AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicble)
0001	06/07/12	68-7060-12	

6. ISSUED BY	CODE	7. ADMINISTERED BY (If other than Item 6)	CODE
Contracting Officer US Naval Research Laboratory 4555 Overlook Avenue, SW Washington, DC 20375-5326	N00173		

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)	(X)	9A. AMENDMENT OF SOLICIATION NO.
		N00173-12-R-PW05
		9B. DATED (SEE ITEM 11) 06/04/12
		10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 11)
CODE / FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[x] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [ ] is extended, [x] 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 1 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 APPROPIRATION 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)	
		Carol A. Parnell Contracting Officer	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	

The purpose of this amendment is to answer questions submitted.

Question 1: The specs say “existing magnet power supply/controller will be used.” Can we please have details of this system so we can ensure it is suitable for the HTS magnet that we intend to offer?

Answer: NRL has a Lakeshore Superconducting Magnet Power Supply Model 612 with the model 601 control unit. The description from the manual is "True, Four-Quadrant, Bidirectional Power Flow output. Current and voltage are autoranging and can operate as a source or sink in either positive or negative polarity in current or voltage mode. Current and voltage can be programmed via front panel control, remote interfaces or analog input." Current: 0 to±125A. Voltage: 0 to±30V. Maximum power: 1000VA continuous.

Question 2: Specs refer to a persistent mode switch. This is typical for LTS> magnets but not relevant to HTS magnets. Please advise a) length of time the magnet is expected to operate in persistent mode, and b) required field stability.

Answer: Persistent mode is not important as long as it is stable. Stability of 1 part in 10^4 per hour (<0.01% relative change per hour) is required.

Question 3: As a power supply will be used, we assume that the magnet will be required to operate at different fields. Please advise the expected time between changing fields and whether a more rapid field sweep rate is of advantage.

Answer: The magnet will stay at the same field from anywhere between 10 minutes and several days. A field ramping rate of 0.07 T/min or better is acceptable.