

2. AMENDMENT/MODIFICATION NO. 002	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. 4200417610	5. PROJECT NO. (If applicable)
6. ISSUED BY CODE NASA/Kennedy Space Center Office of Procurement, OP-ES Andrew Dennis Kennedy Space Center, FL 32899		7. ADMINISTERED BY (If other than Item 6) CODE	

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)	(X)	9A. AMENDMENT OF SOLICITATION NO. NNK12417610R
	(X)	9B. DATED (SEE ITEM 11) January 25, 2012
		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 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 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.
<input type="checkbox"/>	
<input type="checkbox"/>	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).
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
<input type="checkbox"/>	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.)
 The purpose of this amendment is to document the answers provided to questions 8 through 14 received on NNK12417610R.

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) Andrew S. Dennis Contracting Officer
15B. CONTRACTOR/OFFEROR	16B. UNITED STATES OF AMERICA
(Signature of person authorized to sign)	(Signature of Contracting Officer)
15C. DATE SIGNED	16C. DATE SIGNED 2/22/2012

The Government's responses to questions submitted on the Solicitation are contained within this amendment. The responses to questions shall not be construed as altering the requirements of the RFP.

1. The following received questions and the Government provided answers are shown below:

Question 8: Is it necessary to provide liquid nitrogen precooling for the densification operation as part of this scope of supply?

Answer 8: LN2 precooling is not required. It is allowed to meet the predicted densification load of 500W. The system must be capable of meeting the 350W zero boil off mode without LN2 cooling. If LN2 precooling is required then the contractor is responsible for all piping, heat exchangers, and controls associated with the system. The government interface is a flexhose at the end of a tanker.

Question 9: With all the equipment located inside the purged enclosure where is the control and instrument panel for start-up and monitoring located?

Answer 9: If the contractor provided electrical panels cannot fit in the enclosure with the mechanical equipment, then a separate Class 1 Div 2 enclosure shall be delivered by the contractor.

Question 10: Are all start-up controls and instrument monitoring part of this scope or is it part of the test site instrumentation system provided by the government?

Answer 10: All necessary controls and instrumentation are the responsibility of the contractor. The government will provide the demand control input from 100% to 50% capacity.

Question 11: Is the purged enclosure and ISO container, if not what is the height of the container?

Answer 11: The enclosure is expected to be an ISO container. If not, the room will be at least 7.5 feet high.

Question 12: Should we be concerned about the internal temperature of the container with the refrigeration equipment inside?

Answer 12: The primary cycle heat rejection shall be a liquid cooling (recirculation loop chiller). The enclosure will be purged with ambient temperature air, monitored for H₂ and temperature and provided by the government. If necessary that purge can be conditioned.

Question 13: Are there any special provisions for the helium transport loop piping where it will penetrate the purged enclosure?

Answer 13: There are no special provisions. Cut out sections of the container walls will be provided at the locations specified by the contractor.

Question 14: Is the water supplied quality and is it chilled water or city water and what is the inlet temperature, pressure and flowrate?

Answer 14: The water will be supplied by a recirculation loop chiller ordered to meet the system requirements. The required flow rate and temperature should be provided by the contractor in the proposal.

2. The proposal submission due date is extended to March 2, 2012.

3. All other terms and conditions of NNK12417610R remain unchanged.