

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
DO-C9

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2. AMENDMENT/MODIFICATION NO. 0003	3. EFFECTIVE DATE 20 MAR 2002	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY CONTRACTING OFFICER, Code 3235/EJS NAVAL RESEARCH LABORATORY - SSC Department of the Navy Stennis Space Center, MS 39529-5004	CODE N68462	7. ADMINISTERED BY (If other than Item 6) CODE	

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TO ALL OFFERORS	(X)	9A. AMENDMENT OF SOLICITATION NO. N00173-02-R-SE04
	X	9B. DATED (SEE ITEM 11) 21 FEB 2002
		10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 11)
CODE	FACILITY CODE	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
 (a) By completing items 8 and 15, and returning 2 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SEE PAGE 2.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED
16B. UNITED STATES OF AMERICA (Signature of Contracting Officer)	16C. DATE SIGNED

The purpose of this amendment is to answer questions from potential offerors, revise the Statement of Work – Attachment (1) and extend the closing date.

A. Answer questions from offerors as follows: (For answers to questions 1 through 4, see paragraph B, below.)

1. "Is the software video tracker (reference response 12, Amendment 2) GFE by NRL along with the Intevac imager?"

2: "If the response to question 1 is no, can the DAS contractor supply a hardware tracker?"

3. "Our solution approach is to offer a low risk, high reliability, best value solution by using Modified Commercial Off The Shelf (MCOTS) equipment, which is fully compliant with the DAS stabilized pointing system requirements. However, there is not sufficient information provided to quote the optional 3-axis pointer trackers described in Section 12.2 of the DAS SOW, and Amendments. If our response to the RFP excludes these options (Items 0005 through 0008 of Section B), will our proposal be considered non-responsive?"

4. "Will NRL consider an extension of the proposal due date from 3/25/02 to 4/15/02?"

5. "The response to question 17 indicates two temperature operational temperature ranges. Which temperature range should be used: +32 degrees F to +1000 degrees F, or +32 degrees F to +150 degrees F?"

ANSWER: The range shall be from 32 degrees F to 131 degrees F.

6. "If the answer to question 5 is +32 to +150 degrees F, can the DAS electronics be located below deck in a controlled environment, with typical operating temperature range between +32 and +131 degrees F?"

ANSWER: The stabilization driver electronics shall be part of or adjacent to each unit. For contractor performance testing some form of remote control box for communications will be required. There is no operating temperature requirement for this control box because it is not included as a deliverable.

B. Revise Attachment (1) DAS STABILIZED POINTING SYSTEM as follows:

1. Delete paragraph 12.2 in its entirety and replacing it with the following:

"12.2 Optional Three-Axis Pointer Trackers. 12.2. In this option a small two-axis daughter gimbal is to be added as part of the payload along with the camera inside the main stabilization units. As already described, the camera lens field of view will be 48 deg wide by 2.4 deg high with a pixel spacing of 328x82 μ Rad. The payload of this daughter gimbal will be a small laser range finder with 0.5 mRad beam divergence. A flexible optical fiber will be used as both the source and receiver of fiber laser radiation. The sensor head is no more than a tube holding the fiber tip in one end and a lens in the other, and this tubular sensor head size is 3" long by 0.25" in diameter, weighing only 3 ounces. The .5 mRad beam divergence of the laser range has to be directed to points of interest, and that is the job of the subject daughter gimbal. An automated processor looking at the 48x2.4 deg imagery from the camera will on occasion find a bright point of interest and will send back a request to point the laser ranger onto a specific pixel in the image. In this option the stabilization contractor shall

supply a small two-axis gimbal for holding and directing the 3"x.25" ranger head. It shall be mounted inside the main stabilization yoke so that it is in the identical angle space as the main 48x2.4 deg camera. This daughter gimbal needs no additional stabilization. It need use only encoders or resolvers to determine where it is pointing the ranger head. The required pointing accuracy is 250 μ Rad in both azimuth and elevation, relative to an electronically adjustable zero setting. There are 3,350 such pointing positions in 48 degrees; so 12 bits should be sufficient. Any nonlinearity must be well characterized and corrected so that the laser ranger is directed to the proper scene pixie. The contractor shall provide a means for calibrating any such nonlinearity and for establishing the initial reference zero angle pointing direction. The latter could, for instance, be alignment brackets for temporarily mounting a small optical telescope on the daughter gimbal payload for initial alignment and zero calibration adjustment. The electronic interfacing shall enable the laser gimbal to both receive pointing commands and return pointing position. The stabilization contractor may define the mode and nature of this electronic interfacing for the installation with government equipment and shall implement a remote control unit for acceptance testing. The mechanical interfacing shall enable the small daughter gimbal to fit within the main stabilization unit next to the infrared camera. The optical fiber shall be brought off both the daughter gimbal and the main stabilization gimbal. There are no wires or electronics for the laser ranger head. With drift of the main stabilization gimbal, a point in space will move slowly relative to the camera, so the laser ranger yoke needs to be able to follow this motion. Slue time across the full 48 deg field of regard shall be no more than one second.

For performance testing, the government will supply the contractor with two modified versions of the daughter gimbal payload. These payloads will be mechanically identical to the 3"x.25" ranger head; however, the fiber will be replaced by a mirror so that the units can be used as visible-band retro reflection devices. One will have a .5 mRad divergence and the a second a divergence on the order of 2 deg. Alternatively, the stabilization contractor may supply a test payload for acceptance testing at the factory. The performance testing of this daughter gimbal shall show reproducibility of pointing to any position within 48x2.4 deg with the required 250 μ Rad accuracy. “

2. Revise paragraph 2.0 Government Furnished Equipment, by adding “2 ea. Modified versions of the daughter gimbal payload.”

C. The closing date in block 9 of the solicitation is hereby extended to 10 APR 2002.