

## JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION

1. This document is a justification for other than full and open competition prepared by the NASA, John F. Kennedy Space Center.
2. The nature and/or description of the action being approved:

This justification provides the rationale for contracting by other than full and open competition for the acquisition of real-time telemetry data and forwarding of data from the IRIS Pegasus launch vehicle by the Raytheon Company (Raytheon). This acquisition for real-time telemetry will be performed by a deployable telemetry system that is installed in a Government aircraft. This aircraft will be positioned in a location over the Pacific Ocean that is below the IRIS Pegasus launch vehicle's planned flight path on the day of launch. At the specified time after liftoff the deployable telemetry system will acquire the real-time data from the launch vehicle. This data will then be uplinked to a commercial satellite for distribution to NASA Launch Services Program telemetry assets.

3. Description of the supplies or services required (including the estimated value):

The acquisition of the IRIS Pegasus launch vehicle telemetry data will require the following supplies and services:

- The contractor shall perform all required planning and analysis to define appropriate flight path and telemetry collection system settings for collection from the IRIS Pegasus launch vehicle.
- The contractor shall provide and integrate the required telemetry equipment aboard the aircraft, and ensure that all installed systems have been certified for flight safety.
- The contractor shall receive and record the real-time telemetry stream from the IRIS Pegasus launch vehicle until spacecraft separation.
- The contractor shall relay received telemetry in real time from the aircraft to Building 836 at Vandenberg Air Force Base (VAFB), CA, or Hangar AE at Cape Canaveral Air Force Station (CCAFS), FL.
- The cost of this service is estimated to be \$ [REDACTED]

4. Statutory authority permitting other than full and open competition:

Contracting without full and open competition is permitted pursuant to 10 U.S.C. 2304 (c)(1) because the services required by NASA KSC are available from only one responsible source and no other type of supplies or services will satisfy the Government's requirement.

5. A demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires use of the authority cited:

Raytheon acquired the Ktech Corporation in the 4<sup>th</sup> quarter of 2011. There is no other known company that has performs this work.

Raytheon (as Ktech) has performed similar telemetry tracking services for the following U.S government funded projects:

- NASA's WISE launch in December 2009
- The Missile Defense Agency's HTV flight testing in April 2010.
- NASA's GLORY launch in March 2011
- The DOD's Advanced Medium-Range Air-to-Air Missile (AMRAAM) flight testing in April 2011
- DARPA's Hypersonic Technology Vehicle (HTV-2) flight testing in April 2011
- The Army's Advanced Hypersonic Weapon (AHW) flight testing in April 2011

Raytheon (as Ktech) personnel previously worked on a similar program, the Big Crow Project. As part of the Big Crow project these personnel supported the following missions:

- The ST5 mission launched on a Pegasus rocket on March 22, 2006.
- The CloudSat/CALIPSO mission launched on a Delta rocket on April 28, 2006.
- The NROL-22 mission launched on a Delta IV rocket on June 28, 2006.

6. Description of the efforts made to ensure that offers are solicited from as many potential sources as practicable:

NAIS/EPS and FedBizOps will be used to publicize the procurement as required by Subpart 5.2.

7. Determination by the Contracting Officer that the anticipated cost to the Government will be fair and reasonable:

The Contracting Officer will determine the price to be fair and reasonable based on the application of price analysis techniques and procedures performed in accordance with FAR Part 15.4. Technical Analysis support will be requested to evaluate areas such as material, skill mix, labor hours, processes, facilities, and other associated technical factors set forth in the proposal. Price analysis techniques such as comparison of the overall price with the Independent Government Estimate or other pricing information will ensure the Government achieves the primary objective of acquiring supplies and services from a responsible source at a fair and reasonable price.

8. Description of the market survey conducted and the results, or a statement of the reasons a market survey was not conducted:

Until Raytheon purchased Ktech, the U.S. Government was the only source of this type of telemetry services. The assets used for telemetry services were:

- Big Crow Project, Kirtland AFB (no longer in service). Personnel from the canceled Big Crow Project formed Ktech Corporation which was purchased by Raytheon in 2011.
- Ocean Going Transportable Test & Evaluation Resource (OTTR). This is an U.S. Air Force owned asset that is administrated out of Kirtland AFB.

- NAV AIR P3 Aircraft. This is a U.S. Navy asset which is based at the Point Mugu Naval Air Station. As the number of P3 aircraft has declined so has their availability.

Market research was conducted with no other firms identified that could meet the operational requirements. Telemetry conferences were attended in January 2009 and October 2011, at which hundreds of telemetry service providers were evaluated. No organizations other than Raytheon meet the requirements or have experience performing airborne telemetry tracking of expendable launch vehicles.

9. Other facts supporting the use of other than full and open competition, such as:

Airborne and seaborne deployable telemetry services as a commercial business is a new development for the United States commercial space industry. Prior to Raytheon, the Launch Services Program depended on U.S. Government assets for its deployable telemetry needs. Raytheon developed their assets and made unsolicited bids to provide support to NASA and the U.S. Military.

No commercial organizations other than Raytheon meet the requirements or have experience performing airborne telemetry tracking of expendable launch vehicles.

10. A listing of sources, if any, that expressed in writing an interest in the acquisition:

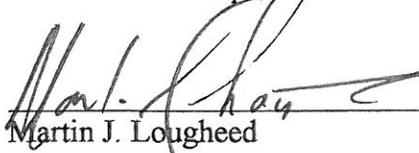
Any company that is interested in submitting a proposal in response to the solicitation will be evaluated

11. A statement of the actions, if any, the Agency may take to remove or overcome any barriers to competition before any subsequent acquisition for the supplies or services required:

There are no known actions the Agency may take to remove or overcome barriers to competition. Raytheon is the first that offers these services outside of the Department of Defense.

Justification for Other than Full and Open Competition for Telemetry Tracking Service

Technical Officer: I certify that the supporting data presented in this justification are accurate and complete.

  
\_\_\_\_\_  
Martin J. Loughheed

4-5-12  
Date

Contracting Officer: I certify that this justification is accurate and complete to the best of my knowledge and belief.

  
\_\_\_\_\_  
Sean D. Howe  
Contracting Officer

4-5-12  
Date