

REQUEST FOR INFORMATION FOR USE OF THE SHUTTLE LANDING FACILITY AT NASA KENNEDY SPACE CENTER

Synopsis - Jul 08, 2005

General Information

Solicitation Number: N/A
Reference Number: SLF2005
Posted Date: Jul 08, 2005
FedBizOpps Posted Date: Jul 08, 2005
Original Response Date: Aug 30, 2005
Current Response Date: Aug 30, 2005
Classification Code: 99 -- Miscellaneous
NAICS Code: 927110 - Space Research and Technology

Contracting Office Address

NASA/John F. Kennedy Space Center, Procurement, Kennedy Space Center, FL 32899

Description

NASA is considering adopting policies and developing plans and procedures to expand access to and use of the Shuttle Landing Facility (SLF) at John F. Kennedy Space Center by other government agencies and their contractors, university research and technology programs, and commercial users as outlined in this request.

The KSC Center Operations Directorate (TA) is soliciting expressions of interest by prospective users of the SLF subject to the limitations and conditions described in this RFI. Information is being sought to allow NASA to formulate appropriate policy, plans, and procedures to enable expanded use of the SLF consistent with Federal Law, Regulations, National Space Policy, and NASA's programmatic requirements both current and future.

In accordance with the U.S. Space Transportation Policy and the NASA Real Property Management Plan, and consistent with the President's Management Agenda, KSC is seeking to accommodate conditional access to the SLF by users from all sectors under appropriate reimbursable agreements. It is emphasized that NASA use of the SLF for support of the Space Shuttle Program and other agency

activities shall take precedence over any and all other prospective uses throughout the remaining operational life of the Space Shuttle Program and beyond.

It is anticipated that the requirement for Space Shuttle Orbiter landings, and related mission support, on the SLF will not extend beyond 2010. However, agency requirements for other aircraft operations, spacecraft and flight vehicle operations, and related support activities will extend into the foreseeable future as the nation's new exploration vision is pursued and NASA carries out mission objectives.

To the extent consistent with NASA's priorities, KSC is investigating the potential to support the following types of uses for the SLF:

1. Research and technology demonstration flights of piloted and unpiloted aircraft and spaceflight vehicles conducted by other NASA organizations, other government agencies, their contractors, universities, and commercial manufacturers or operators.
2. Parabolic research and demonstration flights supporting microgravity experiments and microgravity flights serving as a precursor to commercial human space flight.
3. Commercial space flight research, technology demonstration, and logistical support, including but not limited to delivery of commercial spacecraft and flight hardware, captive test flights, and aircraft-based deployment of piloted and unpiloted suborbital and orbital launchers and spacecraft.
4. Other research and technology demonstrations or experiments that can benefit from the characteristics of the SLF and KSC.
5. Use by current or future international partners of NASA to the extent consistent with agency agreements and ITAR/Export Control regulations.
6. Other uses not listed here and not excluded below.

The following types of uses are not deemed appropriate for access to the SLF at this time and will not be considered:

1. Corporate aircraft flights or conventional commercial passenger aircraft charter flights.
2. General aviation uses.
3. Ordnance testing.
4. Any non-NASA use that would have the effect of precluding reasonable access by commercial users for the types of activities outlined above.
5. Any use not identified as a candidate use above which cannot demonstrate a need for the unique capabilities and characteristics of the SLF, or the associated technical support services of NASA and/or the Air Force Eastern Test Range.

Other factors prospective users may wish to consider and comment on in their response to this RFI are as follow:

Facility Description: The SLF is a single, 15,000-foot concrete runway located in Complex 39 at the Kennedy Space Center. It is oriented to the southeast and northwest with runways designated as 15 and 33 on the approach compass. Air traffic control is managed by a Military Radar Unit (MRU) from a newly-constructed control tower built to FAA standards. The SLF airspace is part of the national airspace system and is in restricted airspace. The runway at present has limited apron area and no on-site aviation fuel storage or maintenance. Fire/crash/rescue is not located on-site at the SLF but could be made available as part of a use agreement with KSC.

The Florida Space Authority (FSA) owns a hangar facility off the SLF tow way. Built to support reusable launch vehicle programs, the FSA hangar can be made available to SLF users through arrangements made with the FSA. The FSA hangar does not currently meet code for storage of fueled aircraft, and would require upgraded systems to accommodate users requesting hangar storage of their fueled aircraft.

A Fact Sheet describing the SLF and its current capabilities and operations is available from the NASA point of contact. NASA may be willing to consider improvements provided at the user's expense.

Pricing: NASA has not determined pricing for cost recovery, including appropriate charges to apply to SLF operations and maintenance services. It is anticipated that a fixed reimbursement fee to be based on a formula to be determined will be charged, along with the costs of optional services that may be requested or required. Optional services may include, but not be limited to, safety and risk assessments for other than piloted aircraft of known and reliable performance characteristics; specialized technical support such as instrumentation and telemetry; access to KSC research and processing labs and/or technical capabilities; use of KSC and U.S. Air Force range services. Support services, such as aviation fueling, must be obtained by non-Federal SLF users through commercial arrangements.

Management Approach: An air space management plan will be developed by NASA in cooperation with the Federal Aviation Authority and the Air Force Eastern Test Range based upon the nature of prospective uses identified in response to this RFI. It is NASA's intent to provide an operating environment for aircraft of known and reliable performance characteristics, flying well defined missions within prescribed parameters, that is similar to that of any airfield under FAA airspace management. Unpiloted aircraft, experimental aircraft, and aircraft engaged in space launch or space vehicle testing and evaluation will be subject to safety and operational restrictions intended to protect the nation's assets at KSC and the Cape Canaveral Air Force Station, the workforce at these facilities, and the public in neighboring communities.

Security Considerations: Based on responses to this RFI, NASA will perform a preliminary security evaluation to determine if the proposed use poses a manageable risk to national assets, KSC personnel, and federal security policy.

Unacceptable risks must be mitigated or the use cannot be approved. The SLF remains inside the KSC security zone and existing security procedures will remain in effect. Users will be required to obtain proper NASA access credentials for their employees and any passengers using the procedures and controls established by NASA/KSC Security. Specialized security requirements needed by Federal agencies or their contractors are available as an optional service. Foreign-origin flights using the SLF will require Customs and security measures as deemed necessary.

Space Shuttle Program Restrictions: SLF use will be conditioned on non-interference with the Shuttle launch activity. Shuttle mission management and support aircraft will remain the priority users of the SLF through the remaining years of the program.

Available Capacity and Prioritization of Access: NASA is considering making available to non-agency users any SLF capacity not required for its use. Procedures for establishing priority in the event of conflicts or demand exceeding capacity will be developed using information received under this announcement. A preliminary priority order under consideration is:

1. NASA
2. Spacecraft or spaceflight hardware delivery
3. Federal research or technology development
4. Commercial or university research or technology development
5. Parabolic flights for human space flight research or training
6. Other flights consistent with the uses outlined above.

Environmental Impacts: Based on responses to this RFI, NASA will evaluate environmental impacts to determine if there are no significant impacts or if a more detailed assessment is needed. Detailed responses will assist NASA in this necessary activity to enable its intent to expand accessibility to the SLF by non-NASA users. Uses which require significant environmental analysis will have to be assessed at the user's expense.

Safety Impacts: Based on responses to this RFI, NASA will perform a preliminary evaluation of the risk to national assets, KSC personnel, and the neighboring communities. A detailed safety and risk description, including a risk mitigation strategy, will assist NASA in this activity. If the Government concludes the risk of the activity is unacceptable, additional mitigations may be required. NASA reserves the right to deny or prohibit any use or any activity the Government concludes can not be mitigated to an acceptable level.

Future Plans for the SLF: Although the Space Shuttle Orbiter is expected to be retired no later than 2010, NASA will have a continuing agency need for the SLF. With the nation embarking on a long-range exploration program to return to the Moon, and proceed to Mars and beyond, it is not possible at this time to predict the agency's requirements for support and mission aircraft and spacecraft that may require use of the SLF. Accordingly, NASA does not expect to relinquish control or ownership of the SLF at any time in the foreseeable future. The agency may, however, explore the potential for out-leasing the SLF to an airfield operator at some future point to increase the efficiency of its operation for the benefit of an expanded set of users. NASA does not intend to pursue that option for the immediate near term but wishes to alert potential users that it may in the future. This RFI does not request, nor will NASA consider at this time, interest by potential airfield operators.

Responders to this RFI are encouraged to comment on any of the foregoing and to express their interest in the SLF by submitting the following information:

1. Organization name, address, principal activity, and primary point of contact. Describe whether responder is a Federal agency, contractor supporting a Federal agency, university or university-affiliated research institute or entity, other governmental entity (foreign, state, or local), or commercial operator engaged in space support services or research and technology development.
2. Proposed use of the SLF and how it conforms to one of the categories of use identified in this RFI. Specific operational requirements and support needs should be identified to the extent known. Include a safety and risk description and describe how the proposed flight activity would not pose a threat to the national assets of KSC or the Cape Canaveral Air Force Station, or if there is a risk, how that risk is proposed to be mitigated. Include any specialized security requirements or needs for specific site support.
3. Identify any hazardous materials, including exotic propellants expected to be used in flight activities. List commodities and quantities required for on-site and aboard the flight vehicle, including but not limited to cryogenics, hypergolics, pyrotechnics, radioactive materials, exotic coatings, ablatives, bio materials, etc.
4. Identify how many individuals would be involved in the proposed activity and whether these individuals are U.S. citizens or if foreign nationals. Include country of origin if foreign.
5. Identify the proposed frequency of flight activity and a profile of the missions intended to be staged from the SLF.
6. Provide information on organizational or corporate experience in carrying out the activities proposed and evidencing financial responsibility and capacity for providing bonds or insurance that may be required.
7. Provide technical descriptions of the aircraft or spaceflight vehicles proposed to be used in conjunction with SLF operations and any pertinent safety data on aircraft performance or reliability. Provide projected operational envelopes of

- the vehicle along with data supporting the qualification/reliability of the hardware and certification training of operators.
8. For unpiloted aircraft or spaceflight vehicle operations, describe the proposed mission profile, the flight vehicle type, and how such operations would be carried out to avoid the risk to civilians, Government assets, or neighboring communities.
 9. For captive flights or release flights involving the test and evaluation of experimental space launch vehicles, whether piloted or unpiloted, describe the proposed mission profile, the aircraft and space vehicle type, and how such operations would be carried out to avoid the risk to civilians, personnel, Government assets, or neighboring communities.
 10. Any other information which the responder believes will help NASA determine whether to grant access to the SLF and in developing the policies and procedures to accomplish that objective.
 11. Specific comments to the description or factors with reference to the item to which the comment applies.

Please provide input by following the above numbered format to allow for efficient NASA review.

Responders are encouraged to suggest “pathfinder” flight activities to demonstrate potential uses and approaches consistent with NASA’s roles and missions. The terms and conditions of such “pathfinder” activities may not be the same as those established as a matter of policy for recurring, non-exclusive flight access.

Failure to respond to this RFI will not preclude an organization from seeking access to the SLF if and when NASA determines capacity for non-NASA use exists and can be made available to users under terms similar to those described in this RFI.

Release of this RFI does not commit NASA to implement expanded access to the SLF. Response to this RFI does not obligate NASA to grant access to the SLF. NASA reserves the right to determine what uses are appropriate for the SLF in light of agency requirements, and under what terms and conditions it will consider granting access to non-NASA organizations.

NASA reserves the right to use submitted responses for NASA internal planning and the development of policies and procedures related to the proposed access to the SLF. Although details of responses are meant only for NASA use, response submitters should not submit proprietary material.

NASA expects to reply to all responders to this RFI and may engage those who expressing interest in desirable uses consistent with this RFI in a further exchange of information. NASA may also decide to hold a workshop at the Kennedy Space Center for parties responding to this RFI to further assist the agency in

determining how to proceed in the anticipated expansion of access to the RFI. If such a workshop is scheduled, responders will be notified.

All responses to this notice shall be submitted to the Contracting Officer at NASA, Kennedy Space Center, Mail Stop: OP-ES-B, Attn: Steve Parker, Kennedy Space Center FL 32899 no later than August 30, 2005. Please reference SLF2005 in any response.

The solicitation and any documents related to this procurement will be available over the Internet. These documents will reside on a World-Wide Web (WWW) server, which may be accessed using a WWW browser application. The Internet site, or URL, for the NASA/KSC Business Opportunities page is http://prod.nais.nasa.gov/cgi-bin/nais/link_syp.cgi

Point of Contact

Name: Jim Ball
Title: Spaceport Development Manager
Phone: (321) 867-2998
Fax: (321) 867-8495
Email: james.e.ball@nasa.gov

Name: Steven E. Parker
Title: Contracting Officer
Phone: (321) 867-2928
Fax: (321) 867-2825
Email: steve.parker@nasa.gov