Pre-Proposal Conference.

Technical Overview

Mitchell Macha,
PDT Chair



MSOC Services and Support

- MSOC provides services for Mission Control Center Systems (MCCS), Training Systems (TS), Space Vehicle Mockup Facility (SVMF), and other support elements in multiple FOD mission systems environments that include:
  - Operations, development/modification, sustaining engineering, maintenance, IT/Cyber security, and FOD wide Communications Security (COMSEC) support
- MSOC supports:
  - International Space Station (ISS)
    - Commercial Cargo
    - International Partners
  - Orion/Space Launch System (SLS)
  - Commercial Crew Program (CCP)
  - Future Programs and Missions as defined

MSOC Services

- **Operations**
  - This effort includes tasks related to ensuring the configuration, integrity and availability of capabilities supporting spaceflight training and real-time mission activities by Plan, Train, Fly and Crew personnel, as well as post flight debriefs and analysis.
- **Development/Modification**
  - This effort includes tasks related to the introduction of new or changed capabilities, services, and system obsolescence formulated through the Systems Engineering processes supporting design and development for FOD mission and training operations needs.
  - In addition, this effort includes system reconfiguration elements that support pre-mission planning, integration, analysis, and operations product development to prepare for mission execution.
- **Sustaining Engineering**
  - This effort includes tasks related to the restoration of support capabilities to their as-built fit, form, function, service, and performance.

MSOC Services

- **Maintenance**
  - This effort includes tasks related to the preventative care actions taken to ensure continued functionality and reliability.
- **IT/Cyber Security**
  - This effort includes tasks related to the processes and practices executed to protect networks, computers, programs and data from attack, damage, and unauthorized access. This effort requires both Secret and Top Secret SCI level clearances.
- **Communications Security (COMSEC)**
  - This effort includes tasks related to providing secure communications. This effort requires Secret and Top Secret SCI level clearances.

FOD Mission Systems Overview

- **Mission Control Center Systems (MCCS)**
  - **Mission Control Center – Houston (MCC-H)**
    - Primary system for data processing, communications, command, telemetry monitoring, trajectory, and control used by the flight control team to monitor and control space vehicles
    - Supports mission and training activities
    - Can be linked with various training systems and control centers to conduct integrated training and operations
    - Consists of multiple support areas for the flight control team, payload and external customers, engineering support, and space and sciences support
  - **Back-up Control Center (BCC)**
    - Located at Marshall Space Flight Center (MSFC), this system provides the backup command and control functions to support NASA ISS operations in case of an outage of the US command and control capability at MCC-H

FOD Mission Systems Overview

- **Training Systems (TS)**
  - **Space Station Training Facility (SSTF)**
    - Full Task Trainer (FTT)
      - High-fidelity ISS systems and payloads simulator for astronaut and flight controller training, and procedure verification
      - Supports up to three simultaneous simulation sessions
      - Training sessions can integrate with other NASA Programs and external partner simulators for integrated mission training and coordination between Space Station crews and flight controllers
    - Part Task Trainer (PTT)
      - Six trainers locally and three at remote locations used primarily for standalone training of astronauts and flight controllers in the operation of individual ISS onboard systems for activation/deactivation and off-nominal situations
    - Dynamic Skills Trainer (DST)
      - Six trainers used primarily to provide high-fidelity simulation for instructor-led or self-guided proficiency training in ISS robotics and rendezvous operations. The high-fidelity simulation capability is provided as government furnished equipment (GFE).

FOD Mission Systems Overview

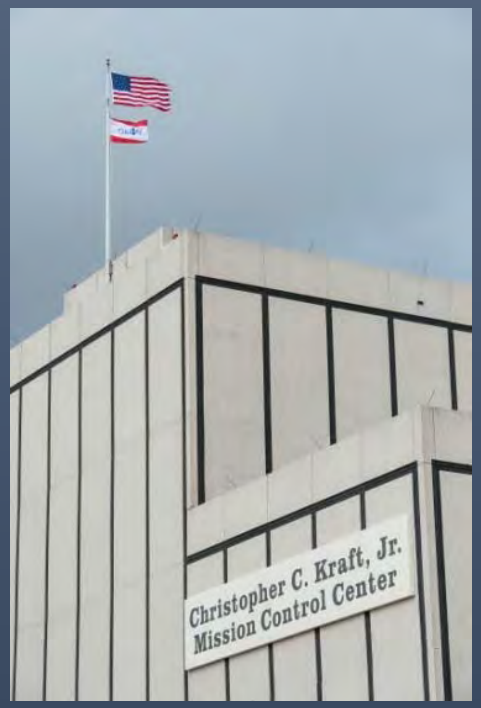
- **Training System (cont.)**
  - **Flight Controller Part Task Trainers (FCPTT)**
    - Seven trainers used primarily for standalone or mini-sim training of flight controllers in the operation of onboard systems and plan, train, fly ground operations
    - This is a multi-program capability
  - **Orion Simulator**
    - Envisioned as multiple simulators/trainers of varying fidelity and complexity that provide training of astronauts and flight controllers on vehicle system operations and procedure development/verification
    - Envisioned to allow for standalone and integrated training of astronauts and flight controllers

FOD Mission Systems Overview

- **Space Vehicle Mockup Facility (SVMF)**
  - Uses full-scale vehicle mockups, flight-like trainers, engineering test articles and environmental simulators to closely emulate the physical characteristics of spacecraft
  - Provides capabilities for training, real-time mission trouble-shooting, mission development, flight procedures development and verification, flight vehicle sustaining engineering, developmental engineering analysis, and support to external users
  - Supports news media, other special events' requirements, and formal/informal tours of the facility

FOD Business IT Support

- **Current contract content <u>not</u> to be continued as part of the MSOC:**
  - **MSOC <u>will not</u> cover FOD *Business* IT Support, which includes:**
    - Help desk support for FOD office computers
    - User and contractor-installed custom and commercial-off-the-shelf (COTS) software tools
    - Procurement, installation, administration, and maintenance of FOD office environment server hardware and software systems providing file, web, database, printer and print services for business office environments
  - **MSOC <u>will</u> cover *Mission* and *Training* IT Support**



Procurement Schedule

Scott A. Stephens,
Contracting Officer

Procurement Schedule

- The Government intends to issue a Draft Request For Proposal (RFP).
- After the Draft RFP is released, a Pre-Proposal Conference will be held to provide industry an opportunity to ask questions specific to the Draft RFP and attend facility tours.
- Following the release of the Draft RFP, industry will have an opportunity to submit questions in writing so that the Government may officially respond.
- It is the Government's intent to request that offerors provide past performance information within 30 days of the release of the Final RFP to expedite the evaluation process.
- A more detailed procurement schedule will be posted to the MSOC procurement website as soon as it is available.

One-on-One Communication with Industry

- At the Gilruth Recreation Center
  - 11/3/15 1:00pm-5:00pm - Lone Star Room, 5:00pm-6:00pm - Discovery Room
  - 11/4/15 8:00am-5:00pm - Brazos Room
  - 11/5/15 8:00am-5:00pm - Trinity Room
- Reminder, 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
- A map to all the rooms is available at the registration table

HOW TO GET CONNECTED

- MSOC Procurement Website

  http://procurement.jsc.nasa.gov/msoc/

- Federal Business Opportunities (FBO)

  https://www.fbo.gov/

  Use the search tool to search for NASA and other Federal government opportunities. You may also create an account in FBO to sign up for email notifications for opportunities of interest.

- NASA Acquisition Internet Service (NAIS)

  http://procurement.nasa.gov

- JSC Procurement Website

  http://procurement.jsc.nasa.gov/

- JSC Office of Small Business Programs (Industry Assistance) - Bldg. 1

  http://procurement.jsc.nasa.gov/smbus.html

Questions

- Reminder: If you have questions regarding the MSOC procurement, please write them on the provided index cards and drop them in the box as you exit.
- Responses to questions will be posted on the MSOC procurement website, FBO, and NAIS at a future date.
- As always, interested parties are welcome to ask questions at any time via email to the CO (jsc-msoc@mail.nasa.gov) or anonymously on the MSOC procurement website.

Thank you for attending!

Visit:
http://procurement.jsc.nasa.gov/msoc/