

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE	PAGE OF PAGES 1   6
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 06 JAN 2000	4. REQUISITION/PURCHASE REQ. NO. 81-8033-00	5. PROJECT NO. (If applicable)	
6. ISSUED BY Contracting Officer, Code 3230.JW Naval Research Laboratory 4555 Overlook Ave., SW Washington DC 20375-5326	CODE N00173	7. ADMINISTERED BY (If other than Item 6) CODE		

8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State and ZIP Code)  <b>TO ALL OFFERORS</b>	<input checked="" type="checkbox"/> 9A. AMENDMENT OF SOLICITATION NO.  N00173-00-R-JW01
	<input checked="" type="checkbox"/> 9B. DATED (SEE ITEM 11)  23 DEC 99
	10A. MODIFICATION OF CONTRACT/ORDER NO.
	10B. DATED (SEE ITEM 13)
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 02 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer x 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 you 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 APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

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 CONTINUATION PAGE(S)

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 BY (Signature of Contracting Officer)	16C. DATE SIGNED

The following are questions and answers (in bold) for this RFP. The answers are official changes to the RFP and will be reflected in the awarded contract.

1. We need to know the spacecraft downlink parameters; transmitter EIRP (power, gain, and losses)?

**Transmitter Power = 6 watts**

**Antenna gain toward ground site at acquisition = +5.0 dBic**

**Atmosphere and rain fading = Rain Region B, 95.5% availability (1.57 dB at 5 degree acquisition)**

**RF cable losses = 2.5 dB**

**EMI filter and switch insertion loss = 2.0 dB**

2. What is the telephone code and exchange (XXX-XXX) for the demarkation point for the windsat data line in the Monterey California POC?

**831-656 (Area code-Exchange)**

3. On page 9, paragraph 8.0 (c), need to confirm that the "106 bits" should be "10<sup>6</sup> bits"?

**Yes, it should be 10<sup>6</sup>.**

4. There is inconsistent direction with respect to submittal copies and formats, please clarify?

**See Question 12, below.**

5. RFP Section 2.A, p. 12 identifies the nominal launch date as 12/15/2001 with the window open through 2/15/2002. The SOW Section 8 (page 9) identifies the launch window as closing on 2/13/2001. Should the latter read 2/15/2002?

**Yes, nominal launch window is from 12/15/01 through 2/15/02; 2/13/2001 is deleted and changed to 2/15/2002.**

6. Footnote RFP Section 1.A Page 3, Option 1 footnote references CLIN 00AC vice CLIN 0005AC. Recommend changing the footnote to reference CLIN 0005AC.

**As recommended, the reference is changed to CLIN 0005AC vice 00AC.**

7. RFP Section 1.A, CLINS 0005-0027 contains no guaranteed minimum passes.

Recommend setting guaranteed minimum pass quantities. This will result in the most competitive pricing structure.

**The Government will entertain suggestions from offerors whether and how to address this issue. Due to the short leadtime, submit suggestions by e-mail to**

[waldenfels@contracts.nrl.navy.mil](mailto:waldenfels@contracts.nrl.navy.mil) as soon as possible. It may not be possible to consider suggestions after the close of business on Thursday, January 6. The Government is considering either leaving the RFP unchanged or stating the same minimum for all offerors. Allowing offerors to state their own minimums would appear to obfuscate the evaluation process.

8. RFP Section 2.G: Is it the Government's intent to exercise an option for primary support year (e.g. CLIN 0005AB) one and exercise an option for back-up support (e.g. CLIN 0019AA) the following year under the same contract?

**The vendor will be either a primary or backup provider, not a mixture of both.**

9. Although not specifically stated, the CLIN structure appears to be firm fixed price for all phases. Please confirm that all three phases are firm fixed price. If so, it appears that the Limitation of the Government's obligation is not applicable to firm fixed price line items that are funded and invoiced according to a schedule. Please clarify.

**The CLIN structure is firm fixed price for all phases, with adjustments as described in Paragraph E on page 14. The terms of the Limitation of the Government's Obligation (LOGO) provision are consistent with this pricing structure, but the LOGO provision does not directly affect the invoicing schedule. However, it indirectly affects invoicing by stating in paragraph (a) the amount "of the total price [that] is presently available for payment and allotted to this contract." Paragraph (b) states that "The Government will not be obligated in any event to reimburse the Contractor in excess of the amount allotted to the contract for those item(s) regardless of anything to the contrary in the clause entitled ...." Other parts of the provision also indirectly affect the amount and timing of invoicing.**

10. Will this funding schedule represent the schedule for invoicing against the firm fixed price line items?

**The funding schedule will indicate the funding expected in the future but will not affect invoicing. HOWEVER, OFFERORS ARE INVITED TO SUGGEST, IN THEIR PROPOSALS, ADDITIONAL PRICED SUB-CLINS UNDER ITEMS 0001 AND 0003 TO AFFORD OPPORTUNITIES FOR BILLING DURING PHASES 1 AND 2. The Government reserves the right to implement the proposed revised structure in the awarded contract.**

11. Section 7 contains only sub-paragraphs (b) and (e). Sub-paragraphs (a), (c), and (d) appear to be missing?

**Section 7 invokes FAR clause 52.212-1, Instructions to Offerors – Commercial Items. Paragraphs (b) and (e) in the RFP are addenda to standard paragraphs (a) through (j) of that clause.**

12. The first two paragraphs of RFP section 7, sub-paragraph (b) appear to be duplicates with the only difference being the number of copies required. Please clarify.

**The first paragraph under sub-paragraph (b) is applicable (“5 copies of pages 1-11 and 15-16.... Submit 7 copies of supporting data. ...” The following, inconsistent paragraph is deleted.**

13. The RFP requires a communications link analysis spreadsheet. Request the Government provide as much of the data as possible in the attached spreadsheet to facilitate the meeting of this requirement.

**See the filled in spreadsheet on page 5.**

14. Does the Government intend to make multiple awards, i.e. one for primary support and one for back-up support?

**No. There will be no multiple awards.**

15. There is no RFP section 8. Please clarify.

**Insert “8. RESERVED” before section 9.**

16. SOW section 3 states that payload data is to be routed to FNMOC, AFRL, RSC, and NRL. Our understanding is that payload data is to be routed only to FNMOC (WindSat) and AFRL (SMEI) and that telemetry SOH is to be routed to RSC and Spectrum Astro. Please clarify.

**Figure 1 is drawn correctly. WindSat payload data will be sent to FNMOC, SMEI payload data will be sent to AFRL, and SOH will be sent to RSC only.**

17. The SOW section 7 states that under this option the Government may request additional, non-scheduled support. Is it the Government’s intent that the maximum quantities in the price schedule are inclusive of such additional non-scheduled support? Or, should the Offeror propose the appropriate price schedule for this support consistent with its technical approach?

**The offeror should propose a unit price premium amount for emergency supports. The Government will adjust the pricing structure of the awarded contract to reflect separate unit prices for emergency and for non-emergency supports.**

18. Ref: SOW Table 1. Please confirm that the maximum amount of payload data to be received in a pass during the cal/val phase is 18.432 Gbits (51.2 Mbps for 6 minutes) and during the operational phase is 6.144 Gbits (51.2 Mbps for 2 minutes).

**That is correct. During the cal/val phase, we are assuming 2-4 X-Band contacts per day. During the operational phase, the contacts will increase to 11-14 per day.**

19. There is a piece of a sentence missing on the top of page 8 in the SOW. The sentence reads “This transfer can start after the ..... has ended, providing the data latency requirement is met.”

**The missing part is the single word “pass”.**

**Spreadsheet for Question 13.**

<b>Answers to requested data for a link calculation.</b>			
<b>(Requester asked:</b>			
If multiple downlink/uplink frequencies are used enter additional data in second and third Value columns.			
<b>Answer: multiple frequencies are not used; the second and third columns were eliminated.)</b>			
<b>Spacecraft Parameters</b>	<b>Value</b>	<b>Units</b>	
Satellite Orbit Altitude	830	Km	
Spacecraft Transponder RF Output Power	37.7815125	dBm	6 watts
Spacecraft RF Path Losses	4.5	dB	
Spacecraft Antenna Gain.	5	dBi	
Spacecraft Receive Antenna Noise Temp	N/A	K	
Spacecraft Receive Antenna G/T	N/A	dB/K	
Spacecraft Receiver Noise Figure	N/A	dB	
Spacecraft Receive Carrier Bandwidth	N/A	Hz	
Spacecraft Receiver Required CNR	N/A	dB	

<b>Downlink</b>	<b>Value</b>	<b>Units</b>		
Data Rate	51.2/25.6	Kbps	Higher rate is nominal	
Modulation Type	OQPSK			
PCM Code	NRZ-M			
Encoding	Convolutional		K=7, R=1/2	
Required BER	1.00E-05			
RF Frequency	8075	MHz		
Polarization	RHCP			
Subcarrier Frequency	N/A	KHz		
Subcarrier Modulation Deviation	N/A	Radians		
<b>Uplink</b>				
Data Rate	N/A	Kbps		
Modulation Type	N/A			
PCM Code	N/A			
Encoding	N/A			
Required BER	N/A			
RF Frequency	N/A	MHz		
Polarization	N/A			
Subcarrier Frequency	N/A	KHz		
Subcarrier Modulation Deviation	N/A	Radians		