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|--|----------------------------------|---|---|-------------------------------------|
| AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT | | | 1. CONTRACT ID CODE J | PAGE OF PAGES 1 27 |
| 2. AMENDMENT/MODIFICATION NO. 0002 | 3. EFFECTIVE DATE 09-May-2013 | 4. REQUISITION/PURCHASE REQ. NO. | | 5. PROJECT NO.(If applicable) |
| 6. ISSUED BY NSWC PANAMA CITY (K. NELSON) KAYLA.M.NELSON@NAVY.MIL 850-230-7072 110 VERNON AVE. PANAMA CITY FL 32407-7001 | CODE N61331 | 7. ADMINISTERED BY (If other than item 6) See Item 6 | | |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) | | X | 9A. AMENDMENT OF SOLICITATION NO. N61331-13-R-0004 | |
| | | X | 9B. DATED (SEE ITEM 11) 20-Mar-2013 | |
| | | | 10A. MOD. OF CONTRACT/ORDER NO. | |
| | | | 10B. DATED (SEE ITEM 13) | |
| CODE | FACILITY CODE | | | |
| 11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS | | | | |
| <input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer 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 <u>1</u> 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 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 <input type="checkbox"/> is not, <input type="checkbox"/> 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 as follows: 1) To answer questions asked during part II of the period for questions, 2) Make corrections to paragraph C.3.3.1 of Addendum to FAR Clause 52.212-4, and 3) Make corrections to paragraph 3.1.1.1 Table 1 of Addendum to FAR Clause 52.212-1. The period for questions is hereby closed and the Government does not anticipate opening another period for questions prior to the closing date of the RFP. Please see Summary of Changes for details. | | | | |
| 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) | | |
| | | TEL: | EMAIL: | |
| 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 13-May-2013 |

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

The following items are applicable to this modification:SUMMARY OF CHANGES (REVISED)

SECTION SF 30 - BLOCK 14 CONTINUATION PAGE

The following have been added by full text:

QUESTION AND ANSWERS-PART II**Note: Questions 1-11 refer to Addendum to FAR Clause 52.212-4 (EEBD Specification) and Answers to questions listed in Amendment 0001**

1) With respect to section C.3.1.3.3 Para B which states that the length of the strap shall not be less than 38" in length. Does this refer to the total length of the strap or the length of the strap from the point of carry to the point where it mates with the storage container?

Answer: This refers to the total length of the strap.

2) With respect to section C.4.4.5 and C.4.4.6 section (f) refers to the "device". Is it the US Navy's intention for the contractor to test one device or all devices subjected to the above testing?

Answer: 8 devices for each test as stated in the referenced paragraphs of Addendum to FAR Clause 52.212-4 (EEBD Specification).

3) With respect to section C.4.4.1 which refers to phenolphthalein testing:

--- Is the swab required on the upstream, downstream, or both paths of the CO2 scrubbing system of the breathing circuit?

Answer: The swab is done on the interior of device (mouthpiece or hood) that is exposed to the inhalation air. More specifically the area where air exits the scrubber (after any designed filters) all the way to the areas nearest to where the air enters the mouth. The intent is that the procedure applies to any surface of the breathing loop that is readily accessible to be swabbed. The device will not be disassembled or opened beyond the prescribed donning procedure.

--- With respect to the unmanned testing requirement which states testing will be conducted within 30 seconds of removal of the device from its protective packaging? Does the device have to be flowing oxygen? Static testing without oxygen flowing may or may not indicate the presence of Alkaline substances.

Answer: If removal from packaging initiates oxygen flow, then yes.

4) With respect to section C.3.2.10 will puncture resistance to MIL-STD-3010 section 2065 greater than 13.2 pounds as specified in A-A-59763 Commercial Item Description for "Emergency Escape Breathing Devices" be an acceptable alternative to this requirement?

Answer: No, that MIL-STD is obsolete and the CID does not apply to this solicitation.

5) With respect to section C.3.4.3 EEBD Labeling, and Clause 252.211-7008 USE OF GOVERNMENT-ASSIGNED SERIAL NUMBERS:

--- Will the device serial numbers be government-assigned?

Answer: No.

6) With respect to Amendment 0001 questions 8, 31, and 32: The RFP submission deadline has been extended to 06 September 2013, but now requires that the Cap 1 CCER NIOSH certification to be completed by that time. Prior to the solicitation being amended, it stated that NIOSH certification had to be obtained by the time of contract award, but that is was not a prerequisite at the time of submission. In our recent enquiry to the appropriate points of contact at NIOSH, they have said the estimated lead time to be 135 working days. Additionally, the test methods and procedures for CCERs in the laboratory at NIOSH are also new and unproven at this time. Given these uncertainties and the potential for NIOSH testing delays outside of the control of the offerors, would the Navy consider amending the RFP such that bids are compliant if the following conditions are met at the time of submission.

1. The proposed equipment has been submitted to NIOSH for certification
2. The application has received a TN number
3. It has passed initial quality review and the pre-submission data package has been accepted by NIOSH

Answer: This requirement has stated from the beginning in the synopsis that the NIOSH certification as well as third party testing of the EEBD shall be completed prior to submitting a proposal. Addendum to FAR Clause 52.212-4 (EEBD Specification) states that the NIOSH certification of the EEBD shall be retained during the life of the contract. The Government is not considering amending the RFP to allow submittal to NIOSH at time of bid submission as compliant to the RFP.

Based on the questions that were received in Part I of the period for questions the Government decided to extend the closing date of the RFP to 06 September 2013 to allow time to for offerors to receive the certification and obtain the third party testing. No further extensions are anticipated.

7) With respect to Amendment 0001 question 15 & Addendum to FAR Clause 52.212-4 (EEBD Specification) paragraph C.3.3.1: The response to question 15 states in part (b) that the maximum operating temperature of 110 degrees Fahrenheit and the operating pressure range of 0.8 to 1.2 bar must be stated in the manual, evaluated by NIOSH, and the equipment approved by NIOSH with these limitations. A formal requested was submitted to NIOSH requesting NIOSH provide certification that states an upper temperature and a range of ambient pressures for equipment use. NIOSH replied that they are not able to run a test to certify at elevated temperatures or different ambient pressures, because this is not part of the NIOSH standard. If the Navy has reached agreement with NIOSH on the mechanism to achieve this type of certification, would the Navy please provide a copy of such agreement and/or the procedure for receiving such certification? If this option is not available, is it permissible for the vendor to conduct third party certified man tests under these conditions?

Answer: Paragraph C.3.3.1 of the Addendum to FAR Clause 52.212-4 has been modified to read as follows: "The NIOSH approval shall be valid for operating temperatures between 21°F (-6°C) and 110°F (43°C), relative humidity less than or equal to 95%, and 1 atmosphere nominal pressure."

8) With respect to Addendum to FAR Clause 52.212-4 (EEBD Specification) paragraph C.3.3.1: For the specified hypo- and hyper- baric pressure conditions (0.8 to 1.2 atmospheres), is it permissible for the vendor to make a design statement that the device will operate correctly under these conditions? Alternatively, if the vendor is required to conduct a third party certified man test under these conditions, can the Navy make a suitable facility available?

Answer: Please refer to the answer to question #7 above. The Navy cannot provide a facility.

9) With respect to Addendum to FAR Clause 52.212-4 (EEBD Specification) paragraph C.3.1.3.5: Paragraph C.3.1.3.5 specifies that the device shall be designed for carry on a belt. It goes on to state that the device should be designed for other modes of carry on the body when the user is not wearing a belt. What is the intent of this statement? Does the Navy require a shoulder carry strap on the device as is required for the storage container as per C.3.1.3.3? If the device has such a strap then what specifications must that strap meet? Are other carry modes desired or requested?

Answer: Belt carry of the device and shoulder carry of device in storage container are the threshold requirements. Any other modes of carry can be proposed but are not required.

10) With respect to Addendum to FAR Clause 52.212-4 (EEBD Specification) paragraph C.3.2.8: The specification states that the maximum weight of the EEBD must not exceed 5.5 lbs. Would the Navy consider an objective maximum weight of 5.5 lb and a threshold of 6.5lb?

Answer: No.

11) With respect to Addendum to FAR Clause 52.212-4 (EEBD Specification) paragraph C.6.2: Would the Navy confirm that the EEBDs being ordered under CLINS 0001, 0004, 0006, 0008, and 0010 are the EEBD delivered in its orange storage container; or more specifically, a combination of the device and the storage container as defined in Addendum to FAR Clause 52.212-4 (EEBD Specification) paragraphs C.6.2 and C.3.1.1.

Answer: The referenced CLINS are for EEBDs delivered in orange storage container.

Note: Questions 12-16 refer to Addendum to FAR Clause 52.212-1 (Instructions to Offerors) and Answers to questions listed in Amendment 0001

12) With respect to Addendum to FAR Clause 52.212-1 (Instruction to Offerors) paragraph 3.1.1.1.a.1 which states "All testing and examinations done for submission of the offer shall be certified by a third party certification organization accredited in accordance with the requirements of ISO/IEC 17025, General Requirements for the Competence of Testing and Calibration Laboratories, and the scope of the accreditation shall include testing of Personal Protective Equipment (PPE)."

--- Will testing and examination certification be accepted by ISO/ IEC 17025, General Requirements for the Competence of Testing and Calibration Laboratories, with different accreditations other than PPE as many of the tests required in the specification may fall under a scope of accreditation such as mechanical or calibration?

Answer: Paragraph 3.1.1.1.a.1 has been changed to read "All testing and examinations done for submission of the offer shall be certified by a third party certification organization."

--- Is testing required by an ISO/ IEC 17025 testing laboratory on sections C.3.2.9 Flammability (i.e. 20MM/Sec vice 60 MM/SEC) and C.4.4 Testing and Inspection as many of these tests fall out of the scope of accreditation held by the test labs.

Answer: Paragraph 3.1.1.1.a.1 has been changed to read "All testing and examinations done for submission of the offer shall be certified by a third party certification organization."

--- With respect to testing that requires multiple tests, such as sections C.4.4.5 and C.4.4.6, can different testing laboratories with different accreditations perform the tests. For example, section C.4.4.5 and C.4.4.6 (shock and vibration) require testing to a specific MIL requirement, however requirements (d) through (f) require testing outside the scope of the accreditation.

Answer: Paragraph 3.1.1.1.a.1 has been changed to read "All testing and examinations done for submission of the offer shall be certified by a third party certification organization."

13) With respect to Addendum to FAR Clause 52.212-1 (Instructions to Offerors) paragraph 2.2 (d) and question 24 of Amendment 0001: The fonts of third party inspection/test reports may be different or not be controllable by the responder. Confirm that these reports can be provided as is provided by the third party.

Answer: The third party reports can be provided as is provided by the third party.

14) With respect to Addendum to FAR Clause 52.212-1 (Instructions to Offerors) paragraph 2.2 (d) and question 24 of the Amendment 0001: As there is a 50 page limit to the technical section would the Navy consider allowing a more modern, proportional, 12 point font? Courier is a non-proportional font and as such can prove difficult to read and is wasteful of space in a page limited proposal.

Answer: No. The Navy is requesting Courier New font no smaller than 12 point, 10 pitch, single spaced, on both sides of a sheet 8-1/2 by 11 inches as stated in Addendum to FAR Clause 52.212-1 (Instructions to Offerors) paragraph 2.2 (d). Offerors are highly encouraged to be clear and concise with their responses to this RFP.

15) With respect to Addendum FAR Clause 52.212-1 (Instructions to Offerors) paragraph 3.1.1.5: Factor 5 states that the sample product (s) (production unit and training unit) and the instructional video with training materials shall be new and form the same lot. All of the submitted product will be new, but the lot numbers for the sample production unit and the sample training unit will be different since they have different part numbers. The date of manufacture will be within three months of each other. Would the Navy confirm that this is acceptable?

Answer: Yes this is acceptable.

16) With respect to Addendum to FAR Clause 52.212-1 (Instructions to Offerors) paragraph 3.1.1.1: Would the Navy explain their warranty returns process or the procedure that will govern it under any resulting contract? Would the Navy please define/explain the terms: "Replacement or Prorated" and "Replace/Repair?"

Answer: The Navy will follow vendor guidelines for warranty execution. Table 1 in paragraph 3.1.1.1 of Addendum to FAR Clause 52.212-1 has been changed. If part is completely covered by repair or replacement (no additional cost to Government), enter "repair/replacement." If there is to be a cost to Government for repair/replacement of item based on some factor determined by vendor, item age for example, input "Prorate." State "No Warranty" for items not covered under a warranty.

SECTION SF 1449 - CONTINUATION SHEET

The following have been modified:

ADDENDUM TO CLAUSE 52.212-1

The following Instructions to Offerors are hereby added as an addendum to FAR Clause 52.212-1 Instructions to Offerors-Commercial Items:

INSTRUCTIONS TO OFFERORS

1.0 Award will be made under this solicitation based on a best value source selection process. Offerors must comply with the detailed instructions for the format and content of the proposals. Proposals that do not comply with the detailed instructions for format and content of the proposal may be considered non-responsive and may render the offeror ineligible for award. The validity of the offerors proposal shall be 180 days.

2.0 Proposal Preparation, Format, and Structure

2.1 General. The Government is requesting proposals to support an Indefinite Delivery – Requirements (ID) contract to provide up to 130,500 Emergency Escape Breathing Devices (EEBD's), up to 960 Training Units, and up to 250 EEBD Instructional Videos with training materials. Each offeror shall submit a written proposal detailing their response to the solicitation, a sample product (production unit and training unit) and an instructional video with training materials. The Sample Product (production unit and training unit) and Instructional video with training materials shall be new and from the same lot. The sample product (production unit and training unit) as well as the instructional video with training materials will be returned after award to the unsuccessful offeror. It is particularly desirable to improve product quality and/or reliability, reduce acquisition price through ease or efficiency of manufacturing, insert current technology, and reduce operating and support costs

of this item. See paragraph 1.2 below for specific proposal format requirements. The proposal shall consist of two volumes:

- (a) **Volume I (Technical Proposal)** - shall be divided into the Executive Summary and separate sections for each of the major technical factors listed below:
- (b) **Volume II (Price Proposal and Offer)** – shall contain price and price breakdowns for the effort described in the offerors Technical Proposal, the completed SF 1449 and representations and certifications as required by the solicitation.
- (c) Volumes shall be packaged in a sealed container and delivered to the location specified in Block 7 of Standard Form 1449 by the date and time specified in Block 9 of Standard Form 1449. All volumes shall be submitted at the same time.
- (d) Comprehensive responses to the requirements of this solicitation are necessary to enable the Government to evaluate the offerors understanding of, and capability to accomplish the stated requirements. Throughout the Proposal, the offeror shall provide sufficient detail to substantiate the validity of all stated claims. Proposals shall be submitted in accordance with the instructions herein and non-conformance with the specific required content may be cause for rejection of the Proposal. The Proposal shall provide comprehensive responses to the areas provided for in paragraph 2.0 below, entitled "Proposal Content".
- (e) Each proposal must be sufficiently complete to demonstrate the manner in which it is proposed to comply with the applicable requirements of the solicitation. Brochuremanship is not desired; clarity and completeness are essential. Data not submitted with this Proposal, but submitted previously, or presumed to be known (i.e., previous projects performed for the Government) cannot be considered as part of the Proposal, and will not be used in the evaluation.
- (f) As used herein, the term "technical" has broad connotation and includes, among other things, system engineering and design, integrated logistic support, configuration management, safety, fabrication, management, and resources.
- (g) In the event any portion of the Technical Proposal is written by anyone who is not a bona fide employee of the firm submitting the Proposal, a certificate to this effect shall be furnished which must be signed by a responsible officer of the offeror and shall show the person's name, employment capacity, the name of the firm, the relationship of that firm to the offerors, and the portion of the Proposal they wrote.

2.2 Proposal Format and Structure

- (a) In order to maximize efficiency and minimize the effort involved in the Proposal evaluation process, all offerors shall submit their proposals in accordance with the format presented below. Offerors must comply with the detailed instructions for the format and content of the proposal; proposals that do not comply with the detailed instructions for the format and content of the proposal may be considered non-responsive and may render the offeror ineligible for award. It is believed that sufficient latitude is provided, such as not to prejudice or limit the comprehensiveness of the Proposal.
- (b) The Proposal shall consist of two volumes. The organization and number of copies of each volume are as follows:

| | <u># of Copies</u> | <u>Maximum Length</u> |
|-------------------------------|--------------------|-----------------------|
| Volume I - Technical Proposal | 4 | 50 pages* |
| Volume II - Price Proposal | 2 | None |

*Note – Maximum length constitutes a page limitation. It is highly desirable that offerors are brief, concise, direct in their responses, and make every effort to respond within the maximum length. Proposals with excessive or

redundant material over and above the required response merely serve to complicate the evaluation process and may be evidence of a lack of understanding of the requirement. Page limitations are identified for each volume of the proposal and will be rated as maximums. If exceeded, excess pages will not be read or considered in the proposal evaluation. When both sides of a sheet display printed material, it shall be counted as two pages. Graph, charts, and tables are included in the page count. The following are not included in the limitations:

Title/Cover pages

Table of Contents

Glossaries of abbreviations and acronyms

Proposal Cross-Reference Tables

Past Performance (Note: Past Performance is limited to five (5) pages but is not part of the 50 page count)

Attachment to Technical Proposal (in accordance with paragraph 3.1.1.1 below)

QA Plan attachment

(c) The volumes shall be bound separately using bindings that will allow the document to lie flat when opened to any page and permit easy removal for evaluation of different sections by multiple evaluators. Each individual volume of the Proposal shall stand on its own as complete and inclusive and shall contain all pertinent information in sufficient detail to permit evaluation of the particular area of interest. Volume I shall contain no pricing information. Volume I shall contain all information needed to evaluate the technical aspects of the Proposal. Volume I shall be unclassified.

(d) The narrative material in the Proposal shall be typewritten in Courier New font no smaller than 12 point, 10 pitch, single-spaced, on both sides of a sheet 8-1/2 by 11 inches. Margins shall be one inch on all sides. In the event photo reduction is used for graphs and drawings, their presentation must be clear and legible. Fold-out sheets shall be one side of the page only, and should be limited to graphs, flow charts, diagrams, and other pictorial-type information. A Table of Contents identifying major areas of the Proposal and showing location page reference shall be placed in the front of each volume.

(e) Pages shall be numbered by, volume number, followed by section number, followed by a sequential number (i.e., "1-3-1", "1-3-2", "11-1-1" etc.). A date shall be placed on each page of the Proposal corresponding to the date of the initial Proposal. Any pages which may be revised during a best and final submission, if required, shall contain revision numbers and dates.

(f) The cover page of each volume of the Proposal shall include: (1) the volume number and title; (2) the nomenclature and solicitation number of the RFP; (3) the company name of the offeror; (4) the full name and address designation of the contracting activity; (5) the offerors position regarding disclosure of Proposal data.

(g) Unnecessarily elaborate brochures or other presentations beyond those sufficient to present a complete and effective response to this solicitation are not desired and may be construed as an indication of the offerors lack of price consciousness. Elaborate art work, expensive paper and bindings, and expensive visual and other presentation aids are neither necessary nor wanted.

(h) No price information shall be included in the Contractor's forwarding letter, nor any part of the Proposal, except the Price Proposal (Volume II). Forwarding letters are to be merely instruments for transmitting the submitted Proposal.

3.0 Proposal Content

3.1 Volume I - Technical Proposal Specifics.

The Technical Proposal shall be as specific and complete as to clearly demonstrate to the Government that the offeror has a thorough comprehension of and the capabilities to perform all aspects of the solicitation requirements. Statements that the offeror understands the requirement and can or will comply with the requirements will be considered inadequate, as will statements such as "straight-forward engineering techniques or "the highest

quality control procedures". It is required that all pertinent factors be detailed. Specifically, the proposal shall discuss in detail the offerors technical superiority in accomplishing the requirements of this solicitation, and shall detail the proposed approach for meeting those requirements. These volumes should also identify areas of potential risk to the achievement of the requirements specified in the EEBD Specification. The offeror shall identify the degree of risk involved in each area and include a description of proposed solution of risk mitigation.

3.1.1 Technical Proposal Contents

(a) **Executive Summary.** The Executive Summary section shall highlight the offerors overall approach, key and unique capabilities, and the general features of the offerors resources. Experience and understanding of the technical efforts required by this solicitation shall also be summarized herein.

(b) **Technical Proposal.** The Technical Proposal shall consist of the sections as detailed below. The offeror should use the same numbering scheme for the factors as the one used below and/or provide a cross-reference for the proposal to this outline. The Technical Proposal must completely respond to the requirements set forth in the solicitation, taking into consideration required quantities and delivery schedules. It is incumbent upon the offeror to read the evaluation factors in their entirety and submit complete responses including all required forms and supporting documentation.

SECTIONS:

Factor 1.0: Technical Approach, Compliance with EEBD Specification

Factor 2.0: Maintenance Requirements

Factor 3.0: Quality Assurance

Factor 4.0: Past Performance

Factor 5.0: Sample Product and Instructional video with training materials

3.1.1.1 Technical Factor 1.0 – Technical Approach and Compliance with the EEBD Specification

This section shall discuss, in detail, the offerors understanding of the EEBD specification requirements and shall detail the offerors ability in meeting those requirements. This section should also identify areas of potential risk to the achievement of the requirements specified in the EEBD specification, located in Addendum to FAR Clause 52.212-4. The proposal shall demonstrate the contractor's ability to comply with the EEBD specification located in Addendum to FAR Clause 52.212-4. All referenced material, as specified in the subparagraphs below, shall be included as an attachment to the technical proposal. The following shall also be included in the technical proposal:

a. The offeror shall provide a report documenting the results of all inspections and testing required by the EEBD Specification. The report shall be in the contractor's format (except that a summary of the results shall be tabulated on a summary page), and shall provide sufficient data in the form of test results, measurements, documentation, test laboratory certifications, etc., to clearly and concisely describe how conformance with each requirement has been demonstrated. This report shall accompany the proposal submittal.

1) All testing and examinations done for submission of the offer shall be certified by a third party certification organization.

2) Third party certification will state that the required tests and examinations have been performed according to the requirements of the RFP and that the test and examination results reported in the proposal are correct and complete. Additionally, the certification shall accurately define what is certified and what is not certified.

3) The offeror is solely responsible for employing the certification organization. The certification organization shall not be owned or controlled by the offeror and their primary business shall be certification. The certification organization shall not have an interest in the ultimate success or failure of the offeror to win the contract.

b. The offerors technical proposal shall also include information regarding hazardous material required in FAR clause 52.223-3, Hazardous Material Identification and Material Safety Data.

c. If a warranty is provided with the EEBD, the offeror shall provide warranty information to include duration, covered components, excluded components, estimated turn-around time for repair, and process for return of equipment. All offerors shall complete Table 1 provided below. The offeror shall complete Table 1 in its entirety and submit it within the Technical Proposal contained in Volume 1. In the event no warranty is offered, the offeror shall complete Table 1 by annotating "No Warranty" or N/A in each applicable field and include the completed Table in its entirety within the Technical Proposal contained in Volume 1.

Table 1 – Warranty Information

| EEBD Assembly/ Component | *Replacement/Repair, Prorated, or No Warranty | Period of Coverage (In Years) | Repair Time or Replacement (In Days) |
|-----------------------------|--|----------------------------------|---|
| | | | |
| | | | |
| | | | |

***Note: If part is completely covered by repair or replacement (no additional cost to Government), enter "repair/replacement." If there is to be a cost to Government for repair/replacement of item based on some factor determined by vendor, item age for example, input "Prorate." State "No Warranty" for items not covered under a warranty.**

3.1.1.2 Technical Factor 2.0 – Maintenance Requirements

a. EEBD Maintenance

The offeror shall identify the periodicity of the periodic visual inspection of the EEBD. The offeror shall specify if skills are required beyond what can be expected of the average user. The offeror shall specify the estimated task duration (in minutes) for the user to perform visual inspection.

b. Training EEBD Maintenance

If maintenance of the EEBD is required, the offeror shall identify all maintenance tasks to include sanitization for the training EEBD. The offeror shall identify conditions for performing maintenance and/or periodicity. The offeror shall provide detailed procedures for all maintenance tasks. The offeror shall indicate if there are additional cost items such as special tools or replacement parts required for maintenance tasks. **Note:** The offeror shall not provide any cost information in the Technical Proposal but merely state yes or no if there is costs associated with maintenance.

3.1.1.3 Technical Factor 3.0 – Quality Assurance

The offeror shall provide documentation that their Quality Assurance program meets the requirements of ISO 9001, or equivalent quality program. The offeror shall provide a copy of the Quality Assurance Plan as an attachment to the technical proposal.

3.1.1.4 Technical Factor 4.0 - Past Performance

The offeror shall submit a description of up to three (3) of its past performance references during the past five (5) years which are in any way relevant to the effort required by this solicitation. Commercial and state/local contracts may be included, if necessary. The description shall include the following information in the following format:

1. Identify in specific detail for each contract listed, why or how you consider that effort relevant or similar to the effort required by this solicitation
2. Your (and/or your subcontractor's) CAGE and DUNS numbers
3. Government or commercial contracting activity, address, and telephone number
4. Procuring Contracting Officer's (PCO's) name and telephone number; and Technical point of contacts name and telephone number
5. Government or commercial contracting activity technical representative, or COR; and telephone numbers
6. Government or commercial contract administration activity, and the name and telephone number of the Administrative Contracting Officer (ACO)
7. Contract number
8. Contract award date
9. Contract type
10. Awarded price
11. Final or, projected final, price
12. Original delivery schedule
13. Final or projected final, delivery schedule
14. A narrative explanation on each previous contract listed describing the objectives achieved and any price growth or schedule delays encountered. For any Government contracts which did not/do not meet original requirements with regard to price, schedule, or technical performance, a brief explanation of the reason(s) for such shortcomings and any demonstrated corrective actions taken to avoid recurrence. The offeror shall also provide a copy of any cure notices or show-cause letters received on each previous contract listed and a description of any corrective action by the offeror or proposed subcontractor.

3.1.1.5 Factor 5.0 – Sample Product and Instructional video with training materials

The offeror shall provide a Sample Product (production unit and training unit) and Instructional video with training materials with the proposal for Government evaluation against the EEBD specification requirements. The Sample Product (production unit and training unit) and Instructional video with training materials shall be new and from the same lot.

The Governments evaluation of the Sample Product (production unit and training unit) and Instructional video with training materials will be conducted at Naval Surface Warfare Center, Panama City Division, Panama City, FL by Government personnel.

- a. The offeror shall provide an EEBD training unit and any special tools required to perform maintenance (if EEBD maintenance is required) to operate the EEBD training unit.

b. The Government's evaluation of the Sample Product (production unit and training unit) and Instructional video with training materials will be conducted at NSWPCD in a conference room or shop area with a number of fixtures/courses/obstacles to simulate requirements identified within the solicitation. The room utilized for the Government's evaluation will be set-up as shown in Table 3 incorporated as Attachment 01 of the solicitation. The product "operator" shall operate the equipment in the presence of Government personnel who will conduct the evaluation. EEBD operations donning and maintenance (visual inspection), will be timed for Government comparison and verification against the offeror's proposal. For the purposes of this evaluation, the equipment operator will be designated Government personnel. **NOTE:** If required, the product operator may wear corrective eye wear (i.e., eye glasses or contacts). All product evaluations will be recorded and retained by Government personnel on electronic media for review against the offeror's proposal.

c. The product evaluation will be conducted as follows:

1. Government personnel will print the company name, part number, operator name, and date on an easel pad that will be provided by the Government.
2. Operator will review operational instructions supplied and don training EEBD without external directions. There is no limitation on the number of times operator may practice donning training EEBD.
3. The operator will remove the EEBD unit from the shipping container box and place the unit (storage container) in a standard bunk type storage rack.
4. The operator will remove the EEBD from the storage rack and perform maintenance identified within the technical manual. The operator shall use only documentation that is provided with the unit to perform the maintenance. The designated Government official will time this event. Time will begin upon the command of "Start" and stop upon the command of "Stop." The tests identified in paragraphs 4 and 5 will be conducted.
5. Using the carrying strap, the operator shall hang the storage container over the left or right shoulder with the storage container hanging on the same side of the body as the strap and adjust the carrying strap accordingly. The operator shall then remove and hang the storage container from the alternate shoulder with the carrying strap crossing the body, adjusting accordingly. The operator will maneuver through the simulation in each orientation identified in # 5 below.
6. The operator shall remove the EEBD from the storage container and attach it to the belt and maneuver through the simulation which includes climbing, walking, crawling, jumping, bending.
 - (a) Belt worn configuration (Table 3 of Attachment 01 provides a diagram of a potential room configuration):
 1. The operator will proceed to Station 1, pick up a box appropriately labeled by NSWPCD and place it on a table in identified station 1a.
 2. The operator will proceed to Station 2, remove the cover from the panel labeled #1 and hang several items in the appropriate position.
 3. The operator will proceed to Station 3 by crawling under table 3, the operator will move "x" items to station 3a. (Number of items will be the same for each offeror)
 4. The operator will proceed to Station 4, operate and perform 2 complete jumping jacks and 2 complete deep knee bends to demonstrate that the EEBD unit is secure.

5. The operator will proceed to Station 5 which contains an eye chart. The operator will read the lowest line that he or she can see clearly. The operator will write down the characters and the line in which they appear on a Government provided notepad at the eye chart station. The Government official will collect the notepad from the operator before the operator departs from Station 5.
6. The operator will proceed to Station 6. Move to the wall. Stand with his or her back against wall and bending only at the neck look down and record the characters seen on the floor on an easel pad provided by the Government. The Government official shall collect the easel pad from the operator before the operator departs Station 6.

(b) Donned EEBD:

The operator shall don the EEBD unit. This event will be timed for comparison against the offerors proposal. Timing of the event will begin upon the command of "Start" and stop upon the command of "Stop." The operator shall proceed to each of the stations as follows without any additional commands of the Government official.

1. In Station 1, the operator shall pick up box appropriately labeled by NSWPCPD and place it on a table in identified station 1a.
2. In Station 2, the operator shall remove the cover from the panel labeled #2 and move the items hung, to a new location on panel #2.
3. Crawl under table 3 to Station 3a, the operator will move "x" items to station 3. (The number of items will be the same for each offeror)
4. In Station 4, the operator will perform 2 jumping jacks and 2 deep knee bends.
5. In Station 5, the operator will proceed to the eye chart station, read the smallest characters, and write down the characters and the line in which they appear.
6. In Station 6, the operator will move to the wall, stand with his or her back against the wall and bending only at the neck look down and write down the characters closest to them on an easel pad provided by the Government.
7. Upon completion of Station 6, the operator shall advise Government officials that all stations have been completed by stating the word "stop" at which time, the timing of the event shall cease.

4.0 Volume II Price Proposal (Factor 6)

Volume II shall contain a completed RFP with Firm Fixed Prices for each Contract Line Item. The offerors pricing shall be established based on the period of performance schedule listed under the section titled "Procedures for Issuing Orders," located in Addendum to FAR Clause 52.212-4.

Step ladder pricing will be used in the evaluation process for award as described in FAR 52.212-2 Evaluation-Commercial Items.

For price proposal purposes under step ladder pricing CLINS 1, 4, 6, 8, and 10, offerors shall multiply the estimated quantity by the highest stepladder unit price to calculate the Schedule of Supplies Estimated Amount for CLINS 1, 4, 6, 8, and 10.

ADDENDUM TO CLAUSE 52.212-4

The following EEBD Specification requirements are a part of the resulting contract:

EEBD SPECIFICATION

C.1. SCOPE

C.1.1. Scope This purchase description establishes performance, design, test, manufacture, and acceptance requirements for a self-contained emergency escape breathing apparatus, also known as the Emergency Escape Breathing Device (EEBD). The EEBD Training Unit is also included in the purchase description.

C.1.2. Intended Use The EEBD will be used by U.S. Navy personnel to provide breathing gas for escape from spaces aboard Navy ships where atmospheres are classified as Immediately Dangerous to Life or Health (IDLH). The primary use of the EEBD is for escape from a shipboard fire. The EEBD will be either stored in a container or worn on the belt (beltworn). Navy shipboard use will expose the EEBD to temperature extremes and rough handling. The EEBD will be exposed to X-RAY and magnetic fields and may be exposed to other electromagnetic radiation.

C.2. APPLICABLE DOCUMENTS

The following documents, of the exact issue shown, form a part of this specification to the extent specified herein. In the event of conflict between the documents referenced and the contents of this specification, the specification shall supersede. Second tier and lower references, (i.e., those referenced in the primary references) shall be used for guidance only.

C.2.1 Military Standards

| | |
|----------------|--|
| MIL-STD-130N | Identification Marking of U.S. Military Property |
| MIL-STD-3010B | Test Procedures for Packaging Materials |
| MIL-STD-167-1A | Mechanical Vibrations of Shipboard Equipment |

C.2.2 Military Specifications

| | |
|------------|--|
| MIL-S-901D | Shock Tests H.I. (High-Impact) Shipboard Machinery, Equipment, And Systems, Requirements For |
|------------|--|

C.2.3 Other Documents

| | |
|-------------------|---|
| 42 CFR 84 | Particulate Respirators |
| ASTM D 1424 - 09 | Standard Test Method for Tearing Strength of Fabrics by Falling-Pendulum Type (Elmendorf) Apparatus |
| ASTM D 2582 – 09 | Standard Test Method for Puncture-Propagation Tear Resistance of Plastic Film and Thin Sheeting |
| ASTM D 4956 – 11a | Standard Specification for Retroreflective Sheeting for Traffic Control |
| ANSI/ASQ Z1.4–08 | Sampling Procedures and Tables for Inspection by Attributes |
| BS-EN-13274-4 | Respiratory Protective Devices; Methods of Test; |

Flame Tests

| | |
|---------------------------|--|
| BS-EN-13794-02 | Respiratory Protective Devices; Self-Contained Closed-Circuit Breathing Apparatus For Escape |
| ISO-9001-08 | Quality Management Standard |
| FED-STD-595C 16 Jan 08 | Federal Standard: Colors Used In Government Procurement |
| OPNAVINST 5100.19E | Navy Safety And Occupational Health (SOH) Program Manual For Forces Afloat |

C.3. REQUIREMENTS

C.3.1. Design, Construction, Performance and Salient Characteristics The EEBD shall meet the design, construction, physical dimensions, performance, and salient Characteristics as specified below.

C.3.1.1. Description

C.3.1.1.1. EEBD The EEBD shall consist of the device (breathing apparatus, tamper-resistant and tamper evident case) and storage container.

C.3.1.1.2. Training EEBD A re-useable training unit shall be provided as an accessory item.

C.3.1.2. Approvals The EEBD shall be approved by the National Institute of Safety and Health (NIOSH) with a Cap 1 capacity rating and a shelf-life of not less than 15 years. NIOSH certification of EEBD shall be retained during the life of the contract.

C.3.1.3. Design and Construction

C.3.1.3.1. Form and Fit The device shall be one-size-fits-all.

C.3.1.3.2. Storage Container

- a. The storage container shall be made of molded plastic.
- b. The inside of the storage container shall be configured to retain the device and prevent its movement within the storage container.
- c. The puncture resistance of the storage container material shall not be less than 80 pounds when tested in accordance with MIL-STD-3010, Method 2065.
- d. The outside dimensions of the storage container shall be 4.30 plus 0.00 or minus 0.30 inches by 8.25 by 9.25 inches, plus or minus 0.25 inches.
- e. There shall be no sharp edges, rough surfaces or projections on the storage container.
- f. The storage container shall be florescent orange semigloss, Color Number 28915 as defined in FED-STD-595C.
- g. All indicators and IUID shall be visible to the user through the storage container, without need to open the storage container.

C.3.1.3.3. Carry Strap

- a. A strap shall be attached to the storage container so that the user may carry the device in the storage container over the shoulder.
- b. The length of the carry strap shall not be less than 38 inches and shall be adjustable.
- c. When the strap is pulled on one end in any direction with a force of 50 pounds, the strap shall not break or pull free of the storage container.

C.3.1.3.4. Reflective Tape

- a. Retroreflective tape shall be attached to the device so that when the device is in use the tape is visible to other personnel.
- b. The retroreflective tape shall have a minimum coefficient of retroreflection and daytime luminance factor of Type IX white sheeting as defined by ASTM D 4956.

C.3.1.3.5. Portability The device shall be designed for carry on a belt that is 1.25 inches wide and 0.125 inches thick. The device should be designed for other modes of carry on the body when the user is not wearing a belt.

C.3.2. PERFORMANCE

C.3.2.1. Donning Time The time required to fully don the EEBD shall not be greater than 30 seconds when measured in accordance with the procedure specified in Para C.4.4.3, Donning Time.

C.3.2.2. Corrective Lenses The wearing of eyeglasses (spectacles) by users shall not prevent the EEBD from complying with any requirement of this purchase description.

C.3.2.3. Visibility

C.3.2.3.1. Vision Clarity A fully donned device shall allow the user to see without loss of visual acuity due to distortion or fogging when tested as specified in Para C.4.4.4. Visibility, C.4.4.4.1 Vision Clarity.

C.3.2.3.2. Head Mobility The device shall not limit the user's range of head movement. When tested as specified in Para C.4.4.4, Visibility, C.4.4.4.3, Head Mobility, the user's head movement shall not compromise respiratory protection (for example, but not limited to, pinching off a breathing tube, pulling mouthpiece from mouth, or breaking neck seal).

C.3.2.3.3. Field of View The device shall not prevent the user from seeing up a vertical escape trunk or down an inclined ladder. The device shall not obstruct the user's view of tripping hazards, nor restrict the user from seeing the overhead hatch release while standing on an escape ladder. When tested as specified in Para C.4.4.4 Visibility, C.4.4.4.2, Field of View, vertical and horizontal fields of view should not be restricted.

C.3.2.4. First Breath The EEBD shall meet the user's respiratory requirements whether the user's first breath is an exhalation or inhalation.

C.3.2.5. Collapse of Breathing Bag The device shall continue to provide sufficient breathing gas after collapse of the breathing bag (or the equivalent compliant volume component of the device) such as can occur if the user falls or collides with a bulkhead, and contractor data shall demonstrate that the following requirements are met after such a collapse of the breathing bag:

- a. The device shall provide not less than 0.8 standard liters of breathing gas to the user within 15 seconds
- b. The device shall provide not less than 4.1 standard liters of breathing gas to the user within 75 seconds

C.3.2.6. Dust in Breathing Loop An EEBD that is in a ready-to-be-used condition and within its approved service life shall be negative before and after use for the presence of alkaline substances within the breathing loop when tested as specified in Para C.4.4.1 Presence of Alkaline Substance in Breathing Loop.

C.3.2.7. Reliability The device shall meet the following reliability requirements, as demonstrated by contractor data.

- a. The probability that a device is successfully activated when following the manufacturer's instructions shall not be less than 0.999 at a 90% confidence level.
- b. The probability that a device complies with the applicable performance requirements specified in 42 CFR 84 shall not be less than 0.990 at a 90% confidence level.

C.3.2.8. Weight The weight of the device and storage container shall not be greater than 5.5 pounds (2.49 kg).

C.3.2.9. Fire Resistance The device shall be resistant to fire and heat that may be encountered during escape from a fire. When the exterior of the device is tested for flammability in accordance with BS EN 13274-4, Method 3, with the exception that the speed at which the flame passes over the device is equal to 20 mm/sec instead of 60 mm/sec, the device shall meet acceptance criteria of BS EN 13794, Flammability Requirements including the leak tightness check. Furthermore, the device shall successfully activate.

C.3.2.10. Tear and Puncture Resistance Breathing bag and smoke hood shall be puncture and tear resistant. Textile materials that are films, supported films (single or double coated) or laminates shall have a puncture propagation tear resistance of not less than 11 pounds force when tested in accordance with ASTM D 2582. Woven, non-woven and knitted materials shall have a tear resistance of not less than 5 pounds force in either direction when tested in accordance with ASTM D 1424. Each test shall be run in both directions and an average in each direction shall be calculated. Failure in either direction shall constitute failure of the material. Each separable layer of multilayer materials systems or composites shall be resistant to puncture and tear as defined above.

C.3.3. Environmental

C.3.3.1. Operating Environment The NIOSH approval shall be valid for operating temperatures between 21°F (-6°C) and 110°F (43°C), relative humidity less than or equal to 95%, and 1 atmosphere nominal pressure.

C.3.3.2. Shipboard Shock The EEBD shall be resistant to damage from shipboard shock, MIL-S-901D, Shock Grade A, Equipment Class 1, Test Type A, and shall perform with the following characteristics during every breath when tested as specified in Para C.4.4.5 Shipboard Shock:

- a. The concentration of oxygen in each inhaled breath shall not be less than 19.5% by volume.
- b. The concentration of carbon dioxide contained in each inhaled breath shall not be greater than 2.5% by volume.
- c. The maximum wet-bulb temperature of each inhaled breath shall not be greater than 50°C.

C.3.3.3. Shipboard Vibration The EEBD shall be resistant to damage from shipboard vibration, MIL-STD-167-1A, Type 1, and shall perform with the following characteristics during every breath when tested as specified in Para C.4.4.6 Shipboard Vibration:

- a. The concentration of oxygen in each inhaled breath shall not be less than 19.5% by volume.
- b. The concentration of carbon dioxide contained in each inhaled breath shall not be greater than 2.5% by volume.
- c. The maximum wet-bulb temperature of each inhaled breath shall not be greater than 50°C.

C.3.3.4. Fluid Resistance Materials used for the storage container shall be resistant to degradation from exposure to turbine fuel, hydraulic fluid, or lubricating oils. The storage container shall perform as required for the required shelf life when exposed to these fluids, as demonstrated by contractor.

C.3.3.5. Corrosion The EEBD shall be resistant to corrosion from exposure to below decks shipboard atmosphere and shall perform as specified when tested as specified in Para C.4.4.7 Corrosion.

C.3.4. Other Requirements

C.3.4.1. Maintenance It is desired that the EEBD not require preventive or corrective maintenance and not require special tools or instruments. Periodic visual inspection shall be minimized in complexity, task duration and periodicity. It is desired that periodic visual inspection should be no more than a 6 minute task required every 2 years. The offeror shall provide the periodic visual inspection procedures and the estimated task duration and required periodicity. The training unit maintenance shall be minimized in complexity, task duration, tooling, and replacement material cost (if any).

C.3.4.2. Storage Container Labeling Where not otherwise included on NIOSH-approved labels and markings, the storage container shall be marked with the following:

- a. The words, prominently displayed and in all capitals, "EMERGENCY ESCAPE BREATHING DEVICE"
- b. Donning instructions shall be located on the 8.25 inch by 9.25 inch face of the storage container.
- c. Both written and pictorial instructions for donning and operating the device, including how to recognize when the device is expended and must be removed from service
- d. Written explanation or illustration of the ready-for-use indicator characteristics when the device is safe to use, and when it is not safe to use
- e. Cautions and warnings
- f. Manufacturer name and mailing address
- g. Model number
- h. National Stock Number
- i. Capacity rating and number of liters of oxygen.

C.3.4.3. EEBD Labeling Where not otherwise included in NIOSH-approved labels and markings, the device shall be marked with the following:

- a. Serial number
- b. Date of manufacture
- c. Lot number
- d. Donning instructions shall be on the EEBD Case.
- e. IUID (Item Unique Identification) shall be printed on the device such that the UII (Unique Item Identifier) is visible and machine readable thru a clear window in the storage container. The UII shall have be an ECC 200 compliant 2D data matrix symbol using Construct 2 (CAGE, Part Number, and Serial Number) per MIL-STD-130N.

C.3.4.4. Disposal of Expended and Expired EEBDs

- a. To aid the Government in the disposal of residual hazardous material found in expended and expired units, and to ensure compliance with all applicable Federal, State, and Local laws and regulations, all expended and expired units will be returned to the contractor for disposal.
- b. The contractor shall accept return of all expended and expired EEBDs at any time during the life of the contract.
- c. Upon receipt of expended units at the Contractor's facility, the responsibility for appropriate disposal of expended and expired units in compliance of all the above shall be that of the contractor.

C.3.4.5. Training Unit

- a. The training unit shall resemble the EEBD in every aspect that is practical, including size, shape, weight, and storage container, and those characteristics that relate to donning and activation.
- b. The training unit shall be reusable. Instructions for sanitization shall be provided by offeror. Sanitization procedure shall conform to procedures in OPNAVINST 5100.19E B0609 and withstand repeated exposure to both Wescodyne and sodium hypochlorite solutions without material degradation.
- c. The training unit storage container shall be identical to EEBD storage container except that the color shall be light blue.
- d. There shall be a warning label in a visible location on the training unit storage container that states, "WARNING Training Unit Only."

C.3.4.6. Training and Instruction

- a. The contractor shall provide training materials and instructions that address, at a minimum, periodic visual inspection, principles of operation, the ready for use indicator, donning procedure, user cautions and warnings, the training unit, and activation and operation of the EEBD.
- b. The contractor shall describe the content of the proposed training materials and instructions, providing examples of existing materials and instructions as necessary.
- c. The contractor shall meet with government representatives, within 45 days after award of CLIN 0003, at NSWPCD, and present for Navy review and comment an outline and

storyboard of the proposed Navy training video and supplemental hard copy and/or electronic instructional materials.

- d. The contractor shall meet with government representatives, within 60 days after the date of the meeting in C.3.5.6(c), at NSWPCD, and present for Navy review and comment a proposed training video for U.S. Navy personnel and supplemental hard copy and/or electronic instructional materials.
- e. The contractor shall meet with government representatives, within 60 days after the date of the meeting in C.3.5.6 (d), at NSWPCD, and present for Navy approval the final training video for U.S. Navy personnel and supplemental hard copy and/or electronic instructional materials.
- f. All materials provided hereunder shall be in English.

C.4. QUALITY ASSURANCE PROVISIONS

C.4.1. Conformance to Requirements The Government reserves the right to require proof of conformance with this purchase description prior to the first delivery and prior to any other delivery under the contract. The government acceptance of such proof shall not relieve the contractor of the responsibility for ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. As a minimum, the contractor's Quality Assurance program shall meet the requirements of ISO 9001 or equivalent.

C.4.2. Responsibility for Tests and Inspections Unless otherwise specified in the contract, the contractor is responsible for the performance of all test or inspection requirements as specified herein. Except as otherwise specified in the contract, the contractor shall use its own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. Failure by the contractor to correct deficiencies discovered shall be cause for a suspension of the acceptance until corrective action has been taken or until conformance to requirement has been demonstrated. Acceptance of the equipment by the contracting agency shall be based upon the contractor's representations that the equipment meets the requirement of this purchase description and of the contract.

C.4.3. Quality Conformance Inspections The contractor shall inspect the EEBD lots to determine conformance with this purchase description.

- a. Sampling Unless otherwise specified, the sampling and inspection levels shall conform to ASQ Z1.4, "Sampling Procedures and Tables for Inspection by Attributes."
- b. Workmanship After assembly, the EEBD shall be inspected for uniform quality and shall be free from irregularities or defects that adversely affect performance, reliability or durability.

C.4.4. Test and Inspections

C.4.4.1. Presence of Alkaline Substance in Breathing Loop The following applies to all procedures below in which a test for the presence of alkaline substance is specified.

- a. The test shall be conducted using a sterile swab and phenolphthalein solution (1g/L, 80% EtOH/20% H₂O). The phenolphthalein solution shall be applied to the swab and then the swab with phenolphthalein shall be touched to the inside surfaces of the EEBD breathing loop outside of the carbon dioxide scrubber. Any change in color of the phenolphthalein shall be recorded as positive for the presence of alkaline substance. If there is no change in color, the result shall be recorded as negative.

- b. If the device is to be operated on an unmanned test machine, the test shall be conducted beforehand, within 30 seconds of removal of the device from its protective packaging, and the test shall be made on breathing loop surfaces that are externally accessible to the tester without modification or disassembly of the device. The test shall not be conducted before use when used by a person.
- c. Tests conducted after use of the EEED shall be made within 30 seconds after the device has expired or when directed by test procedure. The test shall be made on surfaces that are externally accessible as well as on surfaces that are internal to the device but on the outside of the scrubber canister.

C.4.4.2. Breathing Performance The following applies to all procedures below in which a breathing performance test is specified.

- a. Breathing performance tests shall be accomplished either using human test subjects (manned) or a breathing and metabolic simulator (unmanned).
- b. Breathing demand parameters shall be as follows for unmanned tests:

| | <u>Normal</u> |
|---|---------------|
| VO ₂ (standard liters per minute) | 1.35 |
| VCO ₂ (standard liters per minute) | 1.15 |
| Minute Volume (liters) | 30 |
| Respiratory Rate (breaths per minute) | 18 |

- c. For manned tests, VO₂ and VCO₂ shall not be less than the values specified in above.
- d. The breathing performance test period begins when breathing on the device begins, and ends when the device is expended.
- e. The oxygen and carbon dioxide concentration of the inspired breathing gas shall be measured and recorded throughout the breathing performance test period. Inspired wet-bulb temperature shall be measured and recorded; otherwise, dry-bulb temperature shall be measured and recorded, and worst-case wet-bulb temperature estimated using the measured dry-bulb temperature and worst-case estimated breathing gas humidity.

C.4.4.3. Donning Time

- a. Ten test subjects shall be used for the donning time test. The subjects shall have no prior experience or training with the EEED.
 - (1). Five of the test subjects shall wear eyeglasses.
 - (2). Eight of the test subjects shall be men; two shall be women.
 - (3). Test subjects shall wear long sleeve shirts and their arms shall be wet with water to at least the elbows.
- b. The room in which the test is conducted shall be illuminated by one 50-watt red incandescent bulb.
- c. A minimum of three subjects shall be tested at one time.
- d. The test subjects shall be trained to don and operate the EEED following manufacturer instructions. The instruction time shall not exceed 30 minutes.

- e. Test subjects shall be allowed no more than 10 seconds to adjust to the room illumination before the start.
- f. Each test subject shall be standing with arms at their sides and the device stored in the storage container and carried over the test subject's shoulder by the carrying strap. The command to don the device shall be given, and the test subjects shall completely and properly don and activate the device, obtaining respiratory, eye and thermal protection, as instructed. The individual don time for each subject shall be measured from the time the don command is given to the time when the test subject has completely and properly donned and activated the device.
- g. The don time for the EEBD shall be the average of the individual subject don times and should not exceed 30 seconds.
- h. Each test subject shall then don a second EEBD under the same conditions except that the EEBD shall be in the belt worn configuration at the start. The belt worn don times shall be averaged for all individual subjects separate from the storage container don times above. Average donning time for belt worn EEBDs should not exceed 30 seconds.
- i. Failure of a device to operate for the rated capacity, or inability of the device to support the respiratory needs of the test subject during the rated capacity of the device shall be a failure to meet EEBD minimum requirements. The device shall not interfere with a test subject's ability to wear eyeglasses when donning and operating the device.

C.4.4.4. Visibility

- a. Visibility tests shall be conducted using the donning time test subjects after measurement of individual donning times. If necessary because a unit is expended before testing is completed, the test subject will doff the device and don another to continue the tests.

C.4.4.4.1. Visual Clarity

- a. Test subjects shall read an eye chart before donning and activating the device, and then again while wearing the device. In each instance, the test subject shall read the lowest line that he or she can see clearly, while standing the same distance away from the eye chart.
- b. Each subject should be able to clearly read the same line on the eye chart while wearing the device as when not wearing the device.
- c. Failure of a device to operate for the rated capacity, or inability of the device to support the respiratory needs of the test subject during the rated capacity of the device shall be a failure to meet EEBD minimum requirements.

C.4.4.4.2. Field of View

- a. Before donning and activating the device, test subjects shall individually stand at the foot of a ladder inclined against a wall. The test subject shall look down and report whether or not he or she can see his or her feet, or report the lowest rung of the ladder that he or she can see. Test subjects shall look up and report the top most rung of the ladder that he or she can see. The test subjects shall later repeat the procedure when wearing the device.
- b. Each test subject should be able to see his or her feet as well as the same top most rung of the ladder while wearing the device as without.

c. Failure of a device to operate for the rated capacity, or inability of the device to support the respiratory needs of the test subject during the rated capacity of the device shall be a failure to meet EEBD minimum requirements.

C.4.4.4.3. Head Mobility

a. Each test subject shall turn their head from side to side and up and down as far as they are able while wearing the device while an assistant observes.

b. No test subject should feel that head movement is restricted by the device – i.e. the subject is able to turn their head from side to side and up and down as far as they would be able if not wearing the device – and movement shall not pinch off any breathing hoses, pull a mouthpiece from the user's mouth, or break a neck seal, or otherwise compromise protection, as applicable.

c. Failure of a device to operate for the rated capacity, or inability of the device to support the respiratory needs of the test subject during the rated capacity of the device shall be a failure of the device to meet EEBD minimum requirements.

d. The EEBD devices shall be tested for the presence of alkaline substances in the breathing loop when the units are doffed. The result shall be negative in each instance.

C.4.4.5. Shipboard Shock

a. Eight EEBD devices in storage containers shall be exposed to shipboard shock in accordance with MIL-S-901D, Shock Grade A, Equipment Class 1, Test Type A and then evaluated.

b. During shipboard shock exposure, four devices (in their storage container) shall be secured in an EEBD stowage bracket, and the other four devices shall be secured in an EEBD stowage container. The Contracting Officer will provide sources of supply for the brackets and containers upon request.

c. After shock, the ready-for-use indicator of each device shall indicate that the device is fully functional and ready to be used.

d. Two EEBD shall be disassembled and inspected after shipboard shock exposure. There shall be no visible damage to the storage container or device that indicates probable impairment of essential function.

e. After shipboard shock exposure, six EEBD devices shall be tested for breathing performance at normal demand (see C.4.4.2). Three tests shall begin on an exhalation, and the other three on an inhalation. Inspired breathing gas oxygen and carbon dioxide concentration and temperature shall be as follows for the duration of a ten minute breathing performance test period::

- (1) Wet-bulb temperature not greater than 50°C
- (2) Inspired oxygen not less than 19.5% by volume
- (3) Inspired carbon dioxide not greater than 2.5% by volume

f. The device shall be tested, per C.4.4.1, for the presence of alkaline substances in the breathing loop before and after the breathing performance test. The result in each instance shall be negative for presence of alkaline substance.

C.4.4.6. Shipboard Vibration

- a. An additional eight EEBD devices in storage containers shall be exposed to shipboard vibration in accordance with MIL-STD-167-1, Type 1 and then evaluated.
- b. During vibration exposure, four devices (in their storage container) shall be secured in an EEBD stowage bracket, and the other four devices shall be secured in an EEBD stowage container. The Contracting Officer will provide sources of supply for the brackets and containers upon request.
- c. After vibration, the ready-for-use indicator of each device shall indicate that the device is fully functional and ready to be used.
- d. Two EEBD shall be disassembled and inspected Donning Time after shipboard vibration exposure. There shall be no visible damage to the storage container or device that indicates probable impairment of essential function.
- e. Six EEBD devices shall be tested for breathing performance at normal demand (see C.4.4.2) after shipboard vibration exposure. Three tests shall begin on an exhalation and the other three shall begin on an inhalation. Inspired breathing gas oxygen and carbon dioxide concentration and temperature shall be as follows for the duration of the breathing performance test period:
 - (1) Wet-bulb temperature not greater than 50°C
 - (2) Inspired oxygen not less than 19.5% by volume
 - (3) Inspired carbon dioxide not greater than 2.5% by volume
- f. The device shall be tested, per C.4.4.1, for the presence of alkaline substances in the breathing loop before and after the breathing performance test. The result in every instance shall be negative for presence of alkaline substance.

C.4.4.7. Corrosion

- a. An additional three devices in unopened storage containers shall be exposed to salt fog in accordance with MIL-STD-810F, Salt Fog, except that a pre-test visual inspection shall not be performed and the storage container shall not be opened prior to salt fog exposure.
 - (1) The storage container shall be positioned in approximately the stored configuration when exposed to salt fog.
 - (2) The salt fog exposure duration shall be four cycles, a 24-hour salt fog exposure cycle followed by a 24-hour drying cycle, and then another 24-hour salt fog exposure cycle followed by a final 24-hour drying cycle.
- b. After salt fog exposure, the storage container shall be inspected. The device shall be removed from the storage container, made ready as if to don, and inspected. There shall be no visible signs of corrosion or failure, and no signs that the device has been exposed to salt fog.

C.5. **PACKAGING**

- C.5.1. Preservation, Packaging, Packing, and Marking. – These requirements appear elsewhere in the solicitation, contract, or purchase order.

C.6. **NOTES**

- C.6.1. Source of Documents

ASTM. ASTM standards are available from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959 or online at <http://www.astm.org/>.

ANSI. ANSI standards are available from American National Standards Institute, 1819 L Street NW Suite 600, Washington D.C. 20036 or online at <http://www.ansi.org/>.

BS-EN. British Standards are available at Global Engineering Documents, 15 Inverness Way East, Englewood, CO 80112 or online at <http://www.global.ihs.com/>.

CFR. The Code of Federal Regulations (CFR) may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20401 or online at <http://www.gpoaccess.gov/index.html>.

FED-STDs. Federal Standards are available online at <http://astimage.daps.dla.mil/quicksearch/> or <http://assist.daps.dla.mil> or from the Standardization Document Order Desk, 700 Robbins Avenue, Bldg. 4D, Philadelphia, PA 19111-5094.

ISO. ISO standards are available from International Organization for Standardization (ISO) 1, rue de Varembe, Case postale 56, CH-1211 Geneva 20, Switzerland or online at <http://www.iso.org/> and <http://www.ansi.org/>.

MIL-STDs. Military Standards are available online at <http://astimage.daps.dla.mil/quicksearch/> or <http://assist.daps.dla.mil> or from the Standardization Document Order Desk, 700 Robbins Avenue, Bldg. 4D, Philadelphia, PA 19111-5094.

NFPA. NFPA standards are available from National Fire Protection Association (NFPA), 11 Tracy Drive, Avon, MA 02322 or online at <http://www.nfpa.org/> and <http://www.ansi.org/>.

C.6.2. Definitions:

- Device – the self-contained emergency escape breathing apparatus (the EEBD), including tamper resistant and tamper evident case.
- Beltworn Configuration – the EEBD as carried on a user’s belt around the waist. The device will be positioned on either hip.
- Beltworn Use – the EEBD will be worn by the user for up to 8 hours a day while performing physical tasks in an industrial shipboard environment.
- Storage Container – a box or case for storage and protection of the device
- Training Unit – a model that resembles the EEBD in every practical aspect (including size, shape, weight, and storage container) and is used to train personnel on donning and activating the device
- Breathing Bag – a compliant volume (or “bag”) that collects gas during exhalation and provides a gas reserve for inhalation. The hood may serve a dual purpose as the compliant volume, in which case breathing bag requirements apply to the hood.
- Hood – a cover for the wearer’s head to provide eye protection against smoke, and head protection against fire
- EEBD Stowage Rack – the shipboard stowage rack for existing EEBD’s
- Fully Donned – the condition in which the user is operating the device in complete accordance with the manufacturer’s instructions

C.7 SECURITY

This task is unclassified.

PROCEDURES FOR ISSUING ORDERS

(a) Ordering: Supplies or services to be furnished under this contract shall be furnished at such times as ordered by the issuance of delivery orders on DD Form 1449 by the Naval Surface Warfare Center Panama City Division. All orders issued hereunder are subject to the terms and conditions of this contract. This contract shall control in the event of conflict with any order. When mailed, a delivery order shall be "issued" for purpose of this contract at the time the Government deposits the order in the mail, or, if transmitted by other means, when physically delivered to the contractor.

(b) Ordering Procedures:

(1) Delivery orders issued shall include, but not be limited to the following information:

- (a) Date of Order
- (b) Contract and Order Number
- (c) Appropriation and accounting data
- (d) Description of the services to be performed
- (e) Description of end item(s) to be delivered
- (f) Exact place of pickup and delivery
- (g) The inspecting and accepting codes (as applicable)
- (h) The ceiling price for the order
- (i) List of Government furnished material and the estimated value thereof, if applicable.

Oral orders may be authorized by Contracting Officer only in emergency circumstances. Information described above shall be furnished to the contractor at the time of placing an oral order and shall be confirmed by issuance of a written delivery order on DD Form 1449 within two working days.

(c) Modifications of Delivery Orders: Delivery orders may be modified by the contracting officer. Modifications to delivery orders shall include the information set forth in paragraph b above, as applicable. Delivery orders may be modified orally by the contracting officer in emergency situations. Oral modifications shall be confirmed by the issuance of a written modification within two working days from the time of the oral communication modifying the order.

(d) The Ceiling Amount for each delivery will be the ceiling price stated therein and may not be exceeded except when authorized by a modification to the delivery order.

NOTE: Delivery orders issued under this contract will be issued to the Contractor electronically.

AUTHORIZED COMMAND TO WRITE DELIVERY ORDERS

The Naval Surface Warfare Center Panama City Division is the only organization authorized to write delivery orders on this contract.

PERIOD OF PERFORMANCE

The overall period of performance of this Contract shall not exceed five (5) years from date of award. Base year period of performance is one (1) year, with four (4) one (1) year option periods, unless terminated in accordance with provisions herein.

| | |
|-----------------|--|
| CLIN 0001-0003 | (Base Year One)- Date of Award through 12 Months Thereafter |
| CLIN 0004-0005 | (Option Year Two)- 13 Months through 24 Months After Date of Award |
| CLIN 0006-0007 | (Option Year Three)- 25 Months through 36 Months After Date of Award |
| CLIN 0008- 0009 | (Option Year Four)- 37 Months through 48 Months After Date of Award |
| CLIN 0010-0011 | (Option Year Five)- 49 Months through 60 Months After Date of Award |

PREPARATION FOR DELIVERY (COMMERCIALY PACKAGED ITEMS)

Preservation, packaging, and packing shall be in accordance with ASTM-D3951-10.

PROHIBITED PACKING MATERIALS

The use of asbestos, excelsior, newspaper or shredded paper (all types including wax paper, computer paper and similar hygroscopic or nonneutral material) is prohibited.

MARKING OF SHIPMENTS (COMMERCIALY PACKAGED ITEMS)

- a. Marking shall be in accordance with ASTM-D3951-10.
- b. Additional markings are stated below: (If none, so state)

NONE

HAZARDOUS MATERIAL

Packaging, Packing, Marking and Labeling

Hazardous materials to be shipped by any mode or combination of modes of transportation shall be prepared (properly classed, described, packaged, marked, labeled, transport vehicle placarded, etc.) for shipment in accordance with MIL-STD-129 and all applicable government and carrier regulations in effect at time of shipment.

| <u>TYPE OF SHIPMENT</u> | <u>APPLICABLE REGULATIONS</u> |
|-------------------------------|-------------------------------|
| 1. Domestic | A |
| 2. Domestic Air Commercial | A, B, C |
| 3. Domestic Air Military | A, F |
| 4.* Export Surface | A, E, G |
| 5.* Export Air Commercial | A, D, G |
| 6.* Export Air Military (MAC) | F, G |

LIST OF REGULATIONS

- A. Code of Federal Regulations Title: 49 Transportation Parts 100-199
- B. Official Air Transport Restricted Articles Tariff No. 6-D C.A.B. 82
- C. Official Air Transport Restricted Articles Circular No. 6-D
- D. International Air Transport Association Restricted Articles Regulations
- E. International Maritime Dangerous Goods Code
- F. Air Force Regulation 71-4 Preparation of Hazardous Materials for Military Air Shipment

G.* Export shipments are also subject to the domestic regulations indicated to the port of embarkation

PLACE OF DELIVERY/FOB DESTINATION - WAWF

Item(s) shall be delivered, all transportation charges paid by the contractor, as specified below:

Item(s) - For invoicing purposes in WAWF enter DODAAC below:

N61331
NSWC Panama City
c/o NSA PC – N61008
101 Vernon Avenue
Panama City Beach, Florida 32407-7001

Mark for Contract No. *TO BE COMPLETED UPON CONTRACT AWARD

(End of Summary of Changes)