

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
JOHN C. STENNIS SPACE CENTER
STENNIS SPACE CENTER, MS 39529-6000**

JUSTIFICATION AND APPROVAL FOR SOLICITING BRAND NAME (FAR SUBPART 13.5)

1.0 AGENCY/CONTRACTING ACTIVITY

National Aeronautics and Space Administration, John C. Stennis Space Center, Office of Procurement, Stennis Space Center, MS 39529

2.0 DESCRIPTION OF THE ACTION BEING APPROVED

The action to be approved is the limited source procurement of High Definition Low Speed Camera hardware from Hitachi buying KP-HD20 camera systems and KP-HD10 IR cameras with lenses. This requirement is considered to be a commercial item. It is anticipated that this requirement will be available to other vendors as long as the Hitachi products listed are procured.

3.0 DESCRIPTION

The SSC/EA21B at John C. Stennis Space Center, MS, has a requirement for Low Speed Camera systems. These cameras need to be High Definition and Scalable Link Interface (SLI). The procurement includes C-mount lenses for these cameras and some of the cameras will be used for Infrared hydrogen gas leak detection so they will have super low light capability. The hardware associate with this procurement will be installed as part of a Facility Maintenance and Modernization (FM&M) project on the E1 test facility. This procurement will provide enough camera hardware to outfit all 3 cells of the E1 test stand.

| Required Devices | | Qty |
|------------------------------|--|-----|
| Hitachi KP-HD20A | 1/3" 16x9 MOS, 1080P-1080I, color, small size, Hi Res. | 30 |
| Hitachi KP-HD1005-S5 | 1/3" 16x9 MOS, 1080P super low light, Fog, day-night | 5 |
| Computar H10Z0819PDC-MP Lens | C-Mount, 10X 8mm-80mm, F1.9, 1/2" motorized zoom. | 35 |

Total: 70 pieces

4.0 STATUTORY AUTHORITY

This recommendation is made pursuant to FAR 13.106 -1(b)(2) for purchases exceeding the simplified acquisition threshold when only a single source (including brand-name) is available and FAR Subpart 13.5 under the authority of the test program for commercial items at 41 U.S.C. 1901 or the authority of 41 U.S.C. 1903.

5.0 NATURE OF THE ACTION THAT REQUIRES USE OF THE AUTHORITY CITED

1. The Rocket Propulsion Test program office (RPT) funded a study of viable High Definition (HD) low cost Low Speed cameras in 2014. After extensive market research and procurement of our top 3 choices, and testing of these 3 chosen cameras, the Hitachi KP-HD20 camera was choose as the best camera for the amount spent. This camera was then procured and installed at the A1 test complex in several locations. Therefore it is prudent that this procurement emulates the A1 RPT study and knowledge gained from it to procure the same items.

2. The total design on the new E1 video system is predicated on the Hitachi KP-HD20 camera system. All hardware was chosen to work with the Hitachi specifications. This included camera housing size, communication techniques, pan and tilt sizing, IRIG insertion specifications, and video switcher capabilities. Changing the camera hardware would result in changing the design which has already been completed.

3. The Hitachi KP-HD20 cameras are in accordance with maintaining commonality with other SSC propulsion test complex systems in existence at A1, A3, and planned for the B2 test stand, and across SSC and with other NASA center test facilities (KSC uses these cameras on this launch pads). The camera equipment is currently accepted as reliable throughout the propulsion test community. The equipment listed herein is controlled, operated, and maintained likewise. This commonality permits personnel from across the center to be intricately familiar with the equipment which intern reduces cross-training, promotes support across test facilities, provides hardware interchangeability, and establishes a more knowledgeable test community.

4. The Hitachi camera systems listed herein are manufactured in a way that will minimize replacing existing facility cabling while enhancing the manageability of the current test facilities video acquisition systems; video setup, video data collection, video processing, and video distribution and display systems. The electrical characteristics and equipment configuration will allow the systems to be installed without significantly effecting current hardware arrangements and design changes.

6.0 SOLICITATION EFFORTS

Hitachi synopsis was published for 14 days on the NASA Acquisition Internet Service (NAIS) and the Government wide point of entry (GPE) (FedBizOpps) expressing our intent to issue a contract for this requirement.

7.0 COST CERTIFICATION

An Independent Government Estimate (IGE) was developed and based, in part, on the anticipated hours for completion of the tasks outlined in the SOW.

8.0 MARKET SURVEY

No others firms responded to the Hitachi synopsis.

9.0 OTHER SUPPORTING FACTS

1. The Rocket Propulsion Test program office (RPT) funded a study of viable High Definition (HD) low cost Low Speed cameras in 2014. After extensive market research Stennis Space Center (SSC) video team procured their top 3 choices. These cameras systems were tested and the Hitachi KP-HD20 camera was choose as the best camera for the amount spent. This camera was then procured and installed at the A1 test complex in several locations. Therefore it is prudent that this procurement emulates the A1 RPT study and knowledge gained from it to procure the same items.
2. Hitachi produces two cameras that we are interested in purchasing. The first camera is the Hitachi KP-HD20A. This is a small ruggedized HD color camera that was purchased and tested during a test of several lower cost HD cameras. It was determined that this little camera was the better camera for use in our hostile environment for the available pricing. The second camera is a spinoff of the first that Hitachi designed for Inferred Imaging in the KP-HD1005-S5-DV-E5818. This camera is being purchased as a replacement for our aging analog IR cameras. This camera is an HD camera that contains an image sensor that has a range that extents out into the near infrared. It is the only camera that has this ability. Both are a ruggedized camera. These cameras have the ability to be either a color HD camera or switched to a B&W IR camera that works with our current IR filtering. The ruggedized is important because they will be placed in the field next to an active rocket engine and we would like to get 10 plus years usage out of them.
3. Both of these cameras are HD camera and finding lens that actually perform correctly with the added resolution of today's HD cameras is very hard to do. Hitachi owns or has a large stake in this lens company and their crucial imaging division has tested these lens and verified that they will work beyond the capability of these new cameras. The direct purchase from Hitachi gives us a better than average pricing for a lens that has been tested for us and our application.

10.0 SOURCES EXPRESSING AN INTEREST IN THIS PROCUREMENT

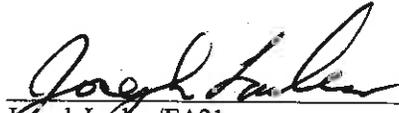
No other sources have expressed an interest in performing this requirement.

11.0 AGENCY ACTIONS TO REMOVE BARRIERS

SSC/EA-21 and Office of Procurement will continue to review changing market conditions to ensure all potential offerors are afforded an equal opportunity to provide subject requirement and will perform market research as applicable to satisfy the Competition in Contracting Act.

12.0 TECHNICAL REPRESENTATIVE CERTIFICATION

Based on the above, I recommend this acquisition be conducted on a limited source basis. I certify that technical data which form a basis for this justification, that are the responsibility of technical or requirement personnel are complete and accurate.

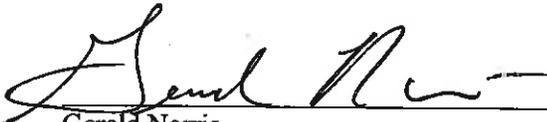


Joseph Lacher/EA21
AST, Electrical Supervisor

7/1/15
Date

13.0 APPROVAL

I certify that this justification for soliciting from a single source (including brand-name) is accurate and complete to the best of my knowledge and belief. I further certify that the anticipated costs to the Government will be determined fair and reasonable prior to award.



Gerald Norris
Contracting Officer / DA10

7-9-15
Date