

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 27

1 CONTRACT PURCH ORDER AGREEMENT NO H00019-15-G-0026	2 DELIVERY ORDER CALL NO 0512	3 DATE OF ORDER CALL 17TTTMMDD 2017 Sep 29	4 REQ PLRCH REQUEST NO 1300847614	PRIORITY DO-A7
---	----------------------------------	--	--------------------------------------	-------------------

6 ISSUED BY NAVAL AIR SYSTEMS COMMAND AIR-2 2 1.1 SUITE 453 BLDG 2272 47123 BUSE ROAD UNIT IPT PATUXENT RIVER MD 20676	CODE H00019	7 ADMINISTERED BY (if other than 6) DCMA CHICAGO 1523 WEST CENTRAL ROAD BLDG 203 ARLINGTON HEIGHTS IL 60005-2451	CODE S1403A	8 DELIVERY FOB <input checked="" type="checkbox"/> DESTINATION <input type="checkbox"/> OTHER (See Schedule if other)
--	-------------	---	-------------	--

9 CONTRACTOR NORTHROP GRUMMAN SYSTEMS CORPORATION NAME (b) (6) AND 509 HICKS RD ADDRESS ROLLING MEADOWS IL 60009-1015	CODE 28916	FACILITY	10 DELIVER TO FOB POINT BY Date 17TTTMMDD SEE SCHEDULE	11 MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN OWNED
---	------------	----------	--	--

14 SHIP TO SEE SCHEDULE	CODE	15 PAYMENT WILL BE MADE BY DFAS COLUMBUS CENTER DFAS-CO/WEST ENTITLEMENT OPERATIONS PO BOX 182317 COLUMBUS OH 43218-2317	CODE HQ0359	MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.
--------------------------------	------	--	-------------	---

16 TYPE OF ORDER	DELIVERY CALL <input checked="" type="checkbox"/>	PURCHASE <input type="checkbox"/>	X This delivery order call is issued on another Government agency or in accordance with and subject to terms and conditions of a boxed numbered contract
------------------	---	-----------------------------------	--

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED SUBJECT TO ALL OF THE TERMS AND CONDITIONS OF THE PURCHASE ORDER AND (b) (6)

Northrop Grumman (b) (6)

NAME OF CONTRACTOR (b) (6)

If this box is marked, supplier must sign acceptance and return the following number of copies:

DATE SIGNED 24 Sep 2017
17TTTMMDD

17 ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18 ITEM NO	19 SCHEDULE OF SUPPLIES/ SERVICES	20 QUANTITY ORDERED ACCEPTED*	21 UNIT	22 UNIT PRICE	23 AMOUNT
SEE SCHEDULE					

* If quantity accepted by the Government is same as quantity ordered indicate by X. If differs enter actual quantity accepted below quantity ordered and enclose	24. UNITED STATES OF AMERICA TEL: (b) (6) ENCL: (b) (6) BY: CONTRACTING ORDERING OFFICE	25 TOTAL 26	27 DIFFERENCE
--	--	----------------	---------------

27a QUANTITY IN COLUMN 20 HAS BEEN
 INSPECTED RECEIVED ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	c DATE 17TTTMMDD	d PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
---	---------------------	--

e MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	28 SHIP NO	29 DO VOUCHER NO	30 INITIALS
---	------------	------------------	-------------

f TELEPHONE NUMBER	g E-MAIL ADDRESS	<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	32 PAID BY	33 AMOUNT VERIFIED CORRECT FOR
--------------------	------------------	--	------------	--------------------------------

36. I certify this account is correct and proper for payment.

a DATE 17TTTMMDD	b SIGNATURE AND TITLE OF CERTIFYING OFFICER	31 PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	34 CHECK NUMBER
---------------------	---	---	-----------------

37 RECEIVED AT	38 RECEIVED BY	39 DATE RECEIVED 17TTTMMDD	40 TOTAL CONTAINERS	41 SR ACCOUNT NO	42 SR VOUCHER NO
----------------	----------------	-------------------------------	---------------------	------------------	------------------

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO. N00019-15-G-0026		2. DELIVERY ORDER/ CALL NO. 0512		3. DATE OF ORDER/ CALL (YYYYMMDD) 2017 Sep 29		4. REQ/ PURCH. REQUEST NO. 1300647814		5. PRIORITY DO-A7	
6. ISSUED BY NAVAL AIR SYSTEMS COMMAND AIR-2 2 1 1 SUITE 453 BLDG 2272 47123 BUSE ROAD UNIT IPT PATUXENT RIVER MD 20670			CODE N00019		7. ADMINISTERED BY (if other than 6) DCMA CHICAGO 1523 WEST CENTRAL ROAD, BLDG 203 ARLINGTON HEIGHTS IL 60005-2451			CODE S1463A	
								8. DELIVERY FOB <input checked="" type="checkbox"/> DESTINATION <input type="checkbox"/> OTHER (See Schedule if other)	

9. CONTRACTOR NORTHROP GRUMMAN SYSTEMS CORPORATION NAME (b) (6) AND 600 HICKS RD ADDRESS ROLLING MEADOWS IL 60008-1015		CODE 26918		FACILITY		10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE		11. MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED	
						12. DISCOUNT TERMS		13. MAIL INVOICES TO THE ADDRESS IN BLOCK See Item 15	

14. SHIP TO SEE SCHEDULE		CODE		15. PAYMENT WILL BE MADE BY DFAS COLUMBUS CENTER DFAS-CO/WEST ENTITLEMENT OPERATIONS PO BOX 182317 COLUMBUS OH 43218-2317		CODE HQ0339		MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.	
------------------------------------	--	------	--	---	--	----------------	--	---	--

16. TYPE OF ORDER	DELIVERY/ CALL	<input checked="" type="checkbox"/>	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
	PURCHASE	<input type="checkbox"/>	Reference your quote dated Furnish the following on terms specified herein. REF

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR	SIGNATURE	TYPED NAME AND TITLE	DATE SIGNED (YYYYMMDD)
<input type="checkbox"/> If this box is marked, supplier must sign Acceptance and return the following number of copies:			

17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
SEE SCHEDULE					

* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.		24. UNITED STATES OF AMERICA TEL: (b) (6) EMAIL: Navy.mil BY: Melanie S. Bateman		(b) (6)		25. TOTAL (b) (4)	
						26. DIFFERENCES	

27a. QUANTITY IN COLUMN 20 HAS BEEN
 INSPECTED RECEIVED ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE		c. DATE (YYYYMMDD)		d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	
--	--	--------------------	--	---	--

e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE			28. SHIP NO.		29. DO VOUCHER NO.		30. INITIALS	
--	--	--	--------------	--	--------------------	--	--------------	--

f. TELEPHONE NUMBER		g. E-MAIL ADDRESS		<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		32. PAID BY		33. AMOUNT VERIFIED CORRECT FOR	
---------------------	--	-------------------	--	--	--	-------------	--	---------------------------------	--

36. I certify this account is correct and proper for payment.						31. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		34. CHECK NUMBER	
a. DATE (YYYYMMDD)		b. SIGNATURE AND TITLE OF CERTIFYING OFFICER						35. BILL OF LADING NO.	

37. RECEIVED AT		38. RECEIVED BY		39. DATE RECEIVED (YYYYMMDD)		40. TOTAL CONTAINERS		41. SR ACCOUNT NO.		42. SR VOUCHER NO.	
-----------------	--	-----------------	--	------------------------------	--	----------------------	--	--------------------	--	--------------------	--

Section A - Solicitation/Contract Form

This Order is issued under and pursuant to the provisions of N00019-15-G-0026 (the "Agreement"). The terms and conditions of the Agreement are hereby incorporated by reference and, except as provided herein by this Order, remain in full force and effect.

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	Non-recurring Engineering CPFF (Completion Type) FOB: Destination PURCHASE REQUEST NUMBER:	(b) (4)			(b) (4)
				ESTIMATED COST	
				FIXED FEE	
				TOTAL EST COST + FEE	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
000101	Funding in support of Line Item 0001 CPFF PURCHASE REQUEST NUMBER:	(b) (4)			(b) (4)
				ESTIMATED COST	
				FIXED FEE	
				TOTAL EST COST + FEE	
	ACRN: (b) (4)				
	CIN: (b) (4)				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	(b) (4) CPFF (Completion Type) (b) (4) Stimulator NOTE: The requirements in DFARS 252.211-7003, Item Identification and Valuation, are applicable for this line item. The contractor shall provide DoD unique identification or a DoD recognized unique identification equivalent. FOB: Destination	(b) (4)			(b) (4)
				ESTIMATED COST	
				FIXED FEE	
				TOTAL EST COST + FEE	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
000201	Funding in support of Line Item 0002 CPFF PURCHASE REQUEST NUMBER: (b) (4)				(b) (4)
				ESTIMATED COST	
				FIXED FEE	
				TOTAL EST COST + FEE	
	ACRN (b) (4) CIN: (b) (4)				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003	Travel COST Travel in support of Line Item Numbers 0001 through 0004, and in accordance with SOW Paragraphs 3.1. FOB: Destination PURCHASE REQUEST NUMBER: (b) (4)	(b) (4)			(b) (4)
				ESTIMATED COST	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
000301	Funding in support of Line Item 0002 COST PURCHASE REQUEST NUMBER: (b) (4)				(b) (4)
				ESTIMATED COST	
	ACRN: (b) (4) CIN: (b) (4)				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004	Data CPFF Technical, Administrative and Financial data in support of all line items in accordance with Attachment 1 and Exhibit A				(b) (4)
				ESTIMATED COST	
				FIXED FEE	
				TOTAL EST COST + FEE	

Section C - Descriptions and Specifications

Item 0001 – The Contractor shall provide Non-recurring Engineering (NRE) in support of the CH-53K Defensive Electronic Countermeasures (DECM) Suite Upgrade (SU) in accordance with Paragraphs 3.2 through 10.10 of Attachment 1, the Statement of Work (SOW), entitled “CH-53K Defensive Electronic Countermeasures (DECM) Suite Upgrade (SU) Program Phase II,” provided under Section J.

Item 0002 – The Contractor shall develop and deliver the (b) (4) required to complete the CH-53K Defensive Electronic Countermeasures (DECM) Suite Upgrade (SU) in accordance with Paragraph 7.1 of Attachment 1, the Statement of Work (SOW), entitled “CH-53K Defensive Electronic Countermeasures (DECM) Suite Upgrade (SU) Program Phase II,” provided under Section J.

Item(s) 0003 – Upon notification to the Technical Point of Contact (TPOC), the Contractor shall travel in accordance with Paragraph 3.1 of Attachment 1, the SOW entitled “CH-53K Defensive Electronic Countermeasures (DECM) Suite Upgrade (SU) Program Phase II,” provided under Section J. See Section 3.1.

Item(s) 0004 – The technical, administrative and financial data to be delivered hereunder shall be in accordance with Exhibit A, the Contract Data Requirements List (CDRL), DD Form 1423-1, provided under Section J.

Section D - Packaging and Marking

Line Item Numbers 0001 and 0003 – N/A

Line Item Number 0002 – When applicable, the supplies to be furnished herein shall be preserved, packaged and marked in accordance with contract, or order, specified Department of Defense (DoD) standards, or with prevailing industry standards when not so specified so as to ensure safe delivery. Reusable containers, with handling fixtures, may be used. Refer to NAVAIR clause 5252.247-9509.

Line Item(s) 0004 – The technical, administrative and financial data to be furnished hereunder shall be packaged and marked in accordance with Exhibit A, CDRL, DD Form 1423-1, found under Section J.

CLAUSES INCORPORATED BY FULL TEXT

5252.247-9502 UNPACKING INSTRUCTIONS: COMPLEX OR DELICATE EQUIPMENT (NAVAIR) (OCT 1994)

(a) Location on Container. When practical, one set of the unpacking instructions will be placed in a heavy water-proof envelope prominently marked "UNPACKING INFORMATION" and firmly affixed to the outside of the shipping container in a protected location, preferably between the cleats on the end of the container adjacent to the identification marking. If the instructions cover a set of equipment packed in multiple containers, the instructions will be affixed to the number one container of the set. When the unpacking instructions are too voluminous to be affixed to the exterior of the container, they will be placed inside and directions for locating them will be provided in the envelope marked "UNPACKING INFORMATION".

(b) Marking Containers. When unpacking instructions are provided, shipping containers will be stenciled "CAUTION - THIS EQUIPMENT MAY BE SERIOUSLY DAMAGED UNLESS UNPACKING INSTRUCTIONS ARE CAREFULLY FOLLOWED. UNPACKING INSTRUCTIONS ARE LOCATED (state where located)." When practical, this marking will be applied adjacent to the identification marking on the side of the container.

(c) Marking. All shipping containers will be marked in accordance with [MIL-STD-2073.1E](#).

Applicable CLINs: 0002

5252.247-9509 PRESERVATION, PACKAGING, PACKING AND MARKING (NAVAIR)(JUL 1998)

(a) Preservation, packaging and packing shall conform to prevailing industry standards for the type of commodity purchased under this contract.

(b) All packages will be clearly marked with applicable contract number/delivery order number, and will contain appropriate packing slip. All deliveries will be marked for and/or consigned as follows:

[CH-53K DoN LAIRCM Property](#)

(c) In the event of any discrepancy in material shipped (overage, technical rejection, damage), the contractor shall, immediately upon request of the Contracting Officer, furnish disposition instructions. Normally, such disposition instruction shall be a properly completed Commercial Bill of Lading, which includes, but is not limited to, the mode of shipment, routing, special handling, and so forth.

(d) If the contractor is required to install equipment upon delivery, then the contractor shall inform the Government of the date of shipment from the contractor's facilities and the anticipated date of arrival at the site. This report shall be made no later than the actual date that the shipment is made from the contractor's facilities. The report may be made by facsimile or e-mail, to the point of contact listed in Section G. All transportation, rigging, drayage, packing, unpacking, and handling necessary to accomplish the installation shall be the responsibility of the contractor.

Section E - Inspection and Acceptance

Line Item 0001 – Inspection and acceptance (I/A) shall occur via DD250 upon demonstration of compliance with the (b) (4) Performance Specification and submission of the (b) (4) submitted under CDRL A005 and flight test data analysis as submitted under CDRL A005 demonstrates the (b) (4) as installed on (b) (4) meets system performance requirements following completion of successful flight test. The Administrative Contracting Officer (ACO) will coordinate with the Technical Point of Contact (TPOC) prior to final acceptance.

Line Item 0002 – I/A shall occur via DD250 and Certificate of Conformance (CoC) upon successful completion of Government approved Acceptance Test Procedures (ATPs), prior to disposition. Disposition may include delivery to Government and aircraft designated test facilities or labs or shipped in place to support ongoing contractor test efforts, and disposition/shipping shall be at the direction of the TPOC.

Line Item 0003 – I/A shall occur via DD250 and Certificate of Conformance (CoC) upon successful completion of Line Item 0001.

Line Item(s) 0004 – I/A shall occur in accordance with Exhibit A, CDRL, DD Form 1423-1.

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

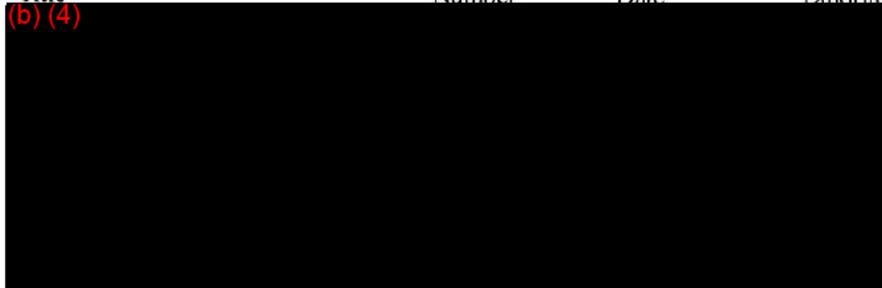
CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	Origin	Government	Origin	Government
000101	N/A	N/A	N/A	N/A
0002	Destination	Government	Destination	Government
000201	N/A	N/A	N/A	N/A
0003	Origin	Government	Origin	Government
000301	N/A	N/A	N/A	N/A
0004	N/A	N/A	N/A	N/A

CLAUSES INCORPORATED BY FULL TEXT

52.246-11 HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT (DEC 2014)

(a) The Contractor shall comply with the higher-level quality standard selected below.

Title	Number	Date	Tailoring
(b) (4)			



(b) (4)

(b) The Contractor shall include applicable requirements of the higher-level quality standard(s) listed in paragraph (a) of this clause and the requirement to flow down such standards, as applicable, to lower-tier subcontracts, in--

- (1) Any subcontract for critical and complex items (see 46.203(b) and (c)); or
- (2) When the technical requirements of a subcontract require-- (i) Control of such things as design, work operations, in-process control, testing, and inspection; or (ii) Attention to such factors as organization, planning, work instructions, documentation control, and advanced metrology.

F5252.246-9512 INSPECTION AND ACCEPTANCE (NAVAIR)(OCT 2005)

(a) Inspection and acceptance of the supplies or services to be furnished hereunder shall be performed by [Defense Contract Management Agency \(DCMA\) Chicago](#) (see [Cover Page, Block 7](#)).

(b) Acceptance of all Contract Line Items/Sub Line Items (CLINs/SLINs) shall be made by signature of the accepting authority on a DD 250 submitted through the WAWF system. Acceptance will only occur when the accepting authority is sure that inspections performed demonstrate compliance with contract requirements.

5252.246-9514 INSPECTION AND ACCEPTANCE OF TECHNICAL DATA AND INFORMATION (NAVAIR)(FEB 1995)

Inspection and acceptance of technical data and information will be performed by the Procuring Contracting Officer (PCO) or his duly authorized representative. Inspection of technical data and information will be performed by ensuring successful completion of the requirements set forth in the DD Form 1423, Contract Data Requirements List (CDRL) and incorporation/resolution of Government review comments on the data items. Acceptance will be evidenced by execution of an unconditional DD Form 250, Material Inspection and Receiving Report, as appropriate, and/or upon receipt of a second endorsement acceptance by the PCO on the attachment to this contract entitled [N/A](#). The attached form will not be used for high cost data such as drawings, specifications, and technical manuals.

Applicable CLINs: 0004

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	DODAAC / CAGE
0001	POP 29-SEP-2017 TO 28-SEP-2021	(b) (4)	N/A FOB: Destination	
000101	N/A		N/A	N/A
0002	31-MAR-2019		NORTHROP GRUMMAN CORPORATION, EY2109 ELECTRONIC (b) (6) 600 HICKS ROAD ROLLING MEADOWS IL 60008-1098 (b) (6) FOB: Destination	
000201	N/A		N/A	N/A
0003	POP 29-SEP-2017 TO 28-SEP-2021		N/A FOB: Destination	
000301	N/A		N/A	N/A
0004	N/A		N/A	N/A

CLAUSES INCORPORATED BY FULL TEXT

5252.247-9505 TECHNICAL DATA AND INFORMATION (NAVAIR)(FEB 1995)

Technical Data and Information shall be delivered in accordance with the requirements of the Contract Data Requirements List, DD Form 1423, Exhibit A, attached hereto, and the following:

(a) The contractor shall concurrently deliver technical data and information per DD Form 1423, Blocks 12 and 13 (date of first/subsequent submission) to all activities listed in Block 14 of the DD Form 1423 (distribution and addresses) for each item. Complete addresses for the abbreviations in Block 14 are shown in paragraph (g) below. Additionally, the technical data shall be delivered to the following cognizant codes, who are listed in Block 6 of the DD Form 1423.

(1) PCO, Code [2.2.1.1](#).

(2) ACO, Code [DCMA Chicago \(Cage: S1403A\)](#).

(b) Partial delivery of data is not acceptable unless specifically authorized on the DD Form 1423, or unless approved in writing by the PCO.

(c) The Government review period provided on the DD Form 1423 for each item commences upon receipt of all required data by the technical activity designated in Block 6.

(d) A copy of all other correspondence addressed to the Contracting Officer relating to data item requirements (i.e., status of delivery) shall also be provided to the codes reflected above and the technical activity responsible for the data item per Block 6, if not one of the activities listed above.

(e) The PCO reserves the right to issue unilateral modifications to change the destination codes and addresses for all technical data and information at no additional cost to the Government.

(f) Unless otherwise specified in writing, rejected data items shall be resubmitted within thirty (30) days after receipt of notice of rejection.

(g) DD Form 1423, Block 14 Mailing Addresses: See Exhibit A

Applicable CLINs: 0004

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

(b) (4)
 COST CODE: (b) (4)
 AMOUNT: (b) (4)

ACRN	CLIN/SLIN	CIN	AMOUNT
(b) (4)	000101 000201 000301	(b) (4)	(b) (4)

CLAUSES INCORPORATED BY REFERENCE

252.204-0002 Line Item Specific: Sequential ACRN Order SEP 2009

CLAUSES INCORPORATED BY FULL TEXT

252.232-7006 WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (MAY 2013)

(a) Definitions, as used in this clause--

"Department of Defense Activity Address Code (DoDAAC)" is a six position code that uniquely identifies a unit, activity, or organization.

"Document type" means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

"Local processing office (LPO)" is the office responsible for payment certification when payment certification is done external to the entitlement system.

(b) Electronic invoicing. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) WAWF access. To access WAWF, the Contractor shall--

(1) Have a designated electronic business point of contact in the System for Award Management at <https://www.acquisition.gov>; and

(2) Be registered to use WAWF at <https://wawf.eb.mil/> following the step-by-step procedures for self-registration available at this Web site.

(d) WAWF training. The Contractor should follow the training instructions of the WAWF Web-Based Training Course and use the Practice Training Site before submitting payment requests through WAWF. Both can be accessed by selecting the "Web Based Training" link on the WAWF home page at <https://wawf.eb.mil/>.

(e) WAWF methods of document submission. Document submissions may be via Web entry, Electronic Data Interchange, or File Transfer Protocol.

(f) WAWF payment instructions. The Contractor must use the following information when submitting payment requests and receiving reports in WAWF for this contract/order:

(1) Document type. The Contractor shall use the following document type(s).

COMBO

(2) Inspection/acceptance location. The Contractor shall select the following inspection/acceptance location(s) in WAWF, as specified by the contracting officer.

Not Applicable

(3) Document routing. The Contractor shall use the information in the Routing Data Table below only to fill in applicable fields in WAWF when creating payment requests and receiving reports in the system.

Routing Data Table*	Data to be entered in WAWF
Field Name in WAWF	
Pay Official DoDAAC:	HQ0339
Issue By DoDAAC:	N00019
Admin DoDAAC:	S1403A
Inspect By DoDAAC:	S1403A
Ship To Code:	(b) (4)
Ship From Code:	
Mark For Code:	DoN LAIRCM
Service Approver (DoDAAC):	S1403A
Service Acceptor (DoDAAC):	S1403A
Accept at Other DoDAAC:	N00019
LPO DoDAAC:	Not Applicable
DCAA Auditor DoDAAC:	HAA167
Other DoDAAC(s):	Not Applicable

(4) Payment request and supporting documentation. The Contractor shall ensure a payment request includes appropriate contract line item and subline item descriptions of the work performed or supplies delivered, unit price/cost per unit, fee (if applicable), and all relevant back-up documentation, as defined in DFARS Appendix F, (e.g. timesheets) in support of each payment request.

(5) WAWF email notifications. The Contractor shall enter the email address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.

(b) (6) e-mail: (b) (6) @navy.mil

(g) WAWF point of contact. (1) The Contractor may obtain clarification regarding invoicing in WAWF from the following contracting activity's WAWF point of contact. For Navy WAWF questions call DFAS Customer Care 1-800-756-4571 option 6

(2) For technical WAWF help, contact the WAWF helpdesk at 866-618-5988.

5252.201-9500 TECHNICAL POINT OF CONTACT (TPOC)(NAVAIR)(SEP 2012)

(a) The Technical Point of Contact (TPOC) for this contract is: (b) (6) [PMA-272 Engineer, 47123 Buse Road, Unit IPT, Building 2272, Suite 535, Patuxent River, MD 20670-1547, \(b\) \(6\)](#)

(b) This individual is not a Contracting Officer nor a Contracting Officer's Representative (COR)/Task Order COR (TOCOR) and has no authority to make changes, verbally or otherwise, to the existing contract or order. Further, no authority has been delegated to this individual by the Procuring Contracting Officer (PCO).

(c) The contractor may use this technical POC for technical questions related to the existing contract or order. Also, as a representative of the requiring activity, the TPOC may perform or assist in such areas as: base access forms, security related issues, IT access requirements, Contractor Performance Assessment Reporting System (CPARS), clarification of technical requirements, and statement of work inquires.

(d) The contractor shall immediately notify the Procuring Contracting Officer in writing if the contractor interprets any action by the TPOC to be a change to the existing contract.

5252.232-9510 PAYMENT OF FIXED FEE (NAVAIR) (OCT 2005)

(a) The fixed fee, as specified in Section B of this contract, subject to any adjustment required by other provisions of this contract, will be paid in installments. The fixed fee will be paid not more frequently than [bi-weekly](#) based on the allowable cost. The amount of each such installment shall be in the same ratio to the total fixed fee as the

allowable incurred cost is to the total estimated cost of the order. Payment shall be made in accordance with FAR Clauses 52.216-7, "Allowable Cost and Payment," and 52.216-8, "Fixed Fee."

(b) In the event of termination of the work in accordance with the FAR Clause 52.232-22, "Limitation of Funds," the fixed fee shall be redetermined by mutual agreement equitably to reflect the reduction of the work performed. The amount by which such fixed fee is less than or exceeds payments previously made on account of fee, shall be paid to (or repaid by) the contractor.

(c) The balance of the fixed fee shall be payable in accordance with other clauses of this contract.

(d) For indefinite delivery type contracts the terms of this clause apply to each delivery/task order there under.

5252.242-9511 CONTRACT ADMINISTRATION DATA (NAVAIR)(SEP 2012)

(a) Contract Administration Office.

(1) Contract administration functions (see FAR 42.302(a) and DFARS 242.302(a)) are assigned to: See the ADMINISTERED BY Block on the face page of the contract, modification, or order.

(b) Special Instructions (see FAR 42.202(b) and (c)):

(1) The following contract administration functions are retained (see FAR 42.302(a) and DFARS 242.302(a)):

Functions Retained	Retained for Performance By:
FAR 42.302(a)(41), evaluate contractor engineering efforts	TPOC will have oversight for Engineering Requirements of the Statement of Work, Section J, Attachment 1.
FAR 42.302(a)(45), review and analyze contractor-proposed engineering and design efforts	TPOC will have oversight for Engineering Requirements of the Statement of Work, Section J, Attachment 1.

(2) The following additional contract administration functions are assigned (see FAR 42.302(b)):

Additional Functions	Retained for Performance By:
FAR 42.302(b)(5), Issue Shipping Instructions	TPOC

(c) Inquiries regarding payment should be referred to: MyInvoice at <https://myinvoice.csd.disa.mil//index.html>.

Section H - Special Contract Requirements

CLAUSES INCORPORATED BY FULL TEXT

5252.228-9501 LIABILITY INSURANCE (NAVAIR) (MAR 1999)

The following types of insurance are required in accordance with the clause entitled, 52.228-7, "Insurance-- Liability to Third Persons" and shall be maintained in the minimum amounts shown:

- (a) Comprehensive General Liability: (b) (4) per person and (b) (4) per accident for bodily injury.
- (b) Automobile Insurance: (b) (4) per person and (b) (4) per accident for bodily injury and (b) (4) per accident for property damage.
- (c) Standard Workman's Compensation and Employer's Liability Insurance (or, where maritime employment is involved, Longshoremen's and Harbor Worker's Compensation Insurance) in the minimum amount of (b) (4)
- (d) Aircraft public and passenger liability: (b) (4) per person and (b) (4) per occurrence for bodily injury, other than passenger liability; (b) (4) per occurrence for property damage. Passenger bodily injury liability limits of (b) (4) per passenger, multiplied by the number of seats or number of passengers, whichever is greater.

5252.232-9516 ALLOTMENT OF FUNDS - INCREMENTALLY FUNDED COST-REIMBURSEMENT CONTRACT OTHER THAN COST-SHARING CONTRACT (NAVAIR)(JUL 1985) - ALT I (OCT 2005)

For the purposes of paragraph (b) of the "Limitation of Funds" clause of this contract-

- (a) The amount available for payment and allotted to this incrementally funded contract is:

Funded Cost

(b) (4)

Funded Fee

TOTAL FUNDS

(b) This contract is incrementally funded and the amount currently available for payment is limited to (b) (4) which includes a fixed fee amount of (b) (4). Subject to the provisions of the clause entitled "Limitation of Funds" (FAR 52.232-22) of the General Provisions of the Contract, no legal liability on the part of the Government for payment in excess of the revised total shall arise unless additional funds are made available and incorporated in a contract modification.

- (c) the items covered by such amount are Item(s) 0001 through 0003; and

(d) the period of performance for which it is estimated the allotted amount will cover is 29 September 2017 through 28 July 2018.

5252.243-9505 ENGINEERING CHANGES (NAVAIR)(OCT 2005)

(a) After contract award, the Contracting Officer may solicit, and the contractor is encouraged to propose independently, engineering changes to the equipment, software specifications or other requirements of this contract. These changes may be proposed for reasons of economy, improved performance, or to resolve increased data processing requirements. If the proposed changes are acceptable to both parties, the contractor shall submit a price change proposal to the Government for evaluation. Those proposed engineering changes that are acceptable to the Government will be processed as modifications to the contract.

(b) This applies only to those proposed changes identified by the contractor, as a proposal submitted pursuant to the provisions of this clause. As a minimum, the following information shall be submitted by the contractor with each proposal:

- (1) A description of the difference between the existing contract requirement and the proposed change, and the comparative advantages and disadvantages of each.

(2) Itemized requirements of the contract that must be changed if the proposal is adopted, and the proposed revision to the contract for each such change.

(3) An estimate of the changes in performance costs, if any, that will result from adoption of the proposal.

(4) An evaluation of the effects the proposed change would have on collateral costs to the Government such as Government-furnished property costs, costs of related items, and costs of maintenance and operation.

(5) A statement of the time by which the change order adopting the proposal must be issued so as to obtain the maximum benefits of the changes during the remainder of this contract. Also, any effect on the contract completion time or delivery schedule shall be identified.

(c) Engineering change proposals submitted to the Contracting Officer shall be processed expeditiously. The Government shall not be liable for proposal preparation costs or any delay in acting upon any proposal submitted pursuant to this clause. The contractor has the right to withdraw, in whole or in part, any engineering change proposal not accepted by the Government within the period specified in the engineering change proposal. The decision of the Contracting Officer as to the acceptance of any such proposal under this contract shall be final and shall not be subject to the "Disputes" clause of the contract.

(d) The Contracting Officer may accept any engineering change proposal submitted pursuant to this clause by giving the contractor written notice thereof. This written notice may be given by issuance of a modification to this contract. Unless and until a modification is executed to incorporate an engineering change proposal under this contract, the contractor shall remain obligated to perform in accordance with the terms of the existing contract.

(e) If an engineering change proposal pursuant to this clause is accepted and applied to this contract, an equitable adjustment in the contract price and in any other affected provisions of this contract shall be made in accordance with the "Changes" clause.

(f) The contractor is requested to identify specifically any information contained in its engineering change proposal which it considers confidential and/or proprietary and which it prefers not to be disclosed to the public. The identification of information as confidential and/or proprietary is for information purposes only and shall not be binding on the Government to prevent disclosure of such information. Offerors are advised that such information may be subject to release upon request pursuant to the Freedom of Information Act (5 U.S.C. 552).

5252.245-9520 ASSOCIATE CONTRACTOR CLAUSE (NAVAIR) (OCT 2005)

(a)(1) This clause is intended to ensure that there will be appropriate coordination/integration of work by the [DoN LAIRCM](#) associate contractors to ensure complete compatibility between equipment, data, and services for the [DoN LAIRCM](#) to prevent unnecessary duplication of effort and in order to maximize commonality.

(2) The price of this contract makes provision for the performance of the work called for in the Associate Contractor Agreements as required by this clause, in support of this contract.

(b) The Associate Contractors are as follows: (b) (4)

(c) The contractor shall work and maintain close liaison with the associate contractors listed in paragraph (b) above. In order to assure accomplishment of this objective, the contractor shall enter into a written Associate Contractor Agreement with each of the other applicable associate contractors.

(d) Each Associate Contractor Agreement between the contractor and an associate contractor shall provide for complete and unbiased exchange of technical information and interface data (data) relating to their detailed responsibilities and procedures. The following is a guide to be used in the development of each agreement:

(1) Identification of the data to be furnished among the associate contractors to facilitate procedures/schedules for the exchange of data. Descriptive detail of the data to be furnished or exchanged, with a specific date for delivery of each item thereof and containing such other mutual covenants and agreements that may be desirable or required to assure delivery or exchange of said data in a timely manner and in a condition suitable for use by the recipient. (For example, this may extend to all information pertaining and essential to the design, development, fabrication, test, interface, modification and installation of equipment and provision of services hereunder to the extent that each party may require such information to ensure the compatibility of their respective equipment, data and services.)

(2) Services to be provided by one contractor to another (including such services as clerical support to visiting associate contractor personnel, unscheduled maintenance and technical support for equipment, etc.) to facilitate the

(b) The said property shall be governed by the terms and conditions of the contract(s) under which it is accountable.

(c) The contractor is responsible for scheduling the use of the said property. The Government shall not be responsible for conflicts, delay or disruptions to any work performed by the contractor due to use of the property under this contract or any other contracts under which use of such property is authorized.

Section I - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52.232-22	Limitation Of Funds	APR 1984
252.204-7008	Compliance With Safeguarding Covered Defense Information Controls	DEC 2015

CLAUSES INCORPORATED BY FULL TEXT

52.216-7 ALLOWABLE COST AND PAYMENT (JUN 2013)

(a) Invoicing.

(1) The Government will make payments to the Contractor when requested as work progresses, but (except for small business concerns) not more often than once every 2 weeks, in amounts determined to be allowable by the Contracting Officer in accordance with Federal Acquisition Regulation (FAR) Subpart 31.2 in effect on the date of this contract and the terms of this contract. The Contractor may submit to an authorized representative of the Contracting Officer, in such form and reasonable detail as the representative may require, an invoice or voucher supported by a statement of the claimed allowable cost for performing this contract.

(2) Contract financing payments are not subject to the interest penalty provisions of the Prompt Payment Act. Interim payments made prior to the final payment under the contract are contract financing payments, except interim payments if this contract contains Alternate I to the clause at 52.232-25.

(3) The designated payment office will make interim payments for contract financing on the 30th day after the designated billing office receives a proper payment request. In the event that the Government requires an audit or other review of a specific payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date.

(b) Reimbursing costs.

(1) For the purpose of reimbursing allowable costs (except as provided in subparagraph (b)(2) of this section, with respect to pension, deferred profit sharing, and employee stock ownership plan contributions), the term "costs" includes only --

(i) Those recorded costs that, at the time of the request for reimbursement, the Contractor has paid by cash, check, or other form of actual payment for items or services purchased directly for the contract;

(ii) When the Contractor is not delinquent in paying costs of contract performance in the ordinary course of business, costs incurred, but not necessarily paid, for --

(A) Supplies and services purchased directly for the contract and associated financing payments to subcontractors, provided payments determined due will be made-

(1) In accordance with the terms and conditions of a subcontract or invoice; and

(2) Ordinarily within 30 days of the submission of the Contractor's payment request to the Government;

(B) Materials issued from the Contractor's inventory and placed in the production process for use on the contract;

(C) Direct labor;

(D) Direct travel;

(E) Other direct in-house costs; and

(F) Properly allocable and allowable indirect costs, as shown in the records maintained by the Contractor for purposes of obtaining reimbursement under Government contracts; and

(iii) The amount of financing payments that have been paid by cash, check or other form of payment to subcontractors.

(2) Accrued costs of Contractor contributions under employee pension plans shall be excluded until actually paid unless-

(i) The Contractor's practice is to make contributions to the retirement fund quarterly or more frequently; and

(ii) The contribution does not remain unpaid 30 days after the end of the applicable quarter or shorter payment period (any contribution remaining unpaid shall be excluded from the Contractor's indirect costs for payment purposes).

(3) Notwithstanding the audit and adjustment of invoices or vouchers under paragraph (g) of this clause, allowable indirect costs under this contract shall be obtained by applying indirect cost rates established in accordance with paragraph (d) of this clause.

(4) Any statements in specifications or other documents incorporated in this contract by reference designating performance of services or furnishing of materials at the Contractor's expense or at no cost to the Government shall be disregarded for purposes of cost-reimbursement under this clause.

(c) Small business concerns. A small business concern may receive more frequent payments than every 2 weeks

(d) Final indirect cost rates.

(1) Final annual indirect cost rates and the appropriate bases shall be established in accordance with Subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal.

(2)(i) The Contractor shall submit an adequate final indirect cost rate proposal to the Contracting Officer (or cognizant Federal agency official) and auditor within the 6-month period following the expiration of each of its fiscal years. Reasonable extensions, for exceptional circumstances only, may be requested in writing by the Contractor and granted in writing by the Contracting Officer. The Contractor shall support its proposal with adequate supporting data.

(ii) The proposed rates shall be based on the Contractor's actual cost experience for that period. The appropriate Government representative and the Contractor shall establish the final indirect cost rates as promptly as practical after receipt of the Contractor's proposal.

(iii) An adequate indirect cost rate proposal shall include the following data unless otherwise specified by the cognizant Federal agency official:

(A) Summary of all claimed indirect expense rates, including pool, base, and calculated indirect rate.

(B) General and Administrative expenses (final indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts).

(C) Overhead expenses (final indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) for each final indirect cost pool.

(D) Occupancy expenses (intermediate indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) and expense reallocation to final indirect cost pools.

(E) Claimed allocation bases, by element of cost, used to distribute indirect costs.

(F) Facilities capital cost of money factors computation.

(G) Reconciliation of books of account (i.e., General Ledger) and claimed direct costs by major cost element.

(H) Schedule of direct costs by contract and subcontract and indirect expense applied at claimed rates, as well as a subsidiary schedule of Government participation percentages in each of the allocation base amounts.

(I) Schedule of cumulative direct and indirect costs claimed and billed by contract and subcontract.

(J) Subcontract information. Listing of subcontracts awarded to companies for which the contractor is the prime or upper-tier contractor (include prime and subcontract numbers; subcontract value and award type; amount claimed during the fiscal year; and the subcontractor name, address, and point of contact information).

(K) Summary of each time-and-materials and labor-hour contract information, including labor categories, labor rates, hours, and amounts; direct materials; other direct costs; and, indirect expense applied at claimed rates.

(L) Reconciliation of total payroll per IRS form 941 to total labor costs distribution.

(M) Listing of decisions/agreements/approvals and description of accounting/organizational changes.

(N) Certificate of final indirect costs (see 52.242-4, Certification of Final Indirect Costs).

(O) Contract closing information for contracts physically completed in this fiscal year (include contract number, period of performance, contract ceiling amounts, contract fee computations, level of effort, and indicate if the contract is ready to close).

(iv) The following supplemental information is not required to determine if a proposal is adequate, but may be required during the audit process:

(A) Comparative analysis of indirect expense pools detailed by account to prior fiscal year and budgetary data.

(B) General Organizational information and limitation on allowability of compensation for certain contractor personnel. See 31.205-6(p). Additional salary reference information is available at http://www.whitehouse.gov/omb/procurement_index_exec_comp/.

(C) Identification of prime contracts under which the contractor performs as a subcontractor.

(D) Description of accounting system (excludes contractors required to submit a CAS Disclosure Statement or contractors where the description of the accounting system has not changed from the previous year's submission).

(E) Procedures for identifying and excluding unallowable costs from the costs claimed and billed (excludes contractors where the procedures have not changed from the previous year's submission).

(F) Certified financial statements and other financial data (e.g., trial balance, compilation, review, etc.).

(G) Management letter from outside CPAs concerning any internal control weaknesses.

(H) Actions that have been and/or will be implemented to correct the weaknesses described in the management letter from subparagraph (G) of this section.

(I) List of all internal audit reports issued since the last disclosure of internal audit reports to the Government.

(J) Annual internal audit plan of scheduled audits to be performed in the fiscal year when the final indirect cost rate submission is made.

(K) Federal and State income tax returns.

(L) Securities and Exchange Commission 10-K annual report.

(M) Minutes from board of directors meetings.

(N) Listing of delay claims and termination claims submitted which contain costs relating to the subject fiscal year.

(O) Contract briefings, which generally include a synopsis of all pertinent contract provisions, such as: Contract type, contract amount, product or service(s) to be provided, contract performance period, rate ceilings, advance approval requirements, pre-contract cost allowability limitations, and billing limitations.

(v) The Contractor shall update the billings on all contracts to reflect the final settled rates and update the schedule of cumulative direct and indirect costs claimed and billed, as required in paragraph (d)(2)(iii)(1) of this section, within 60 days after settlement of final indirect cost rates.

(3) The Contractor and the appropriate Government representative shall execute a written understanding setting forth the final indirect cost rates. The understanding shall specify

(i) the agreed-upon final annual indirect cost rates,

(ii) the bases to which the rates apply,

(iii) the periods for which the rates apply,

(iv) any specific indirect cost items treated as direct costs in the settlement, and

(v) the affected contract and/or subcontract, identifying any with advance agreements or special terms and the applicable rates.

The understanding shall not change any monetary ceiling, contract obligation, or specific cost allowance or disallowance provided for in this contract. The understanding is incorporated into this contract upon execution.

(4) Failure by the parties to agree on a final annual indirect cost rate shall be a dispute within the meaning of the Disputes clause.

(5) Within 120 days (or longer period if approved in writing by the Contracting Officer) after settlement of the final annual indirect cost rates for all years of a physically complete contract, Contractor shall submit a completion invoice or voucher to reflect the settled amounts and rates. The completion invoice or voucher shall include settled subcontract amounts and rates. The prime contractor is responsible for settling subcontractor amounts and rates included in the completion invoice or voucher and providing status of subcontractor audits to the contracting officer upon request.

(6)(i) If the Contractor fails to submit a completion invoice or voucher within the time specified in paragraph (d)(5) of this clause, the Contracting Officer may--

(A) Determine the amounts due to the Contractor under the contract; and

(B) Record this determination in a unilateral modification to the contract.

(ii) This determination constitutes the final decision of the Contracting Officer in accordance with the Disputes clause.

(e) Billing rates. Until final annual indirect cost rates are established for any period, the Government shall reimburse the Contractor at billing rates established by the Contracting Officer or by an authorized representative (the cognizant auditor), subject to adjustment when the final rates are established. These billing rates --

(1) Shall be the anticipated final rates; and

(2) May be prospectively or retroactively revised by mutual agreement, at either party's request, to prevent substantial overpayment or underpayment.

(f) Quick-closeout procedures. Quick-closeout procedures are applicable when the conditions in FAR 42.708(a) are satisfied.

(g) Audit. At any time or times before final payment, the Contracting Officer may have the Contractor's invoices or vouchers and statements of cost audited. Any payment may be --

- (1) Reduced by amounts found by the Contracting Officer not to constitute allowable costs; or
- (2) Adjusted for prior overpayments or underpayments.

(h) Final payment.

(1) Upon approval of a completion invoice or voucher submitted by the Contractor in accordance with paragraph (d)(5) of this clause, and upon the Contractor's compliance with all terms of this contract, the Government shall promptly pay any balance of allowable costs and that part of the fee (if any) not previously paid.

(2) The Contractor shall pay to the Government any refunds, rebates, credits, or other amounts (including interest, if any) accruing to or received by the Contractor or any assignee under this contract, to the extent that those amounts are properly allocable to costs for which the Contractor has been reimbursed by the Government. Reasonable expenses incurred by the Contractor for securing refunds, rebates, credits, or other amounts shall be allowable costs if approved by the Contracting Officer. Before final payment under this contract, the Contractor and each assignee whose assignment is in effect at the time of final payment shall execute and deliver --

(i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(ii) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except --

(A) Specified claims stated in exact amounts, or in estimated amounts when the exact amounts are not known;

(B) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following the release date or notice of final payment date, whichever is earlier; and

(C) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding, however, any expenses arising from the Contractor's indemnification of the Government against patent liability.

252.211-7003 ITEM UNIQUE IDENTIFICATION AND VALUATION (MAR 2016)

(a) Definitions. As used in this clause--

“Automatic identification device” means a device, such as a reader or interrogator, used to retrieve data encoded on machine-readable media.

“Concatenated unique item identifier” means--

(1) For items that are serialized within the enterprise identifier, the linking together of the unique identifier data elements in order of the issuing agency code, enterprise identifier, and unique serial number within the enterprise identifier; or

(2) For items that are serialized within the original part, lot, or batch number, the linking together of the unique identifier data elements in order of the issuing agency code; enterprise identifier; original part, lot, or batch number; and serial number within the original part, lot, or batch number.

“Data matrix” means a two-dimensional matrix symbology, which is made up of square or, in some cases, round modules arranged within a perimeter finder pattern and uses the Error Checking and Correction 200(ECC200) specification found within International Standards Organization (ISO)/ International Electrotechnical Commission (IEC) 16022.

“Data qualifier” means a specified character (or string of characters) that immediately precedes a data field that defines the general category or intended use of the data that follows.

“DoD recognized unique identification equivalent” means a unique identification method that is in commercial use and has been recognized by DoD. All DoD recognized unique identification equivalents are listed at http://www.acq.osd.mil/dpap/pdi/uid/iuid_equivalents.html.

“DoD item unique identification” means a system of marking items delivered to DoD with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items. For items that are serialized within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier and a unique serial number. For items that are serialized within the part, lot, or batch number

within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier; the original part, lot, or batch number; and the serial number.

“Enterprise” means the entity (e.g., a manufacturer or vendor) responsible for assigning unique item identifiers to items.

“Enterprise identifier” means a code that is uniquely assigned to an enterprise by an issuing agency.

“Government's unit acquisition cost” means--

(1) For fixed-price type line, subtitle, or exhibit line items, the unit price identified in the contract at the time of delivery;

(2) For cost-type or undefinitized line, subtitle, or exhibit line items, the Contractor's estimated fully burdened unit cost to the Government at the time of delivery; and

(3) For items produced under a time-and-materials contract, the Contractor's estimated fully burdened unit cost to the Government at the time of delivery.

“Issuing agency” means an organization responsible for assigning a globally unique identifier to an enterprise, as indicated in the Register of Issuing Agency Codes for ISO/IEC 15459, located at http://www.aimglobal.org/?Reg_Authority15459.

“Issuing agency code” means a code that designates the registration (or controlling) authority for the enterprise identifier.

“Item” means a single hardware article or a single unit formed by a grouping of subassemblies, components, or constituent parts.

“Lot or batch number” means an identifying number assigned by the enterprise to a designated group of items, usually referred to as either a lot or a batch, all of which were manufactured under identical conditions.

“Machine-readable” means an automatic identification technology media, such as bar codes, contact memory buttons, radio frequency identification, or optical memory cards.

“Original part number” means a combination of numbers or letters assigned by the enterprise at item creation to a class of items with the same form, fit, function, and interface.

“Parent item” means the item assembly, intermediate component, or subassembly that has an embedded item with a unique item identifier or DoD recognized unique identification equivalent.

“Serial number within the enterprise identifier” means a combination of numbers, letters, or symbols assigned by the enterprise to an item that provides for the differentiation of that item from any other like and unlike item and is never used again within the enterprise.

“Serial number within the part, lot, or batch number” means a combination of numbers or letters assigned by the enterprise to an item that provides for the differentiation of that item from any other like item within a part, lot, or batch number assignment.

“Serialization within the enterprise identifier” means each item produced is assigned a serial number that is unique among all the tangible items produced by the enterprise and is never used again. The enterprise is responsible for ensuring unique serialization within the enterprise identifier.

“Serialization within the part, lot, or batch number” means each item of a particular part, lot, or batch number is assigned a unique serial number within that part, lot, or batch number assignment. The enterprise is responsible for ensuring unique serialization within the part, lot, or batch number within the enterprise identifier.

“Type designation” means a combination of letters and numerals assigned by the Government to a major end item, assembly or subassembly, as appropriate, to provide a convenient means of differentiating between items having the same basic name and to indicate modifications and changes thereto.

“Unique item identifier” means a set of data elements marked on items that is globally unique and unambiguous. The term includes a concatenated unique item identifier or a DoD recognized unique identification equivalent.

“Unique item identifier type” means a designator to indicate which method of uniquely identifying a part has been used. The current list of accepted unique item identifier types is maintained at http://www.acq.osd.mil/dpap/pdi/uid/uii_types.html.

(b) The Contractor shall deliver all items under a contract line, subtitle, or exhibit line item.

(c) Unique item identifier.

(i) The Contractor shall provide a unique item identifier for the following:

(i) Delivered items for which the Government's unit acquisition cost is \$5,000 or more, except for the following line items:

Contract Line, Subline, or Exhibit Line Item Number Item Description

N/A

(ii) Items for which the Government's unit acquisition cost is less than (b) (4) that are identified in the Schedule or the following table:

Contract Line, Subline, or Exhibit Line Item Number Item Description

N/A

(If items as identified in the Schedule, insert "See Schedule" in this table.)

(iii) Subassemblies, components, and parts embedded within delivered items, items with warranty requirements, DoD serially managed reparable and DoD serially managed nonreparable as specified in Attachment Number N/A.

(iv) Any item of special tooling or special test equipment as defined in FAR 2.101 that have been designated for preservation and storage for a Major Defense Acquisition Program as specified in Attachment Number _____.

(v) Any item not included in (i), (ii), (iii), or (iv) for which the contractor creates and marks a unique item identified for traceability.

(2) The unique item identifier assignment and its component data element combination shall not be duplicated on any other item marked or registered in the DoD Item Unique Identification Registry by the contractor.

(3) The unique item identified component data elements shall be marked on an item using two dimensional data matrix symbology that complies with ISO/IEC International Standard 16022, Information technology - International symbology specification - Data matrix; ECC200 data matrix specification.

(4) Data syntax and semantics of unique item identifiers. The Contractor shall ensure that--

(i) The data elements (except issuing agency code) of the unique item identifier are encoded within the data matrix symbol that is marked on the item using one of the following three types of data qualifiers, as determined by the Contractor:

(A) Application Identifiers (AIs) (Format Indicator 05 of ISO/IEC International Standard 15434), in accordance with ISO/IEC International Standard 15418, Information Technology--EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance and ANSI MH 10.8.2 Data Identifier and Application Identifier Standard.

(B) Data Identifiers (DIs) (Format Indicator 06 of ISO/IEC International Standard 15434), in accordance with ISO/IEC International Standard 15418, Information Technology--EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance and ANSI MH 10.8.2 Data Identifier and Application Identifier Standard.

(C) Text Element Identifiers (TEIs) (Format Indicator 12 of ISO/IEC International Standard 15434), in accordance with the Air Transport Association Common Support Data Dictionary; and

(ii) The encoded data elements of the unique item identifier conform to the transfer structure, syntax, and coding of messages and data formats specified for Format Indicators 05, 06, and 12 in ISO/IEC International Standard 15434, Information Technology--Transfer Syntax for High Capacity Automatic Data Capture Media.

(5) Unique item identifier.

(i) The Contractor shall--

(A) Determine whether to--

(1) Serialize within the enterprise identifier;

(2) Serialize within the part, lot, or batch number; or

(3) Use a DoD recognized unique identification equivalent (e.g. Vehicle Identification Number); and

(B) Place the data elements of the unique item identifier (enterprise identifier; serial number; DoD recognized unique identification equivalent; and for serialization within the part, lot, or batch number only: original part, lot, or batch number) on items requiring marking by paragraph (c)(1) of this clause, based on the criteria provided in MIL-STD-130, Identification Marking of U.S. Military Property, latest version;

(C) Label shipments, storage containers and packages that contain uniquely identified items in accordance with the requirements of MIL-STD-129, Military Marking for Shipment and Storage, latest version; and

(D) Verify that the marks on items and labels on shipments, storage containers, and packages are machine readable and conform to the applicable standards. The contractor shall use an automatic identification technology device for this verification that has been programmed to the requirements of Appendix A, MIL-STD-130, latest version.

(ii) The issuing agency code--

(A) Shall not be placed on the item; and

(B) Shall be derived from the data qualifier for the enterprise identifier.

(d) For each item that requires item unique identification under paragraph (c)(1)(i), (ii), or (iv) of this clause or when item unique identification is provided under paragraph (c)(1)(v), in addition to the information provided as

part of the Material Inspection and Receiving Report specified elsewhere in this contract, the Contractor shall report at the time of delivery, either as part of the Material Inspection and Receiving Report, the following information:

- (1) Unique item identifier.
- (2) Unique item identifier type.
- (3) Issuing agency code (if concatenated unique item identifier is used).
- (4) Enterprise identifier (if concatenated unique item identifier is used).
- (5) Original part number (if there is serialization within the original part number).
- (6) Lot or batch number (if there is serialization within the lot or batch number).
- (7) Current part number (optional and only if not the same as the original part number).
- (8) Current part number effective date (optional and only if current part number is used).
- (9) Serial number (if concatenated unique item identifier is used).
- (10) Government's unit acquisition cost.
- (11) Unit of measure.
- (12) Type designation of the item as specified in the contract schedule, if any.
- (13) Whether the item is an item of Special Tooling or Special Test Equipment.
- (14) Whether the item is covered by a warranty.

(e) For embedded subassemblies, components, and parts that require DoD unique item identification under paragraph (c)(1)(iii) of this clause or when item unique identification is provided under paragraph (c)(1)(v), the Contractor shall report as part of the Material Inspection and Receiving Report specified elsewhere in this contract, the following information:

(1) Unique item identifier of the parent item under paragraph (c)(1) of this clause that contains the embedded subassembly, component, or part.

- (2) Unique item identifier of the embedded subassembly, component, or part.
- (3) Unique item identifier type.**
- (4) Issuing agency code (if concatenated unique item identifier is used).**
- (5) Enterprise identifier (if concatenated unique item identifier is used).**
- (6) Original part number (if there is serialization within the original part number).**
- (7) Lot or batch number (if there is serialization within the lot or batch number).**
- (8) Current part number (optional and only if not the same as the original part number).**
- (9) Current part number effective date (optional and only if current part number is used).**
- (10) Serial number (if concatenated unique item identifier is used).**
- (11) Description.

** Once per item.

(f) The Contractor shall submit the information required by paragraphs (d) and (e) of this clause as follows:

(1) End items shall be reported using the receiving report capability in Wide Area WorkFlow (WAWF) in accordance with the clause at 252.232-7003. If WAWF is not required by this contract, and the contractor is not using WAWF, follow the procedures at <http://dodprocurementtoolbox.com/site/uidregistry/>.

(2) Embedded items shall be reported by one of the following methods--

- (i) Use of the embedded items capability in WAWF;
- (ii) Direct data submission to the IUID Registry following the procedures and formats at <http://dodprocurementtoolbox.com/site/uidregistry/>; or
- (iii) Via WAWF as a deliverable attachment for exhibit line item number N/A, Unique Item Identified Report for Embedded Items, Contract Data Requirements List, DD Form 1423.

(g) Subcontracts. If the Contractor acquires by subcontract, any item(s) for which item unique identification is required in accordance with paragraph (c)(1) of this clause, the Contractor shall include this clause, including this paragraph (g), in the applicable subcontract(s), including subcontracts for commercial items.

Section J - List of Documents, Exhibits and Other Attachments

Exhibit/Attachment Table of Contents

DOCUMENT TYPE	DESCRIPTION	PAGES	DATE
Exhibit A	Contract Data Requirements List (CDRL), DD Form 1423-1	23	26-SEP-2017
Attachment 1	Statement of Work, CH-53K DSU Program Phase II	29	19-SEP-2017
Attachment 2	DoD Contract Security Classification Specification, DD 254	3	20-AUG-2015
Attachment 3	Individual Small Business Subcontracting Plan	23	14-MAR-2017
Attachment 4	Data Rights Assertion List (DRAL)	4	25-SEP-2017

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO. 0004		B. EXHIBIT A	C. CATEGORY ADMN
D. SYSTEM/ITEM DoN LAIRCM CH-53K DSU		E. CONTRACT/PR NO. N00019-15-G-0026-0512	
F. CONTRACTOR Northrop Grumman			
1. DATA ITEM NO. A002	2. TITLE OF DATA ITEM Conference Minutes (See Block 16)		3. SUBTITLE Meeting Minutes and Action Items
4. AUTHORITY (Data Acquisition Document No.) DI-ADMN-81250		5. CONTRACT REFERENCE SOW 4.2.4.4.6.2	
6. REQUIRING OFFICE PMA-272, PMA-261			

7. DD 250 REQ LT	8. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION		
8. APP CODE N/A		11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION N/A	a. ADDRESSEE	b. COPIES	
						Draft

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

<p>16. REMARKS</p> <p>Block 2: Contractor format is acceptable.</p> <p>Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272.</p> <p>Block 12: An agenda shall be delivered to the Government 14 days in advance of design reviews. Conference minutes shall be delivered 10 calendar days after meeting and design reviews. Conference minutes shall include presentation materials, action items, minutes.</p> <p>Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/</p>	(See Block 16)			
15. TOTAL				

G. PREPARED BY (b) (6)	H. DATE 9/26/2017	I. APPROVED BY (b) (6)	J. DATE 9-26-17
----------------------------------	-----------------------------	----------------------------------	---------------------------

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO. 0004		B. EXHIBIT A	C. CATEGORY ADMN	
D. SYSTEM/ITEM DoN LAIRCM CH-53K DSU		E. CONTRACT/PR NO. N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman
1. DATA ITEM NO. A004	2. TITLE OF DATA ITEM Program Protection Implementation Plan (PIP) (See Block 16)		3. SUBTITLE	
4. AUTHORITY (Data Acquisition Document No.) DI-ADMN-81306		5. CONTRACT REFERENCE SOW ¶ 10.3		6. REQUIRING OFFICE PMA-272, PMA-261
7. DD 250 REQ DD	9. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY 1 TIME	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION a. ADDRESSEE b. COPIES Final Draft Reg. Repro
8. APP CODE A (See Block 16)	11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION N/A	15. TOTAL	
18. REMARKS Block 2: Contractor format is acceptable. Block 8: The Government will approve/disapprove this data item within 30 working days of receipt. Disapproval requires contractor to incorporate Government comments and submit final data item within 10 working days of receipt of Government comments. Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272. Block 12: Draft due 60 days after updates are identified. Final submission due 30 days after receipt of Government comments. Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/275DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/				17. PRICE GROUP
				18. ESTIMATED TOTAL PRICE

G. PREPARED BY (b) (6)	H. DATE 9/26/2017	I. DATE (b) (6)	J. DATE 9-26-17
----------------------------------	-----------------------------	---------------------------	---------------------------

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO 0004		B. EXHIBIT A	C. CATEGORY NDTI	
D. SYSTEM ITEM DoN LAIRCM CH-53K DSU		E. CONTRACT/PR NO. N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman
1. DATA ITEM NO A005	2. TITLE OF DATA ITEM Test Reports (See Block 16)		3. SUBTITLE	
4. AUTHORITY (Data Acquisition Document No.) DI-NDTI-81442A		5. CONTRACT REFERENCE SOW ¶ 4.1.2,4.1.3,4.3.5.1,10.7.1		6. REQUIRING OFFICE PMA-272, PMA-261
7. DD 250 REC LT	8. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION a. ADDRESSEE b. COPIES Final Draft Reg. Repro
9. APP CODE N/A	11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION ASREQ		
16. REMARKS				
<p>Block 2: Contractor format is acceptable.</p> <p>Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272.</p> <p>Block 12: Draft reports due 30 days after test. Government has 30 days to review draft submittals and provide comments.</p> <p>Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil and all meeting attendees containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe</p>				
15 TOTAL				
G. PREPARED BY (b) (6)		H. DATE 9/26/2017	I. APPROVED BY (b) (6)	
			J. DATE 9-26-17	

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO. 0004		B. EXHIBIT A	C. CATEGORY NDTI	
D. SYSTEM ITEM DoN LAIRCM CH-53K DSU		E. CONTRACT/PR NO N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman
1. DATA ITEM NO. A006	2. TITLE OF DATA ITEM Test Plans and Procedures (See Block 16)		3. SUBTITLE	
4. AUTHORITY (Data Acquisition Document No.) DI-NDTI-80566A		5. CONTRACT REFERENCE SOW ¶ 4.1.1, 4.1.3, 4.3.5.1		9. REQUIRING OFFICE PMA-272, PMA-261
7. DD 250 REQ DD	9. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION a. ADDRESSEE b. COPIES Final Draft Reg. Repr
8. APP CODE A (See Block 16)	11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION (See Block 16)	15. TOTAL	
16. REMARKS Block 2: Contractor format is acceptable. Block 8: The Government will approve/disapprove this data item within 30 working days of receipt. Disapproval requires contractor to incorporate Government comments and submit final data item within 10 working days of receipt of Government comments. Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272. Block 12: Draft plans due 45 days prior to test event. Block 13: Revisions due 15 days after receipt of comments. Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/				(See Block 16)

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

G. PREPARED BY (b) (6)		H. DATE 9/26/2017	I. APPROVED BY (b) (6)		J. DATE 9-26-17
---------------------------	--	----------------------	---------------------------	--	--------------------

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO 0004		B. EXHIBIT A		C. CATEGORY IPSC	
D. SYSTEM/ITEM DoN LAIRCM CH-53K DSU		E. CONTRACT/PR NO N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman	
1. DATA ITEM NO A007	2. TITLE OF DATA ITEM Software Version Description (See 16)			3. SUBTITLE SVD	
4. AUTHORITY (Data Acquisition Document No.) DI-IPSC-81442A		5. CONTRACT REFERENCE SOW 4.1.2, 4.1.3.4.3		6. REQUIRING OFFICE PMA-272, PMA-261	
7. DD 250 REQ LT	8. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION a. ADDRESSEE b. COPIES Final Draft Reg. Repr	
8. APP CODE N/A	11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION (See Block 16)	15. TOTAL		
18. REMARKS Block 2: Contractor format is acceptable. Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272. Block 12: Initial draft 30 days prior to SFQT. Government has 30 days to review and provide draft submittals and provide comments. Block 13: Revisions as required. Revisions due 30 days after receipt of Government comments. Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/275DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/				(See Block 16)	
G. PREPARED BY (b) (6)		H. DATE 7/20/2016		I. DATE (b) (6)	
				9-26-17	

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

Data Item Number A008

RESERVED

Data Item Number A009

RESERVED

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO 0004		B. EXHIBIT A	C. CATEGORY MCCR	
D. SYSTEM/ITEM DoN LAIRCM CH-53K DSU		E. CONTRACT/PR NO. N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman
1. DATA ITEM NO. A00A	2. TITLE OF DATA ITEM Computer Software Product End Items (See Block 16)		3. SUBTITLE System Software and Documentation	
4. AUTHORITY (Data Acquisition Document No.) DI-MCCR-80700		5. CONTRACT REFERENCE SOW 4.0, 4.1.2, 4.1.5,		8. REQUIRING OFFICE PMA-272, PMA-261
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION a. ADDRESSEE (See Block 16)
8. APP CODE N/A	11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION (See Block 16)	b. COPIES Final Draft Reg Repr	
16. REMARKS <p>Block 2: Contractor format is acceptable.</p> <p>Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272.</p> <p>Block 12: Submit final 30 days after SFQT is completed.</p> <p>Block 13: Submit subsequent changes 30 days after change occurs.</p> <p>Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/</p>				
15. TOTAL				

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

G. PREPARED BY (b) (6)	H. DATE 9/26/2017	I. APPROVED BY (b) (6)	J. DATE 9-26-17
----------------------------------	-----------------------------	----------------------------------	---------------------------

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO. 0004		B. EXHIBIT A	C. CATEGORY TMSS	
D. SYSTEM/ITEM DoN LAIRCM CH-53K DSU		E. CONTRACT/PRNO N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman
1. DATA ITEM NO. A00B	2. TITLE OF DATA ITEM Technical Manual Research and Analysis Source Data (See Block 16)		3. SUBTITLE	
4. AUTHORITY (Data Acquisition Document No.) DI-TMSS-81354		5. CONTRACT REFERENCE SOW 1 8.1.8.2		6. REQUIRING OFFICE PMA-272, PMA-261
7. DD 250 REQ LT	8. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION a. ADDRESSEE
9. APP CODE N/A	11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION (See Block 16)	b. COPIES Final Draft Reg Repr	
16. REMARKS Block 2: Contractor format is acceptable. Block 9: DISTRIBUTION STATEMENT D: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272. Block 12: Submit draft technical manual updates 30 days prior to qualification testing. Block 13: Subsequent revisions due 30 days after receipt of Government comments. Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/				15. TOTAL

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

G. PREPARED BY (b) (6)	H. DATE 9/26/2017	I. APPROVED BY (b) (6)	J. DATE 9-26-17
----------------------------------	-----------------------------	----------------------------------	---------------------------

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO. 0004		B. EXHIBIT A		C. CATEGORY NDTI		
D. SYSTEM/ITEM DoN LAIRCM CH-53K DSU		E. CONTRACT/PR NO N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman		
1. DATA ITEM NO. A00H	2. TITLE OF DATA ITEM Test/Inspection Report (See Block 16)			3. SUBTITLE (b) (4) Acceptance Test Report		
4. AUTHORITY (Data Acquisition Document No.) DI-NDTI-80809 B		5. CONTRACT REFERENCE SOW ¶ 7.2		6. REQUIRING OFFICE PMA 272 (AIR 4.5.18)		
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION		
8. APP CODE N/A	11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION ASREQ	a. ADDRESSEE	b. COPIES		
				Draft	Reg	Repro
16. REMARKS Block 2: Contractor format is acceptable. Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272. Block 12: Submit within 30 working days after test completion. Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/				(See Block 16)		
				15. TOTAL		

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

G. PREPARED BY (b) (6)		H. DATE 9/26/2017		I. APPROVED BY (b) (6)		J. DATE 9-26-17	
---------------------------	--	----------------------	--	---------------------------	--	--------------------	--

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO. 0004		B. EXHIBIT A	C. CATEGORY MISC	
D. SYSTEM/ITEM DoN LAIRCM CH-53K DSU		E. CONTRACT/PR NO. N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman
1. DATA ITEM NO. A00J	2. TITLE OF DATA ITEM Technical Report - Study/Services (See Block 16)		3. SUBTITLE Final Report	
4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508 B		5. CONTRACT REFERENCE SOW ¶ 4.5.1,4.5.2,4.5.4,4.5.5,4.5.6,5.3		6. REQUIRING OFFICE PMA-272, PMA-261
7. DD 250 REQ LT	8. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY OTIME	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION b. ADDRESSEE
8. APP CODE N/A	11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION N/A	b. COPIES Final Draft Reg Repr	
16. REMARKS Block 2: Contractor format is acceptable. Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272. Block 12: Submit 10 days prior to the end of the period of performance indicated in the delivery order. Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/				15. TOTAL

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

G. PREPARED BY (b) (6)	H. DATE 9/26/2017	I. APPROVED BY (b) (6)	J. DATE 9-26-17
----------------------------------	-----------------------------	----------------------------------	---------------------------

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO. 0004		B. EXHIBIT A		C. CATEGORY IPSC			
D. SYSTEM/ITEM DoN LAIRCM CH-53K DSU		E. CONTRACT/PR NO. N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman			
1. DATA ITEM NO. A00K	2. TITLE OF DATA ITEM Software Development Plan (SDP)/Software QA Plan (See Block 16)			3. SUBTITLE SPD/ SW QA PLAN			
4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80508 B		5. CONTRACT REFERENCE SOW ¶ 4.1.1		6. REQUIRING OFFICE PMA-272, PMA-261			
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY ONE/R	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION a. ADDRESSEE b. COPIES Final Draft Reg. Repr			
8. APP CODE N/A	11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION (See Block 16)	15. TOTAL				
16. REMARKS Block 2: Contractor format is acceptable. Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272. Block 12: Submit final 60 days prior to start of SFQT. Government has 30 days to review draft submittals and provide comments. Block 13: Revisions due 30 days after receipt of Government comments. Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/				(See Block 16)			

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

(b) (6)	H. DATE 9/26/2017	I. APPROVED BY (b) (6)	J. DATE 9-26-17
----------------	-----------------------------	----------------------------------	---------------------------

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO. 0004		B. EXHIBIT A	C. CATEGORY CMAN			
D. SYSTEM ITEM DoN LAIRCM CH-53K DSU		E. CONTRACT/PR NO N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman		
1. DATA ITEM NO A00L	2. TITLE OF DATA ITEM Configuration Audit Summary Report (See Block 16)		3. SUBTITLE FCA/PCA Documentation			
4. AUTHORITY (Data Acquisition Document No.) DI-MISC-81022C		5. CONTRACT REFERENCE SOW ¶ 4.4		6. REQUIRING OFFICE PMA-272, PMA-261		
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION b. ADDRESSEE		
8. APP CODE N/A		11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION (See Block 16)			
16. REMARKS Block 2: Contractor format is acceptable. Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272. Block 12: Submit draft audit plan and slides due 10 days prior to review. Government has 30 days to review and draft submittals and provide comments. Block 13: Revisions due 30 days after receipt of Government comments. Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/				17. PRICE GROUP		
				18. ESTIMATED TOTAL PRICE		
				15. TOTAL		

G. PREPARED BY (b) (6)	H. DATE 9/26/2017	I. APPROVED BY (b) (6)	J. DATE 9-26-17
---------------------------	----------------------	---------------------------	--------------------

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.

A. CONTRACT LINE ITEM NO
0004

B. EXHIBIT
A

C. CATEGORY
IPSC

D. SYSTEM/ITEM
DoN LAIRCM CH-53K DSU

E. CONTRACT/PR NO.
N00019-15-G-0026-0512

F. CONTRACTOR
Northrop Grumman

1. DATA ITEM NO
A00M

2. TITLE OF DATA ITEM
Interface Design Description (See Block 16)

3. SUBTITLE
IDD

4. AUTHORITY (Data Acquisition Document No.)
DI-IPSC-81436A

5. CONTRACT REFERENCE
SOW ¶ 4.1.4

6. REQUIRING OFFICE
PMA-272, PMA-261

7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION		
8. APP CODE N/A		11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION (See Block 16)	a. ADDRESSEE		
				b. COPIES		
				Draft		
				Reg.		
				Repro		

16. REMARKS

Block 2: Contractor format is acceptable.

Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272.

Block 12: Submit final 60 days prior to start of SFQT. Government has 30 days to review draft submittals and provide comments.

Block 13: Revisions due 30 days after receipt of Government comments.

Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC <https://safe.amrdec.army.mil/safe/>

15. TOTAL

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

G. PREPARED BY
(b) (6)

H. DATE
9/26/2017

I. APPROVED BY
(b) (6)

J. DATE
1-26-17

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)					Form Approved OMB No. 0704-0188		
Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.							
A. CONTRACT LINE ITEM NO. 0004			B. EXHIBIT A		C. CATEGORY MGMT		
D. SYSTEM ITEM DoN LAIRCM CH-53K DSU			E. CONTRACT/PR NO N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman		
1. DATA ITEM NO. A00N		2. TITLE OF DATA ITEM Contractor's Progress, Status, and Management Report (See Block 16)			3. SUBTITLE		
4. AUTHORITY (Data Acquisition Document No.) DI-MGMT-80227			5. CONTRACT REFERENCE SOW 3.5		6. REQUIRING OFFICE PMA-272, PMA-261		
7. DD 250 REQ LT	8. DIST STATEMENT REQUIRED D (See Block 16)	10. FREQUENCY MONTHLY	12. DATE OF FIRST SUBMISSION (See Block 16)	14. DISTRIBUTION			
8. APP CODE N/A		11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION MONTHLY	a. ADDRESSEE		b. COPIES	
						Draft	Reg
							Repro
16. REMARKS Block 2: Contractor format is acceptable. Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272. Block 12: 30 days after the first full month of performance. Block 14: Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/				(See Block 16)			
				15. TOTAL			
G. PREPARED BY (b) (6)			H. DATE 9/26/2017		I. APPROVED BY (b) (6)		J. DATE 9-26-17

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)					Form Approved OMB No. 0704-0188		
Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.							
A. CONTRACT LINE ITEM NO 0004			B. EXHIBIT A		C. CATEGORY ILSS		
D. SYSTEM/ITEM DoN LAIRCM CH-53K DSU			E. CONTRACT/PR NO N00019-15-G-0026-0512		F. CONTRACTOR Northrop Grumman		
1. DATA ITEM NO. A00P		2. TITLE OF DATA ITEM Failure Mode Effects and Criticality Analysis Report			3. SUBTITLE FMECA		
4. AUTHORITY (Data Acquisition Document No.) DI-ILSS-81495 (See Block 16)			5. CONTRACT REFERENCE SOW PARA 9.1		6. REQUIRING OFFICE PMA-272, PMA-261		
7. DD 250 REQ LT	8. DIST STATEMENT REQUIRED D (See Block 16)	9. FREQUENCY ONE/R	10. DATE OF FIRST SUBMISSION (See Block 16)	11. AS OF DATE N/A	12. DATE OF SUBSEQUENT SUBMISSION (See Block 16)	14. DISTRIBUTION	
8. APP CODE N/A						a. ADDRESSEE	b. COPIES
						Draft	Final
						Reg.	Repro
15. REMARKS					15 TOTAL		
<p>Block 4: The Data Item Description (DID) identified in Block 4 may be tailored to Contractor s format, provided all DID information is included in the Contractor s format. Military Standards and Military Specifications cited in the DID are for guidance only.</p> <p>Block 9: Distribution authorized to the Department of Defense (DoD) and DoD contractors only; Critical Technology; 16 December 2013. Other requests shall be referred to Naval Air Systems Command, PMA-272.</p> <p>Block 12 and 13: Deliver draft at PCA. Deliver final at FCA.</p> <p>Block 14: Request distribution list from COR. An email notification will be delivered to PMA-272/261DM@navy.mil containing a PDF copy of the letter identifying deliverable. The document will be delivered VIA AMRDEC https://safe.amrdec.army.mil/safe/</p>					(See Block 16)		
G. PREPARED BY (b) (6)			H. DATE 9/26/2017		I. APPROVED BY (b) (6)		J. DATE 9-26-17

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

19 September 2017

**CH-53K
DEFENSIVE ELECTRONIC
COUNTERMEASURES (DECM)
SUITE UPGRADE (DSU) PROGRAM
PHASE II**

Table of Contents

1.0 SCOPE	4
1.1 TITLE.....	4
1.2 APPLICABILITY.....	4
1.3 BACKGROUND.....	4
1.4 PURPOSE.....	4
2.0 REFERENCE DOCUMENTS	5
2.1 GOVERNMENT DOCUMENTS.....	5
2.2 NON-GOVERNMENT DOCUMENTS.....	7
3.0 GENERAL REQUIREMENTS	7
3.1 TRAVEL.....	7
3.2 NOTIFICATION OF RIGHTS.....	7
3.3 DISPOSITION OF EXCESS MATERIAL AND CONTRACTOR-ACQUIRED PROPERTY (CAP).....	8
3.4 ENTERPRISE-WIDE CONTRACTOR MANPOWER REPORTING APPLICATION (ECMRA) DATA.....	8
3.5 PROGRAM MANAGEMENT.....	8
4.0 ENGINEERING REQUIREMENTS	8
4.1 SOFTWARE.....	8
4.1.1 SOFTWARE RELEASES AND DOCUMENTATION.....	9
4.1.2 DSM UPDATES.....	9
4.1.3 DECM UPGRADE SUITE SYSTEM SOFTWARE FORMAL QUALIFICATION TEST (SFQT).....	10
4.1.4 INTERFACE CONTROL DOCUMENTATION.....	10
4.1.5 SOFTWARE DELIVERABLES.....	10
4.2 DECM UPGRADE SUITE TEST READINESS REVIEW (TRR).....	11
4.3 DECM UPGRADE SUITE DESIGN VERIFICATION TESTING (DVT).....	11
4.4 FUNCTIONAL CONFIGURATION AUDIT.....	12
4.4.1 FCA ENTRY CRITERIA.....	12
4.4.2 FCA EXIT CRITERIA.....	13
4.5 STUDIES AND ANALYSIS.....	13
4.5.1 ADVANCED LASER TECHNOLOGIES.....	13
4.5.2 DELTA RWR ANTENNA ANALYSIS.....	13
4.5.3 M-CODE.....	13
4.5.4 ONBOARD/OWN SHIP WEAPON ASSESSMENT.....	13
4.5.5 SURVIVABILITY ANALYSIS.....	13
4.5.6 FLEXURE ANALYSIS SUPPORT AND AIRCRAFT DATUM ESTABLISHMENT.....	14
4.6 (b) INTEGRATION SUPPORT.....	14
4.7 COMMAND AND CONTROL.....	14
4.8 INTEGRATED SMART DISPENSE.....	14
4.9 (b) (4).....	14
4.10 FIRMWARE UPDATE.....	14
5.0 DELTA QUALIFICATION TESTS	14
5.1 ELECTROMAGNETIC INTERFERENCE.....	15
5.2 ENVIRONMENTAL/ELECTRICAL QUALIFICATION.....	15
5.3 FIRE HAZARD.....	15
6.0 MEETINGS	15
6.1 WEEKLY TELECOM MEETINGS.....	15
6.2 TECHNICAL INTERCHANGE MEETINGS (TIMS).....	16
6.3 DDSR INTEGRATION EVENTS.....	16
6.4 DDSR INTEGRATION SETR EVENTS.....	16

7.0 TEST AND EVALUATION	17
7.1 SYSTEM INTEGRATION LAB (SIL) TEST SUPPORT	17
7.2 GROUND AND FLIGHT TEST SUPPORT	18
8.0 LOGISTICS	18
8.1 TECHNICAL PUBLICATIONS	19
8.2 TRAINING	19
9.0 RELIABILITY AND MAINTAINABILITY (R&M).....	19
9.1 FAILURE MODES, EFFECTS AND CRITICALITY ANALYSIS (FMECA)	19
9.2 FAILURE REPORTING, ANALYSIS AND CORRECTIVE ACTION SYSTEM (FRACAS)	19
10.0 SECURITY.....	20
10.1 SECURITY REQUIREMENTS	20
10.2 OPERATION SECURITY PROGRAM (OPSEC)	20
10.3 PROGRAM PROTECTION IMPLEMENTATION PLAN (PPIP)	21
10.4 CYBER SECURITY	21
10.5 PUBLIC KEY INFRASTRUCTURE	22
10.6 PUBLIC RELEASE	22
10.7 CERTIFICATION AND ACCREDITATION	22
10.8 IA INTEGRATION AND TEST	23
10.9 CERTIFICATION TESTING AND EVALUATION	23
10.10 CRITICAL PROGRAM INFORMATION (CPI).....	23

1.0 SCOPE

1.1 TITLE

CH-53K Defensive Electronic Countermeasures (DECM) Suite Upgrade (DSU).

1.2 APPLICABILITY

(b) (4), (b) (3) (A) System Processor Replacement (LSPR) integrated with (b) (4), (b) (3) (A) sensors, (b) (4), (b) (3) (A), (b) (4), and the (b) (3) (A), (b) (4) (b) (3) (A) Power PC systems hereinafter referred to as the CH-53K DECM Suite Upgrade (DSU).

1.3 BACKGROUND

The CH-53K DECM Suite currently includes the (b) (4), (b) (3) comprised of (b) (3) (A), series System processor, (b) (4), (b) (3) (A) and (b) (4), (b) (3) (A) integrated with the (b) (4), (b) (3) (A) and the (b) (4), (b) (3) (A) using a (b) (4), (b) (3) (A) Processor. The current (b) (3) (A), (b) configuration is entering its end of life due to Diminishing Manufacturing Sources / Operational (DMS/OPR) issues. For this reason, the CH-53K must move to a more sustainable product configuration.

The Phase I effort, contracted via Defense Microelectronics Activity (DMEA) Statement of Work (SOW) Contract Engineering Task (CET) 14-425, updated the (b) (3) (A), (b) (4) (b) (3) (A), (b) (4) through the development, integration, and testing of software to upgrade the CH-53K's (b) (4), (b) (3) suite with (b) (3) (A), (b) (3) (A), (b) (4) and (b) (3) (A), (b) (4) while maintaining and expanding the CH-53K Avionics Management System (AMS) and (b) (4), (b) (3) (A) interfaces to include an Ethernet connection between the (b) (3) (A), (b) and (b) (3) (A) processor. This effort included modification of the Government Furnished Material (GFM) (b) (3) (A), (b) from a (b) (3) (A), (b) sensor.

Phase II effort will include (b) (4) engineering release of software and (b) (4) formal build of software. The intent of these software releases is to address the following: Engineering release #1 was provided by the contractor at the end of the separate phase I contract. Engineering release #2 will be provided to (b) (4) for testing. (b) (4) dry runs in their SIL with the engineering release #3. All major issues identified during this testing will be resolved and fed into the formal release #1 build. (b) (4) will run formal Engineering Test Procedures (ETPs) in their SIL with formal release #1. This formal build #1 will be provided to conduct CH-53K flight testing.

1.4 PURPOSE

This statement of work defines the effort required for the continued design, test, and system integration of the (b) (3) (A), (b) (4) (b) (3) (A), (b) (4) (b) (3) (A), (b) (4) for use on the CH-53K.

This effort completes the required non-recurring engineering (NRE) resulting in a formal, fully qualified DSU software drop for CH-53K integration, test, and separately contracted flight test. The required tasking includes engineering support for the CH-53K System Integration Laboratory (SIL) and engineering support for aircraft integration and test, implementation of a logistics program to include providing logistical support and associated documentation, and further design enhancements of the DECM upgrade suite. These design enhancements include

(b) (3) (A)

optimization. In addition, this SOW includes formal Software Formal Qualification Test (SFQT) and Development Verification Test (DVT) of the software developed under (b) (4) and delivers a formal and fully qualified software product to support separately contracted CH-53K flight test activities. Effort will include analyzing and providing recommendations for DSU System Inquiry Reports (SIRs)/System Anomaly Reports (SARs) discovered during Northrop Grumman Corporation (NGC), (b) (4) and (b) (4) SIL testing. Selection of the specific DSU SIRs/SARs to be analyzed will be via government direction based on the results of the weekly joint Design Change Review Board (DCRB) meetings. The government will approve priority and path forward for each SIR during the weekly joint DCRB meetings. The effort also includes conducting several studies to include supporting the Obscuration Study/Data Collection.

2.0 APPLICABLE DOCUMENTS

2.1 GOVERNMENT DOCUMENTS

Document Number	Date	Title
None	*Latest rev as of CA	(b) (3) (A)
(b) (3) (A)	8/25/16	(b) (3) (A)
(b) (3) (A)	9/1/15	(b) (3) (A)
DoDI 8500.01	3/14/14	Cybersecurity
DoD 8510.01	3/14/2014	Risk Management Framework (RMF) for DoD Information Technology (IT)
Version 1.0	7/15/08	DoN DoD Information Assurance Certification and Accreditation Process (DIACAP) Handbook
Document Number	Date	Title
SECNAV Instruction 5239.3B	6/17/09	DON Information Assurance Policy

DOD 8570.01-M	12/19/05	Information Assurance Workforce Improvement Program
OUSD(AT&L) Memorandums	2/4/99	"Implementation of AT Techniques in Acquisition Programs"
DoD 5105.38M	10/03/03	FMS/DCS AT Policy Compliance
DoDI 5200.39	7/16/08	Critical Program Information (CPI) Protection within the Department of Defense and Change 1, 28 Dec 2010
DoDD 5200.1M	16 Mar 94	Acquisition Systems Protection Program
PMA-261/53K0001/R* (b) (3) (A)	*Latest rev as of CA 9/1/15	CH-53K Air Vehicle Specification (b) (3) (A)
ISO 17025	May 2005	General Requirements for the Competence of Testing and Calibration Laboratories
MIL-HDBK-221	3 May 1965	Fire Protection Design Handbook for U.S. Navy Aircraft Powered by Turbine Engines
MIL-STD-1553B	January 1996	Department of Defense Interface Standard for Digital Time Division Command/Response Multiplex Data Bus, Notice 1-4
MIL-STD-461F	Dec 2007	Requirements for the Control Of Electromagnetic Interference Characteristics of Subsystems and Equipment
NAVMAT P 4855-2	1983 Edition	Design Guidelines for Prevention and Control of Avionic Corrosion
NAVAIRINST 2400.1	22 Dec 2009	Electromagnetic Environmental Effects and Spectrum Supportability Policy and Procedures
DOD 5220.22-M Change 2	18 May 2016	National Industrial Security Program Operating Manual (NISPOM)
DOD 5400.07-R	September 1998	DOD Freedom of Information Act Program
DoD 8500.1	06 Feb 2003	DoD Instruction, Information Assurance (IA) Implementation
DoDI 5230.24 (incorporates Change 1)	28 Apr 2016	Distribution Statements on Technical Documents
Document Number	Date	Title
DoDI 8510.01	28 Nov 2007	DoD Information Assurance Certification and Accreditation

		Process (DIACAP)
DoDI 8500.2	6 Feb 2003	Information Assurance (IA) Implementation
FIPS 140-2	3 Dec 2002	Federal Information Processing Standard (FIPS) Publication
DOD Manual O-5205.13	26 Apr 2012	Defense Industrial Base Cyber Security and Information Assurance Program Security Classification Manual
NSDD 298	22 Jan 1998	National Operations Security Program
N/A	06 Jul 2006	Interim DoD Information Assurance Certification and Accreditation Process (DIACAP) Guidance
OPNAVINST 3432.1A	4 Aug 2011	Operations Security
SECNAVINST 5510.36A	6 Oct 2006	Department of the Navy Information Security Program Instruction

2.2 NON-GOVERNMENT DOCUMENTS

Document Number	Date	Title
(b) (4)		

3.0 GENERAL REQUIREMENTS

3.1 TRAVEL

The contractor is required to travel to accomplish this requirement.

3.2 NOTIFICATION OF RIGHTS

The contractor shall identify and receive written government approval prior to committing to the use of any privately developed items, components, processes, computer software, and/or technical data.

3.3 GOVERNMENT FURNISHED EQUIPMENT (GFE) TRACKING AND DISPOSITION OF EXCESS MATERIAL/CONTRACTOR ACQUIRED PROPERTY (CAP)

The contractor shall utilize the Inventory Status Report process for visibility and coordination of the program hardware in accordance with (IAW) **CDRL A003**. The contractor shall identify and receive written disposition instructions from the Administrative Contracting Officer (ACO) for all excess material and CAP in accordance with (IAW) **CDRL A003**. Frequency of A003 is twice, at the beginning of the contract and at the end of the contract.

A003 Status of Government Furnished Property (GFP) Report

3.4 ENTERPRISE-WIDE CONTRACTOR MANPOWER REPORTING APPLICATION (ECMRA) DATA

The contractor shall report all labor hours (including subcontractor labor hours) required for performance of services provided under this contract for the Department of the Navy (N00019) via a secure data collection site. The contractor is required to completely fill in all required data fields using the following web address: <http://www.ecmra.mil/>. Reporting inputs shall be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the help desk at <https://cmra.army.mil/help/faq.html>.

3.5 PROGRAM MANAGEMENT

The contractor shall perform administrative, technical and performance, cost and financial management, schedule management, IMS and ECMRA reporting functions during the course of this effort and shall maintain and provide a status of their effort towards achieving the SOW objectives, including all technical activities and efforts, problems/deficiencies, impacts, and recommended solutions IAW **CDRL A001**.

A001 Status Report

4.0 ENGINEERING REQUIREMENTS

The contractor shall develop and deliver CH-53K DSU software and updated executable Digital System Model (DSM) as defined in the subsequent paragraphs maintaining all system performance specifications (SPS), functionality, and hardware aircraft and interface requirements IAW documents referenced in Paragraphs 2.1 and 2.2. The contractor shall deliver CH-53K DSU software and an updated executable DSM IAW **CDRL A00A**.

A00A Computer Software End Product

4.1 SOFTWARE

The contractor shall develop, test, and deliver a fully qualified formal DSU software load ready for CH-53K integration and SAC ETP. The contractor shall perform software engineering tasks to include requirements analysis, design, coding, testing, and documenting specified changes for

the DSU software. The contractor shall provide technical data necessary to complete software configuration documents. The contractor shall manage the development and integration of the DSU software test development, test execution, and documentation for each OFP testing to ensure the proper implementation of the requirements and overall system performance. The contractor shall develop DSU software interoperable with government test equipment including the Data Acquisition Unit (DAU).

4.1.1 SOFTWARE RELEASES AND DOCUMENTATION

The contractor shall deliver an engineering release to support the following:

- Engineering Release #2 (b) (4)
- Engineering Release #3 (b) (4)
- Formal Release #1 (Production Release for (b) (4) ETPs)

The contractor shall prepare and deliver the following:

- Software Test Plan (CDRL A00G)
- Software Test Procedures with Software Verification Cases (CDRL A006)
- Software Requirements Specification (SRS) (CDRL A00D)
- System Product Specification (SPS) (CDRL A00D)
- Software Development Plan (SDP) (CDRL A00K)
- Software QA Plan (CDRL A00K)

The contractor shall make available the (b) (4) models at the contractor facility for government review in lieu of the Software Design Document (SDD) IAW with CDRL A00E.

A006 Software Test Procedures with Software Verification Cases

A00D Software Requirements Specification/Software Product Specification

A00E SDD (b) (4) Models

A00G Software Test Plan

A00K Software Development Plan/Software QA Plan

The contractor shall conclude the DECM Upgrade Suite software development task with the approval of the most current software configuration, approval of defined deliverables and the resolution of anomalies deficiencies or approval of corrective action plans of the TIM and Test Readiness Review (TRR) meetings.

4.1.2 DSM UPDATES

The contractor shall develop, test, perform validation, and deliver an updated DSM software version to include CH-53K DSU system performance against IR missile threats, hostile fire threats, threat false alarm sources, and under various environmental conditions. The contractor shall deliver the updated DSM IAW CDRL A00A and a DSM Software Version Description (SVD) IAW CDRL A007.

A00A Computer Software Product End Items

A007 Software Version Description

The contractor shall provide to the Government unrestricted rights to utilize the executable model for independent assessment of the upgrade system.

The contractor shall present the models, simulations, and results of the DSM at a planned quarterly Technical Interchange Meeting (TIM). The contractor shall document and deliver the Modeling and Simulation results IAW **CDRL A005**.

A005 Test Report

4.1.3 DECM UPGRADE SUITE SYSTEM SOFTWARE FORMAL QUALIFICATION TEST (SFQT)

The contractor shall perform an SFQT of the DSU OFPs to include the development and execution of test procedures, formal dry runs, and formal test reports. The contractor shall conduct an SFQT for each modified OFP, except the CMDS OFP being provided as GFE and DSM. The contractor shall fully integrate and test each OFP in the DSU software as a standalone Unit Under Test (UUT) and submit the following test procedures, test reports, and software version descriptions:

- Software Version Description (**CDRL A007**)
- Software Formal Qualification Test Procedure (**CDRL A006**)
- Software Formal Qualification Test Report (**CDRL A005**)

A005 Test Report

A006 Test Procedure

A007 Software Version Description

The contractor shall provide access for the Government to witness contractor testing during any phase or level, on a non-interference basis.

4.1.4 INTERFACE CONTROL DOCUMENTATION

The contractor shall develop, update and deliver all CH-53K DSU Interface Control Documents (ICD) and Interface Design Documents (IDD) that are affected by the requirements from this effort IAW **CDRL A00C** and **CDRL A00M**. These ICDs shall describe all CH-53K DSU software digital interfaces including, but not limited to, BIT definition, order of transmission, transmission rates, frame rates, destination, and data description. Additionally, the ICDs shall ensure Ethernet capability within the DECM suite.

A00C Interface Control Document

A00M Interface Design Description

4.1.5 SOFTWARE DELIVERABLES

The contractor shall deliver the DSU software with unlimited data rights IAW the requirements set forth in this SOW and IAW **CDRL A00A**. The contractor shall deliver all software executable code and the software development source code for each OFP and for the DSM. This includes:

- LSPR Reprogramming (RP) Image and associated documentation

- User Data Modules (UDM), Maintenance UDMs, and Test UDMs for all (b) (3) (A), (b) configurations
- (b) (4), (b) (3) (A) and operator tools for each configuration
- Aircraft Characterization Module (ACM) Generator Tool
- Smart Card Utility Tool

A00A Computer Software Product End Items

4.2 DECM UPGRADE SUITE TEST READINESS REVIEW (TRR)

The contractor shall conduct a TRR via telecom within 5 days prior to any SFQT and DVT contractor software testing and formal hardware test on the upgraded system. The contractor shall discuss and present the following during the TRR, at a minimum:

- A review of all applicable test documentation (e.g., plans, procedures, test tool certification results, test bed configuration diagrams)
- The configuration control and validation of test tools and test items (both hardware and software)
- Preliminary Qualification Testing (PQT)/Dry Run Testing Status and Results
- Other items deemed necessary to the successful conduct of testing, including any applicable test data available prior to the start of testing.

The contractor shall conclude the TRR with resolution of the assigned Action Items (AIs) or approval of CAPs. The contractor shall conduct the contractor test only after successful completion of the TRR. The results of the TRR shall be reported in conference minutes IAW **CDRL A002**.

A002 Conference Minutes

4.3 DECM UPGRADE SUITE DESIGN VERIFICATION TESTING (DVT)

The contractor shall conduct DVT at the DSU system level. The contractor shall perform DVT to include the generation of test procedures, formal dry runs, TRR, test execution, and formal test reports. The DVT shall function as a DECM upgrade suite Hardware-In-The-Loop (HITL) evaluation to ensure interoperability. The contractor shall perform a DVT at the contractor's facility.

The contractor shall plan, conduct and document a DVT on one (1) DSU System verifying compliance with requirements listed in System Requirements Documents for integration of the (b) (3) (A), (b) (4). The contractor shall ensure all interfaces to and from the DSU are tested and verified as described in the approved ICDs.

The contractor shall prepare and submit to the Government a DVT test plan and DVT test procedure for approval IAW **CDRL A006**. The DVT shall be conducted IAW the Government approved procedure.

A006 Test Procedure

The contractor shall investigate all discrepancies and Trouble Reports generated during DVT for relevancy and Government adjudication. Any discrepancy determined to be relevant by the Government shall require corrective action by the contractor and a complete re-test of applicable and related functions. A discrepancy and Trouble Report shall be defined as a failure to meet any applicable requirement specified in the System Requirements Document for (b) (4), (b) (3) (b) (3) (A), (b) (4) and this SOW.

Results of the DVT shall be documented in a DVT report and software test report IAW CDRL A005. The contractor shall include as part of the test report the occurrence and disposition of all test anomalies, failures, deficiencies, and corrective actions taken during and after conduct of acceptance test. Test results shall be evaluated for effect on test and disposition (i.e. test re-run, resume test, or no test). The contractor shall prepare and submit the software version descriptions IAW CDRL A007. The contractor shall prepare and submit a final ICD that documents the physical, functional, and performance characteristics of the DSU sub-systems and DSU system IAW CDRL A00C. The contractor shall prepare and submit the System/Subsystem Specification IAW CDRL A00F.

A005 Test Report
A007 Software Version Description
A00C ICD
A00F System/Subsystem Specification (SSS)

The contractor shall provide access for the Government to witness contractor testing during any phase or level, on a non-interference basis.

4.4 FUNCTIONAL CONFIGURATION AUDIT (FCA)

The contractor shall conduct a DSU Functional Configuration Audit (FCA). During this configuration audit, the contractor shall provide evidence that all tests have been successfully completed and that all test results have been documented in the applicable test reports. The purpose of the audit is to verify that the DSU was built per applicable drawings, and that the DSU meets its requirements. At the audit, the contractor shall provide for Government review of the test plans, test procedures, test results, drawings, requirements document, traceability documents, and manufacturing papers used to verify performance of the DSU. The audits shall be conducted IAW the contractor's standard procedures. The contractor shall prepare and submit the FCA minutes IAW CDRL A002 and the FCA report IAW CDRL A00L.

A002 Conference Minutes
A00L Configuration Audit Summary Report

4.4.1 FCA ENTRY CRITERIA

The contractor shall conduct the FCA at the contractor's facility upon completion of the following:

- System, subsystem and Configuration Item (CI) design specifications
- Verification Plans
- Verification Test Procedures
- Verification Test Data

- Manufacturing records, to include processes used and variances, deviations and Material Review Board (MRB) actions

4.4.2 FCA EXIT CRITERIA

The FCA will be considered complete when:

- Required tests and analysis are complete and indicate the system will perform properly in the operational environment as integrated and configured on the CH-53K per the system specification.
- Risks are known and manageable
- System meets the established acceptance criteria
- Required safe shipping, handling, checkout, and operational plans and procedures are complete and ready for use
- Technical data package is complete and reflects the delivered system
- Resolution of action items is complete; Government approval of corrective action plans

4.5 STUDIES AND ANALYSIS

4.5.1 (b) (3) (A)

The contractor shall conduct a study to document the cost, technical and performance impact to implement an (b) (3) (A) on the CH-53K platform. The contractor shall deliver the results of the study in a technical report IAW CDRL A00J.

A00J Technical Report – Study/Services

4.5.2 (b) (3) (A), (b) (4) ANALYSIS

The contractor shall conduct a (b) (3) (A), (b) co-site/own ship analysis for the upgraded dual (b) (3) (A) and (b) (3) (A). The contractor shall provide the analysis, including the (b) (3) (A) information, IAW CDRL A00J.

A00J Technical Report – Study/Services

4.5.3 Reserved

4.5.4 ONBOARD/OWN SHIP WEAPON ASSESSMENT

The contractor shall evaluate the onboard weapon (b) (3) (A), (b) impacts to sensor performance, develop possible solutions and recommend courses of action to maintain (b) (3) (A) performance. The contractor shall deliver the results IAW CDRL A00J.

A00J Technical Report – Study/Services

4.5.5 SURVIVABILITY ANALYSIS

The contractor shall conduct a survivability analysis to determine the optimal (b) (3) (A) placement on the aircraft and deliver the results and an obscuration map IAW CDRL A00J. Additionally, the contractor shall participate in a joint impact study with (b) (4) to determine possible solutions to address (b) (3) (A) obscuration. . The contractor shall plan for and travel to (b) (4)

(b) (4) facility for four days to support this effort. The contractor shall evaluate the onboard weapon (b) (3) (A), (b) (4) impacts to sensor performance, and deliver the results IAW CDRL A00J.

A00J Technical Report – Study/Services

4.5.6 FLEXURE ANALYSIS SUPPORT AND AIRCRAFT DATUM ESTABLISHMENT

The contractor shall provide engineering support to (b) (4) for flexure analysis. The contractor shall analyze the flexure data and deliver a report of impacts to the system and recommended corrective actions IAW CDRL A00J. Additionally, the contractor shall provide engineering support to (b) (4) to establish the CH-53K aircraft datum in support of (b) (4) installation efforts.

A00J Technical Report – Study/Services

4.6 AMS INTEGRATION SUPPORT

The contractor shall ensure (b) (3) (A), (b) (4) software is reprogrammable via Ethernet through the AMS.

4.7 COMMAND AND CONTROL

The contractor shall ensure Ethernet capability between the (b) (3) (A), (b) (4) for future growth for (b) (3) (A) Command and Control. The contractor shall deliver an updated ICD IAW CDRL A00C.

A00C Interface Control Document

4.8 INTEGRATED SMART DISPENSE

The contractor shall implement (b) (3) (A), (b) (4) (b) (4), (b) (3) (A) (b) (3) (A), (b) (4) to Aircraft and Associated Equipment (b) (4). The contractor shall ensure Integrated Smart Dispense capabilities are compliant with MIL-STD-1553 and maintain the six-line discrete interface as backup in this configuration. The contractor shall ensure the testing of the six-line discrete interface is conducted IAW Smart Dispense IRS 91504785C. The contractor shall ensure discrete interface test progress and status messages are available on the EW, AV and Ethernet bus interfaces.

4.9 GAU-21 VERSUS SENSOR PERFORMANCE

The contractor shall implement the best possible solution to ensure DoN (b) (3) (A), (b) (4) system performance is not degraded.

4.10 FIRMWARE UPDATE

The contractor shall ensure DSU hardware and software meet program protection requirements.

5.0 SAFETY OF FLIGHT (SOF) DATA PACKAGE

The contractor shall provide supporting qualification documentation for the following: DECM upgrade suite systems integration and test, delta electrical, environmental, and electromagnetic interference qualification, design verification test, and acceptance test to support hardware fleet flight clearance. The contractor shall also provide technical assistance to address platform integrator questions in support of flight clearances.

A00J Technical Report Study/Services (SOF Data Package)

5.1 ELECTROMAGNETIC INTERFERENCE SOF DATA PACKAGE

The contractor shall verify DSU components (b) (4), (b) (3) (A) comply with the CH-53K Electromagnetic Interface (EMI) control requirements of MIL-STD-461F. The contractor shall provide proof of compliance for completed tests (i.e. procedures and reports). For DSU components not fully tested with the CH-53K MIL-STD-461F requirements, the contractor shall conduct the delta EMI tests and provide the EMI test procedures IAW CDRL A006 and the EMI test report IAW CDRL A005. Contractor shall provide any relevant historical data for MIL-STD-461F EMI testing and MIL-STD-704F power testing. Contractor shall provide (b) (3) (A), Data Package IAW CDRL A00J.

The contractor shall use an ISO 17025 based accredited laboratory (I.E. NVLAP, A2LA, UKAS or NAVAIR approved), with a scope-of-accreditation covering all test requirements to conduct required MIL-STD-461F and MIL-STD-704F testing.

A005 Test Report

A006 Test Procedure

A00J Technical Report Study/Services

5.2 ENVIRONMENTAL/ELECTRICAL SOF DATA PACKAGE

The contractor shall verify CH-53K DSU components comply with MIL-STD-810F and MIL-STD-704F parts 1 through 8. The contractor shall provide proof of compliance for completed tests (i.e. procedures and reports). The Aircraft Utilization Equipment shall not degrade the Electrical Power System such that it does not meet the specifications of MIL-STD-704F.

5.3 FIRE HAZARD

The contractor shall conduct a System Safety Hazard Report (SSHR) to include Fire Hazard Analysis to identify any potential fire hazards from the DSU (b) (4), (b) (3) (A) upgrade using MIL-HDBK 221 as guidance. The contractor shall document the results of the fire hazard analysis IAW CDRL A00J. Special attention should be given to any equipment that is not (b) (3) (A), (b) (4)
(b) (3) (A), (b) (4)

A00J Technical Report - Study/Services

6.0 MEETINGS

6.1 WEEKLY TELECOM MEETINGS

The contractor shall conduct a weekly one hour phone conference with SAC, POC, RC, and the Government to discuss technical issues, interface issues, progress/status, SETR preparation status and risks. The contractor shall conduct a weekly one hour DCRB phone conference with POC, SAC, RC, and the Government to discuss SIRs generated at NGC, RC, and SAC SILs, prioritize, and determine path forward. The contractor shall allow access to their generated SIRs to (b) (4) via SharePoint.

6.2 TECHNICAL INTERCHANGE MEETINGS (TIMS)

The contractor shall conduct eight TIMs to include a post award conference TIM, (b) (3) (A), (b) (4) Design Review TIM, and an (b) (3) (A), (b) (4) TIM. TIMs shall be scheduled when there is need for technical interchange between the Government and the contractor and can be initiated by the contractor or the Government with three weeks advanced notice. Four of the TIMs shall be held at a Government facility and four TIMs shall be held at the contractor facility. All TIMs and Engineering Design Reviews shall be documented by the contractor IAW CDRL A002, Conference Minutes.

A002 Conference Minutes

6.3 DDSR INTEGRATION EVENTS

The contractor shall support the CH-53K DDSR Integration and Test Events IAW Table 1.

Table 1. CH-53K DDSR Integration Events

Event	Planned Location	Review Days	Travel
(b) (4)			

Note 1: Travel events require 2 days travel in addition to the review days listed here.

Note 2: Integration Events #1 and #2 took place during the previous contract period.

6.4 DDSR INTEGRATION SETR EVENTS

The contractor shall support the (b) (4) DDSR SETR events IAW Table 2.

Table 2. CH-53K DDSR SETR Events

Event	Planned Location	Review Days	Travel
(b) (4)			

(b) (4)			
Event	Planned Location	Review Days	Travel
(b) (4)			
(b) (4)			
(b) (4)			

Note: Travel events require 2 days travel in addition to the review days listed here.

7.0 TEST AND EVALUATION

7.1 SYSTEM INTEGRATION LAB (SIL) TEST SUPPORT

The contractor shall provide technical expertise during the systems integration laboratory (SIL) assessments of the DSU system at the Support Activity (SSA), (b) (4) (b) (4) SILs. The contractor shall support up to (b) (4) HW/ SW integration test events (b) (4) (b) (4) SIL. Support includes preparation, set-up, and other pre-test activities. The contractor shall provide (b) (4) SIL support upon request from the Government.

The contractor shall:

- a. Provide technical expertise during assessment planning activities
- b. Perform the installation and set-up of the DECM suite system for assessment
- c. Provide technical expertise during the execution of the assessment during working hours (assessment will be run by (b) (4) personnel). The contractors shall have access to data required to support the assessment and monitor system operation
- d. Provide all consumables, spares, and other operational supplies necessary to support the operation of the DECM suite from the available GFE on contract
- e. Provide (b) (4), (b) (3) (A) stimulators to be used to perform lab integration testing
- f. Provide (b) (4) test ACM images for the (b) (4) SIL
- g. Provide the Maintenance User Data Module (MUDM), Reprogramming (RP), and User Data Module (UDM) images/files required to support SIL testing
- h. Provide a pre-loaded Smart Connector Assembly (SCA) with ACM file
- i. Provide the Smart Card Loader (SCL) software ready for installation on the Program Loader System (PLS)
- j. Provide the adapter required between the SCA and the PLS with a USB plug-in compatible with the PLS
- k. Conduct familiarization on the equipment operating procedures with up to three (3) qualified technicians provided by SSA (b) (4) to operate and maintain the DECM suite during the assessment including performing necessary decontamination actions to return the system to baseline performance before each trial
- l. Provide technical expertise to (b) (4) during development and review of engineering test procedures (ETPs)
- m. Provide support for reviewing Integrated Electronic Technical Manuals (IETMs)

Aircraft integrator personnel shall have access to all DECM suite data through the central data center during the assessments. The contractor shall present the results of this assessment in the final report IAW CDRL A005.

The contractor shall ensure that all requirements have been validated and all System Inquiry Reports (SIRs), System Anomaly Reports (SARs), Trouble Reports (TRs) generated during Northrop Grumman Corporation (NGC), (b) (4) SIL regression testing have been closed.

7.2 RISK REDUCTION TEST AND EVALUATION

The contractor shall provide technical expertise and support to conduct a Risk Reduction (b) (4) (b) (4)

The contractor shall provide technical expertise and support to conduct a Risk Reduction Flight Test on a flying test bed as designated by the government.

8.0 LOGISTICS

The Contractor shall provide updates to DoN (b) (4), (b) (3) (A) technical source data, training, and all other logistics products required to retrofit and sustain the DECM Suite Upgrade. The Contractor shall support design meetings, TIMS, and other technical meeting as requested by the government. The Contractor shall provide technical expertise and support to Government personnel making changes and updates to Support Equipment Recommendation Data (SERD), Maintenance Plans, and other logistics documents.

8.1 TECHNICAL PUBLICATIONS

The contractor shall prepare and deliver new or updated technical manual source data reflecting items added or modified as defined by the Government DSU requirements. The contractor shall update source data pertaining to all aspects of organization level operation and maintenance. The contractor shall include all required procedures and reference material to operate, maintain, reprogram and support the (b) (4), (b) (3) (A) systems. The contractor shall provide source data with related information to support flight and organizational maintenance that includes operator and unit level maintenance procedures with an installation and troubleshooting guide. The contractor shall provide source data that includes procedures and reference material to enable operation, maintenance, and support of the (b) (4), (b) (3) System in both stand-alone and remote operations. The contractor shall submit the source data in a format that supports S1000D Version 3.0 and 4.1 developments for the CH-53K Interactive Electronic Technical Manual (IETM) integration. Graphics provided as part of the source data shall be delivered in WEB CGM 2.0. Provided data shall be organized and formatted consistently with the existing technical manual content associated with PMA-272. The contractor shall provide the source data IAW CDRL A00B.

A00B Technical Manual Research and Analysis Source Data

8.2 TRAINING

The Contractor shall provide updated training source data for the DSU IAW **CDRL A00B**. The Contractor shall provide training to address operating and maintenance characteristics of the CH-53K DSU. The Contractor shall support two training events:

- a. One (1) training event for CH-53K Government and (b) (4) personnel at Northrop Grumman facilities at Rolling Meadows, IL
- b. One (1) onsite training event not to exceed 5 days at the (b) (4). Changes to location or training shall be agreed to by the Government and Contractor.

A00B Technical Manual Research and Analysis Source Data

9.0 RELIABILITY AND MAINTAINABILITY (R&M)

9.1 FAILURE MODES, EFFECTS, AND CRITICALITY ANALYSIS (FMECA)

The Contractor shall update DoN (b) (3) (A), (b) (4) Failure Modes, Effects and Criticality Analysis data to incorporate changes to CH-53K DSU IAW **CDRL A00Q**.

A00Q Failure Mode Effects and Criticality Analysis Report

9.2 FAILURE REPORTING, ANALYSIS AND CORRECTIVE ACTION SYSTEM (FRACAS)

The Contractor shall support the existing Northrop Grumman Field Failure Reporting, Analysis, and Corrective Action System (Field FRACAS) during the FRB process under the PMA-272 Repair of Repairables contract for the reporting of data related to the CH-53K DSU.

10.0 SECURITY

10.1 SECURITY REQUIREMENTS

The Contractor shall implement and maintain security procedures and controls to prevent unauthorized disclosure and/or distribution of controlled unclassified information (CUI) and classified information, and to control distribution of CUI and classified information IAW the DoDM 5200.01 Volume 1 and DoDM 5400.7-R (Freedom of Information Act Regulation, Chapter 3), and the DOD 5220-22-M National Industrial Security Program Operating Manual (NISPOM) as well as all other applicable terms and conditions of any existing Basic Ordering Agreement (BOA).

The Contractor shall appropriately identify all controlled unclassified technical information and mark it as For Official Use Only IAW DoDM 5200.01 Vols 2 and 4 and DoDD 5400.07. All Contractor facilities shall provide an appropriate means of storage for controlled unclassified documents, equipment, and materials IAW DODM 5200.01 Volumes 2 and 4 and DODM 5200.01 Volume 3 for safeguarding, storage, destruction, transmission, and transportation of classified documents, equipment and materials.

The contractor shall not store CUI on mobile computing devices such as laptops and personal digital assistants (PDAs), or removable storage media that do not utilize Federal Information Processing Standard 140-2 (FIPS 140-2) compliant encryption for protecting data at rest.

IAW DoDI 5230.24, the following distribution statement shall be placed on all data and is the only distribution statement authorized for this effort:

“Distribution Statement D: Distribution authorized to the Department of Defense and U.S. DoD Contractors only (Insert Reason...) INSERT DATE. Other requests shall be referred to Naval Air Systems Command, PMA261, 47123 Buse Rd, Building 2272, Patuxent River, MD 20670-1547.”

10.2 OPERATION SECURITY PROGRAM (OPSEC)

All Contractor facilities shall provide an appropriate means of storage for controlled unclassified documents, equipment, and materials IAW Operations Security (OPSEC) requirements. The contractor is required to provide OPSEC protection for all classified information (as defined in FAR 4.401) and sensitive information (as defined in Title 15, United States Code, Section 278g-3(d)(4)). Security policy, procedures, and requirements for classified information are provided in DoD Manual 5220-22-M, National Industrial Security program Operating Manual (NISPOM). The concept of OPSEC is provided in National Security Decision Directive (NSDD) 298 of 22 January 1988, and OPNAVINST 3432.1. The contractor will apply the framework for telecommunications security in Defense Federal Acquisition Regulation Supplement (DFARS) Clause 252.239-7016, as appropriate. The contractor will apply and use Distribution Statements following the provisions outlined in SECNAVINST 5510.36. In order to meet this requirement, the contractor shall protect classified and sensitive information to be held, provided, used, handled, discussed, processed, stored, transmitted, or delivered at a contractor's or subcontractor's facilities during performance of this contract. The Contractor shall supplement their current security practices by requiring all Contractor personnel to complete annual OPSEC training.

Note: SECURITY CLASSIFICATION: The highest level of security for this effort is SECRET DD254, Section 10.k. "Other" shall specify "Use of SIPRNet authorized." Please refer to Attachment J2, Form DD254.

10.3 PROGRAM PROTECTION IMPLEMENTATION PLAN (PIIP)

If there is an existing DoD/USN compliant Program Protection Implementation Plan (PIIP), it shall be utilized. If there is no compliant PIIP, one shall be submitted IAW **CDRL A004**. The contractor will submit (b) (4) applicable collectively to this agreement and to each delivery order placed hereunder, within 90 days of contract award. The contractor will submit the draft document to the government PMA261 Program Security Manager (PSM) for approval.

A004 Program Protection Implementation Plan

10.4 CYBER SECURITY

The contractor shall ensure appropriate protective measures are in place to safeguard CUI processed, stored, or transmitted on the contractor's information systems. The Contractor shall report within 24 hours of discovery of any cyber incident that affects CUI/Confidential or Secret processed, stored, or transmitted through the contractor's information systems. The contractor shall report cyber incidents to the DoD at <http://dibnet.dod.mil>. To minimize the potential for revealing classified information the contractor shall refer to DoD Manual O-5205.13 Defense Industrial Base (DIB) Cyber Security and Information Assurance (CS/IA) Program Security Classification Manual (SCM) specifically Table 5 of Enclosure (3) for classification information

related to cyber incident reporting. The contractor shall preserve and protect data and information from all known affected information systems and all relevant monitoring or packet capture data for at least 90 days from the submission of the cyber incident report to allow DoD to request the media or decline interest. At DoD's request, contractors must provide DoD with access to additional information or equipment that is necessary to conduct a forensic analysis related to the reported cyber incident.

The Federal Information Security Management Act (FISMA) and Department of Defense Directive (DoDD) 8500.1 and DOD 8510.01, Cybersecurity, requires that all weapon systems meet Cybersecurity requirements. The contractor shall ensure continued adherence to the Department of the Navy's (DON) Cybersecurity Program prescribed methodologies for the protection of information to support the DON missions. The contractor shall ensure that platform and ground systems, software and interfaces meet Government security certification standards and requirements appropriate to the particular classification level of operation as specified by the US Navy, DoD, or other cognizant Government authority IAW SECNAV Instruction 5239.3B

10.5 PUBLIC KEY INFRASTRUCTURE (PKI)

Public Key Infrastructure (PKI) is the DoD framework for issuing, maintaining, and revoking public key certificates. Public key certificates provide digital signature and encryption capabilities which contribute to the identification and authentication, integrity, and confidentiality of Controlled Unclassified Information (CUI). CUI is defined as U.S. Government data that is NOT CLASSIFIED and that has NOT BEEN PUBLICALLY RELEASED. CUI includes but is not limited to data that is labeled or considered: For Official Use Only (FOUO), Privacy data, Contract Information, Unclassified Technical Data, Accountability information, DoD Sensitive But Unclassified (SBU).

The contractor shall obtain and utilize digital certificates issued by the DoD PKI or by the DoD External Certification Authority (ECA) program for authentication, digital signature, or encryption. PKI certificates shall be obtained and utilized by the contractor, its subcontractors, and suppliers when transmitting CUI via electronic means. The contractor shall utilize digital signature and encryption via DoD PKI or ECA digital certificates on all electronic mail (e-mail) messages containing CUI or e-mail messages that discuss any matter that may serve as an OPSEC indicator. The contractor shall use a separate DoD PKI or ECA digital certificate for each email address if multiple email addresses are used by any contractor personnel under this contract. Unapproved accounts, such as GMAIL, AOL, HOTMAIL or YAHOO, shall not be used for official business under this contract.

10.6 PUBLIC RELEASE

The contractor shall ensure NAVAIR program related information and graphics intended for release to the public and/or posting on internet and World Wide Web (www) site is submitted through the NAVAIR Security Policy Review (SPR) process before release. The contractor shall include note pages in all briefings and slide presentations submitted to the NAVAIR organization that owns or controls the information for review and final release authorization.

10.7 CERTIFICATION AND ACCREDITATION SUPPORT

Certification and accreditation for the CH-53K platform will be completed and coordinated by the PMA-261 Program Office. The DDSR family of systems will be included within the aircraft authorization boundary. The contractor shall support the overall platform certification and accreditation effort through execution of SOW section 10.7.

The contractor shall ensure that personnel who perform any of the Information Assurance (IA) functions described in Chapters 3 or 4, of the DoD 8570.01-M. IA Workforce Improvement Manual possess the information assurance certification to perform the IA functions IAW DoD 8570.01-M.

10.7.1 IA Test Plan

The Information Assurance (IA) Test Plan shall define all required (b) (4)

(b) (4)

(b) (4) The IA Test Plan shall be reviewed at the TIM/Delta EDR. (A005 Test Plan)

10.7.2 Vulnerability Scans. In accordance with the approved IA Test Plan, the System shall be scanned using the approved and Government provided vulnerability scanning tools as identified by the DAA, AO, or ISSM. The vulnerability scanner shall be updated with the latest signatures and scanning engines prior to the execution of each vulnerability scan. Vulnerability Scan to be conducted on code base at (b) (3) (A), (b) (4) Review, and remediated prior to (b) (3) (A), (b) (4) (b) (4)

10.7.3 Compliance Scans. In accordance with the approved IA Test Plan, the System shall be assessed using the appropriate Security Technical Implementation Guides (STIGs), Security Readiness Guides (SRGs), Secure Content Automation Protocol (SCAP) Benchmarks, and other approved hardening tools (e.g. Vendor Security Configuration Guides). Vulnerability Scan to be conducted on code base at (b) (3) (A), (b) (4) Review, and remediated prior to SFQT (Formal I Release).

10.7.4 Security Control Assessment and Implementation. The contractor shall implement and assess the required security controls using the NIST SP 800-53 Security Control Relationship Matrix (Appendix X). Applicable NIST SP 800-53 Security Controls assessed as non-compliant shall be implemented. A technical mitigation will be provided for Security Controls that cannot be implemented. (b) (3) (A), (b) (4)

10.7.5 Reference Documents (Related to DIACAP/RMF Security Control Cross-walk and Deliverables)

DODI 8510.01 (2014-RMF)
NIST SP 800-53 r4
NIST SP 800-53A
CNSSI 1253

FAO acceptable Test Plan Template for compliance and vulnerability assessment can be provided (ISSM Format). Security Control Test Plan Template can be contractor format derived

from NIST 800-53A assessment procedures. (b) (4), (b) (3) (A)
(b) (4), (b) (3) (A)

Reports for applicable STIGs shall be delivered in native SCAP Compliance Checker (SCC) application file export format (e.g. CKL files). Reports generated by Assured Compliance Assessment Solution (ACAS) shall be delivered in native application format (e.g. .nessus files). For Security Requirements Guides (SRG) without an automated reporting output, see appendix for specific format example. Assessment report for NIST SP 800-53 Security controls shall be delivered in contractor format derived from NIST SP 800-53A.

Cybersecurity / IA Reports can be provided in contractor format. (A00R Cybersecurity Report CDRL; 30 days after testing, 30 day customer approval of report).

10.8 RESERVED

10.9 RESERVED

10.10 CRITICAL PROGRAM INFORMATION (CPI)

The contractor shall ensure continued adherence to the Department of the Navy's (DON) DoD 5105.38M, 10/03/03 FMS/DCS AT Policy Compliance, DoDI 5200.39 "Critical Program Information (CPI) protection within the Department of Defense," of 16 July 08, Incorporating Change 1, 28 Dec 10, DoDD 5200.1M "Acquisition System Protection Program," of 16 Mar 94, DoDD 5200 .02, 17 Jan15, and ASN RDA Memo, " Required Use of Standardized Process for the Identification of Critical Program Information (CPI) in DoN Acquisition Programs, " of 20 Feb 08 Program prescribed methodologies for the protection of information to support the DON missions". The contractor shall ensure that platform and ground systems, software and interfaces meet Government security certification standards and requirements appropriate to the particular classification level of operation as specified by the US Navy, DoD, or other cognizant Government authority IAW SECNAV Instruction 5239.3B DON CIO, 17 June 09.

The contractor shall ensure the compliance of DoDI 5000.02, 08 Dec 2008, 5200.39 16 July 2008, OUSD(AT&L) Memorandums, 4 Feb 1999, Implementation of AT Techniques in Acquisition Programs".

The contractor shall ensure the capability to purge all relevant DSU Critical Program Information (CPI) data upon user command IAW DoD 5220.22-M which provides a receipt to the user notifying the purge was complete and successful. The contractor shall purge all relevant DECM suite CPI data even if power is interrupted within the system.

ACRONYMS

2CIR	2 Color Infrared
ACA	Associate Contractor Agreement
ACO	Administrative Contracting Officer
ADR	Architecture Design Review
ADTS	Aircraft Data Transfer System
AI	Action Item
AMS	Avionics Management System
AMWS	Advanced Missile Warning System
AMWSP	Advanced Missile Warning System Processor
AO	Authorizing Official
ASE	Aircraft Survivability Equipment
AT	Anti-Tamper
ATO	Authority To Operate
ATW	Advanced Threat Warning
AV	Avionics
AVS	Air Vehicle Specification
C&A	Certification and Accreditation
CA	Contract Award
CAP	Contractor Acquired Property
CCA	Circuit Card Assembly
CDR	Critical Design Review
CDRL	Contract Data Requirements List
CET	Contract Engineering Task
CFSR	Contract Funds Status Report
CI	Configuration Item
CIUR	Control Indicator Unit Replacement
CMDS	Countermeasure Dispensing System
CPSMR	Contractor's Progress, Status, and Management Report
CPI	Critical Program Information
CSCI	Computer Software Configuration Item
DAA	Designated Accrediting Authority
DAU	Defense Acquisition Unit
DCRB	Design Change Review Board
DDR	Data Design Review
DDSR	DTU/DECM System Replacement
DECM	Defense Electronic Countermeasures
DIACAP	DOD Information Assurance Certification & Accreditation Process
DIRCM	Direct Infrared Countermeasures
DMEA	Defense Microelectronics Activity
DMS/OPR	Diminishing Manufacturing Sources / Operational

DOD	Department of Defense
DODD	Department of Defense Directive
DODI	Department of Defense Instruction
DON	Department of the Navy
DSM	Digital Simulation Model
DSU	DECM Suite Upgrade
DTU	Data Transfer Unit
DVT	Design Verification Test
E3	Electromagnetic Environmental Effects
ECMRA	Enterprise Wide Contractor Manpower Reporting Application
EGI	Embedded GPS/INS
EMI	Electromagnetic Interference
ER	Engagement Reporting
ETP	Engineering Test Procedure
EW	Electronic Warfare
EWSC	Electronic Warfare Suite Controller
FCA	Functional Configuration Audit
FIPS	Federal Information Processing Standard
FIR	False Indication Report
FISMA	Federal Information Security Management Act
FPGA	Field Programmable Gate Array
FTS	Fine Track Sensor
FY	Fiscal Year
GFE	Government Furnished Equipment
GFI	Government Furnished Information
GFM	Government Furnished Material
GLTA	Guardian Laser Transmitter Assembly
HITL	Hardware in the Loop
HLR	Heavy Lift Replacement (CH-53K)
IA	Information Assurance
IATS	Interface Control Document & Installation Acceptance Test Specification
ICD	Interface Control Document
IDD	Interface Description Document
IETM	Interactive Electronic Technical Manual
iSC	Improved System Controller
iMS	Improved Maintenance Support
IMS	Integrated Master Schedule
IR	Infrared
IRS	Interface Requirements Specification
ISSM	IS Security Manager
IT	Information Technology
IVHMS	Integrated Vehicle Health Monitoring System

LAIRCM	Large Aircraft Infrared Countermeasures
LBA	Low Band Array
LPM	Logistics Program Management
LRU	Line Replacement Unit
LSPR	LAIRCM System Processor Replacement
LWS	Laser Warning System
MRB	Material Review Board
MUDM	Maintenance User Data Module
MW	Missile Warning
MWS	Missile Warning Sensor
NAVAIRINST	NAVAIR Instruction
NDA	Non-Disclosure Agreement
NDI	Non-Development Item
NGC	Northrop Grumman Corporation
NISPOM	National Industrial Security Program Operating Manual
NRE	Non Recurring Engineering
OATP	On Aircraft Test Procedure
OPF	Operational Flight Program
OMVT	Obscuration Map Verification Test
OSD	Office of Secretary of Defense
PCO	Procurement Contracting Officer
PDR	Preliminary Design Review
PEMA	Portable Maintenance Electronic Manual
PHS&T	Packaging Handling Storage & Transportation
PIT	Platform Information Technology
PMR	Program Management Review
PMS	Planned Maintenance System
POA&M	Plan of Action & Milestones
PLS	Program Loader System
(b) (4)	
PPP	Program Protection Plan
PQT	Preliminary Qualification Test
PRA	Platform Information Technology Risk Approval
QA	Quality Assurance
QCL	Quantum Cascade Laser
R&M	Reliability and Maintainability
(b) (4)	
RDT&E	Research, Development, Test, and Evaluation
RFD	Request for Deviation
RMF	Risk Management Framework
RP	Reprogramming

RSDS	Radar Signal Detecting Set
RT	Remote Terminal
RWR	Radar Warning Receiver
(b) (4)	
SAR	System Anomaly Report
SBEP	Super Back End Processor
SCA	Smart Connector Assembly
SCAP	Secure Content Automation Protocol
SCL	Smart Connector Loader
SDD	Software Design Document
SDD	System Design & Development
SDP	Software Development Plan
SDTA	System Design Test Article
SECNAV	Secretary of the Navy
SERD	Support Equipment Recommendation Data
SETR	Systems Engineering Technical Review
SFQT	Software Formal Qualification Test
SFR	System Functional Review
SIL	System Integration Laboratory
SIR	System Inquiry Report
SOW	Statement of Work
SPS	Software Product Specification
SRA	Shop Repairable Assembly
SRG	Security Readiness Guide
SRR	System Requirements Review
SRS	System Requirements Specification
SSA	Software Support Activity
SSR	System Software Review
SSS	System/Subsystem Specification
STIG	Security Technical Integration Guide
TCA	Test Connector Assembly
TIM	Technical Interchange Meeting
TPOC	Technical Point of Contact
TPWG	Test Plan Working Group
TRR	Test Readiness Review
TSSD	Training Systems Support Document
UBEP	Uber Back End Processor
UDM	User Data Module
UUT	Unit Under Test
VCD	Verification of Correction of Deficiencies
WRA	Weapons Replaceable Assembly

CONTRACT DATA REQUIREMENTS LIST (CDRL)

The following table summarizes the existing, new or updated CDRL required to support the changes described in this SOW. The delivery column shows delivery frequency or milestones as they relate to the DDSR milestones, not the SDD or SDTA milestones, unless otherwise noted.

DPT = Days prior to
 DA = Days after
 ASGEN = As generated
 ASREQ = As required
 QTC = Qualification Test Completion
 EOC = End of Contract
 MTHLY = Monthly
 ONE/R = One Time/Changes as Required
 QRTLY = Quarterly

CDRL Number	Title	Deliveries
A001	Status Report	MTHLY
A002	Conference Minutes	ASREQ/10 DA meeting
A003	Status of Government Furnished Equipment (GFE) Report	30 DA Award and 30 DPT EOC
A004	Program Protection Implementation Plan	ONE/R
A005	Test Report	ASREQ/30 DA SFQT
A006	Test Procedure	ASREQ/30 DPT SFQT
A007	Software Version Description (SVD)	ASREQ/30 DPT SFQT
A008	RESERVED	N/A
A009	RESERVED	N/A
A00A	Computer Software End Product	ASREQ/30 DA SFQT
A00B	Technical Manual Research and Analysis Source Data	ASREQ/30 DPT SFQT
A00C	System/Segment Interface Control Specification	ASREQ
A00D	Software Requirements Specification (SRS)/Software Product Specification (SPS)	ASREQ
A00E	Software Design Description (SDD) - (b) (4)	ONE/R, 60 DPT SFQT
A00F	System/Subsystem Specification (SSS)	ASREQ
A00G	Test Plan	ASREQ, 30DPT SFQT

A00H	Test/Inspection Report DECM Suite Acceptance Test Report	ASREQ
A00J	Technical Report/Study/Services	OTIME/10 DPT POP end
A00K	Software Development Plan/Software QA Plan	ONE/R, 60 DPT SFQT
A00L	Configuration Audit Summary Report, FCA/PCA Documentation	ASREQ/10 DPT review
A00M	Interface Design Description	ASREQ/60 DPT SFQT
A00N	Contractor's Progress, Status, and Management Report	MTHLY
A00P	Failure Reporting, Analysis and Corrective Action System	MTHLY
A00Q	Failure Mode Effects, and Criticality Analysis Report	ONE/R
A00R	Cybersecurity / IA Report	ASREQ, 30DPT SFQT

DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATION				1. CLEARANCE AND SAFEGUARDING	
<p><i>(The requirements of the DoD National Industrial Security Program Operating Manual apply to all security aspects of this effort.)</i></p>				a. FACILITY CLEARANCE REQUIRED	
				SECRET	
				b. LEVEL OF SAFEGUARDING REQUIRED	
SECRET					
2. THIS SPECIFICATION IS FOR: <i>(X and complete as applicable)</i>			3. THIS SPECIFICATION IS: <i>(X and complete as applicable)</i>		
X	a. PRIME CONTRACT NUMBER N00019-15-G-0026	X	a. ORIGINAL <i>(Complete date in all cases)</i>	DATE (YYYYMMDD) 20150820	
	b. SUBCONTRACT NUMBER N/A		b. REVISED <i>(Supersedes all previous specs)</i>	Revision Number	DATE (YYYYMMDD)
	c. SOLICITATION OR OTHER NUMBER	DUE DATE (YYYYMMDD)		c. FINAL <i>(Complete item 5 in all cases)</i>	DATE (YYYYMMDD)
4. IS THIS A FOLLOW-ON CONTRACT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO. <i>If YES, complete the following:</i>					
Classified material received or generated under _____ (preceding contract number) is transferred to this follow-on contract.					
5. IS THIS A FINAL DD FORM 254? <input type="checkbox"/> YES <input type="checkbox"/> NO. <i>If YES, complete the following:</i>					
In response to the contractor's request dated _____ retention of the identified classified material is authorized for the period of _____					
6. CONTRACTOR <i>(Include Commercial and Government Entity (CAGE) Code)</i>					
a. NAME, ADDRESS, AND ZIP CODE Northrop Grumman Corporation CLASSIFIED MAILING ADDRESS: 600 Hicks Road Rolling Meadows, IL 60008-1015		b. CAGE CODE 26916	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i> Defense Security Service (IOFNS) 303 Fountains Parkway, Suite 303 Fairview Heights, IL 62208 (V) 618-2067-7220 (F) 618-622-9146		
7. SUBCONTRACTOR					
a. NAME, ADDRESS, AND ZIP CODE N/A		b. CAGE CODE N/A	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i> N/A		
8. ACTUAL PERFORMANCE					
a. LOCATION Same as 6a.		b. CAGE CODE 26916	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i> Same as 6c.		
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT					
Basic Ordering Agreement (BOA) to procure support for the Department of the Navy Large Aircraft Infrared Countermeasures (DoN LAIRCM).					
TPOC: [REDACTED] PMA272D, [REDACTED]					
10. THIS CONTRACT WILL REQUIRE ACCESS TO:					
		YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:	
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION		<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
b. RESTRICTED DATA		<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. RECEIVE CLASSIFIED DOCUMENTS ONLY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
d. FORMERLY RESTRICTED DATA		<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
e. INTELLIGENCE INFORMATION:				e. PERFORM SERVICES ONLY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
(1) SENSITIVE COMPARTMENT INFORMATION (SCI)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
(2) NON-SCI [REDACTED]		<input checked="" type="checkbox"/>	<input type="checkbox"/>	g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
f. SPECIAL ACCESS INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. REQUIRE A COMSEC ACCOUNT	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
g. NATO INFORMATION		<input checked="" type="checkbox"/>	<input type="checkbox"/>	i. HAVE TEMPEST REQUIREMENTS	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
h. FOREIGN GOVERNMENT INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
i. LIMITED DISSEMINATION INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
l. FOR OFFICIAL USE ONLY INFORMATION		<input checked="" type="checkbox"/>	<input type="checkbox"/>	l. OTHER <i>(Specify)</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
m. OTHER <i>(Specify)</i> STE / SIPRNet Access / Secure FAX authorized.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Critical Program Information (CPI Protection Requirement; Program Protection Implementation Plan (PIIP) requirement.	

2. PUBLIC RELEASE. Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual or unless it has been approved for public release by appropriate U.S. government authority. Proposed public releases shall be submitted for approval prior to release. Subcontractors: shall forward public releases through the Prime for endorsement and final concurrence by GCA.

Direct Through (Specify):

Transmissions by non-secure facsimile or E-mail is NOT authorized (by Prime or subcontractor(s))
 Submit ALL Public Releases to: PEO(T) PMA272 (ATTN: PAO), Bldg 2272, Suite 446, 47123 Buse Rd., Patuxent River, MD 20670
 Phone: (301) 342-3005
 NAVAIR FORM 572011 must be completed and attached.

13. SECURITY GUIDANCE. The security classification guidance needed for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (Fill in as appropriate for the classified effort. Attach, or forward under separate correspondence, any documents/guides/extracts referenced herein. Add additional pages as needed to provide complete guidance.)

Technical papers, briefings, presentations, either classified or unclassified to be presented at classified symposia must be submitted to AIR-7.4.1 for approval prior to presentation. Unclassified material submitted for public release (that is not to be presented at classified symposia) shall be forwarded for review prior to release as stated in item 12 above. Transmission by non-secure facsimile of technical papers, briefings or presentations is NOT authorized. All controlled unclassified and classified technical information shall be appropriately marked with distribution statements as specified in DoDI 5230.24 (Distribution Statements on Technical Documents) <http://www.dtic.mil/whs/directives/corres/pdf/523024p.pdf>.

Visit requests shall have "Need-to-Know" certified by the TPOC listed in Block 9. All visit requests to military installations for classified or unclassified visits from subcontractors will be sent via the prime contractor who will certify the need-to-know.

Determination of need-to-know in connection with a classified visit is the responsibility of the individual/host who will disclose the classified information.

10a & 11h - Classified COMSEC material is not releasable to contractor employees who have not received a FINAL Clearance at the appropriate security level. COMSEC access shall be IAW DoD 5220.22-M. COMSEC information and materials are subject to the controls of and restrictions specified in the National Security Agency NSA/CSS Policy Manual, 3-16, dated 05 August 2005. When access is required at government facilities, contractor personnel will adhere to COMSEC rules and regulations as mandated by EKMS 1A (or applicable series) and command policy and procedures. Written concurrence of the TPOC is required prior to subcontracting.

See page 3 (Additional Data Sheet for DO Form 254)

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to NISPOM requirements, are established for this contract. (If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use item 13 if additional space is needed.)

<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
-------------------------------------	-----	--------------------------	----

OPSEC in contract. PPIP CDRL in contract.

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. (If Yes, explain and identify specific areas or elements carved out and the activity responsible for inspections. Use item 13 if additional space is needed.)

<input type="checkbox"/>	YES	<input checked="" type="checkbox"/>	NO
--------------------------	-----	-------------------------------------	----

NONE.

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL	b. TITLE	c. TELEPHONE (include Area Code)
	CONTRACTING OFFICER'S SECURITY REPRESENTATIVE (COSR)	

d. ADDRESS (include Zip Code)
 Commander, Naval Air Warfare Center Aircraft Division
 Attn: PMA272 Security Officer
 47123 Buse Rd Bldg 2272, Rm 535
 Patuxent River, MD 20670

17. REQUIRED DISTRIBUTION

<input checked="" type="checkbox"/>	a. CONTRACTOR
<input type="checkbox"/>	b. SUBCONTRACTOR
<input checked="" type="checkbox"/>	c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
<input checked="" type="checkbox"/>	d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
<input checked="" type="checkbox"/>	e. ADMINISTRATIVE CONTRACTING OFFICER
<input checked="" type="checkbox"/>	f. OTHERS AS NECESSARY

e. SIGNATURE

8-20-15

COR, COSR

Additional Data Sheet for DO Form 254

10e (2) - Access to Intelligence Information required for performance. Non-SCI Intelligence Information is not releasable to contractor employees who have not received a Clearance at the appropriate security level. Contractor shall comply with. Naval Air Warfare Center Aircraft Division Scientific and Technical Intelligence Liaison Officer Memo of 03 Mar 09 (Attached).

Reviewed by: [REDACTED]

10g - To facilitate potential access to NATO classified information, to include NATO accredited SIPRnet terminals, all DoD military, civilian, and contractor personnel who are briefed on their responsibilities for protecting U.S. classified military information, shall also be briefed on the requirements for protecting NATO information, per Deputy Under Secretary of Defense Policy Security Memo of 5 Dec 01. Written concurrence of the TPOC, identified in Block 9, required prior to subcontracting.

10j - For Official Use Only Information generated and/or provided under this contract shall be mailed and safeguarded as specified in DoDM 5200.01 (DoD Information Security Program: Controlled Unclassified Information (CUI)) Vol. 4 (enclosure 3 pages 11-18) available at http://www.dtic.mil/whs/directives/corres/pdf/520001_vol4.pdf and DoD 5400.7-R, Freedom of Information Program Chapter 3 (pages 31-42) available at <http://www.dtic.mil/whs/directives/corres/pdf/540007r.pdf>.

All For Official Use Only (FOUO) and program sensitive data transmitted and stored via electronic means shall use approved encryption. The Contractor shall ensure that when transmitting FOUO, over non-secure e-mail (e.g. not connected to the Navy Marine Corps Intranet through Broadband Unclassified Remote Access System / Virtual Private network), those transmissions are encrypted using Department of Defense Public Key Infrastructure (PKI), or an approved DoD External Certificate Authority, in accordance with Public Key Infrastructure & Public Key Enabling, DoDI 8520.02, 24 May 2011.

10k - Secret Internet Protocol Network (SIPRnet) access is authorized. Although inadvertent access exists, the contractor shall not access, download, or further disseminate any information or data that falls outside the scope and execution of the defined contract requirements. In the event any additional access is required, the Technical Point of Contact/Contracting Officer Representative must modify the requirements for DO Form 254 revisions. Contractor shall prepare and submit all required documentation as required by Command policy prior to receiving access. Written concurrence of the Technical Point of Contact (TPOC) identified in blk 9 is required prior to subcontracting. Use of Secured Telephone Equipment for transmission of classified U.S. Government information is authorized. Secure Facsimile: Receipt and Transmission of Classified Information authorized via Secure Facsimile. Written concurrence of the Technical Point of Contact (TPOC) identified in block 9 is required prior to subcontracting.

11g - In order to use OTIC services the contractor shall register for an account. Online registration information is available at <http://www.dtic.mil/dtic/registration/contractors/index.htm>.

11j - PMA272, the Requiring Organization, has made a determination that BASIC Operations Security (OPSEC) measures are sufficient to protect the contracted related Critical Information associated with this Contract. The NAVAIR 00254 OPSEC Annex, dated Apr 2013, shall be included as an attachment in the 00254. When basic OPSEC measures are prescribed, there shall be no required OPSEC CDRLs associated with this contract. However, the contractor will adhere to all OPSEC requirements specified in the OPSEC attachment. The Contractor shall be responsible for subcontractor implementation of the OPSEC Program requirements for this contract.

11k - Contractor shall use the Defense Courier Service for delivery of all COMSEC. The Contractor shall forward their USTRANSCOM IMT10 Defense Courier Account Record form to the COR/TPOC to verify clearances and sign Part 11.

11l - PPIP: Refer to the PPIP CDRL and Data Item Description (DID) for more information. The Program Protection Plan shall be provided by the Technical Point of Contact identified in Blk 9.

The following security classification guide (s), and subsequent upgrades/revision(s), apply to classified performance on this contract. Subsequent updates shall be provided by the Technical Point of Contact, identified in Blk 9, as Government Furnished Information (GFI), and shall be executed by the Contractor without obligation to modify this DD Form 254.

US AIR FORCE AN/AAQ-24(V) LARGE AIRCRAFT INFRARED COUNTERMEASURES (LAIRCM) dtd 15 April 2005 Revised 1 June 2011.
If additional security classification is required, contact the TPOC/COR identified in Blk 9.

***** END OF DO FORM 254 ADDITIONAL DATA SHEET *****

Identification and Assertion of Restrictions on the Government's Use, Release, or Disclosure of Technical Data or Computer Software.

Identification and Assertion of Use, Release, or Disclosure Restrictions are in accordance with DFARS 252.227-7013, 252.227-7014, 252.227-7015 & 252.227-7017

The Offeror asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

	Technical Data/Computer Software to be Furnished with Restrictions*	Basis for Assertion** w/Charge# used & Programs (IRAD and/or direct commercial sale charge number[s] inserted)	Asserted Rights Category***	Name of Person asserting Restrictions ****
1	DIRCM File System (DFS) Explorer (Description - generates a "file based" smartcard image)	Developed Exclusively at Private Expense H0008E2002 NGSC IRAD SW Rehost	Restricted Rights *****	Northrop Grumman Systems Corporation
2	Flight Data Analysis Display (FDAD) Licensed Version 3.0 Used to Graphically display real-time Ethernet data from the SRUs and playback of field and ESS data	Developed Exclusively at Private Expense H4G490NRE H0008E2002 (NGSC IRAD SW Rehost)	Restricted Rights *****	Northrop Grumman Systems Corporation
3	Data Protection: Computer Software, algorithms and methods for protection and encryption of Mission Data Files (MDFs) containing US Government derived threat parameters.	Developed Exclusively at Private Expense H5ADM000C H5WR9000A H5WR90000 H5WR900CF H5FRD02AE H5FRD02CC H5FRD03EA H5FRD03EB H5FRD06CA H6R26CAA H7602TLAA 29305GRAUA H8603RBHA	Restricted Rights *****	Northrop Grumman Systems Corporation
4	Data Protection: Computer Software, algorithms and methods for protection cryptographic keys and decryption of Mission Data Files (MDFs) containing US Government derived threat parameters or generic derived threat parameters	Developed Exclusively at Private Expense H5ADM000C H5WR9000A H5WR90000 H5WR900CF H5FRD02AE H5FRD02CC H5FRD03EA H5FRD03EB H5FRD06CA H6R26CAA H7602TLAA 29305GRAUA H8603RBHA	Restricted Rights *****	Northrop Grumman Systems Corporation

	Technical Data/Computer Software to be Furnished with Restrictions*	Basis for Assertion** w/Charge# used & Programs (IRAD and/or direct commercial sale charge number[s] inserted)	Asserted Rights Category***	Name of Person asserting Restrictions ****
5	Digital Receiver / Exciter (DRE) SRU Technical Data Package ***** <ul style="list-style-type: none"> • Schematic & Assembly Drawings • Wiring Diagrams • Piece Part Drawings • Source & Specification Control Drawings • Bill of Materials 	Developed Exclusively at Private Expense H5ADM000C H5WR9000A H5WR90000 H5WR900CF H5FRD02AE H5FRD02CC H5FRD03EA H5FRD03EB H5FRD06CA H6R26CAA H7602TLAA 29305GRAUA H8603RBHA	Limited Rights	Northrop Grumman Systems Corporation
6	Extended Single Board Computer (ESBC) Technical Data Package *****: Specifically the schematic and assembly drawings, wiring diagrams, and bill of material data that pertains to: <ul style="list-style-type: none"> • DC to DC power supply circuits for lower voltage power supply conversion • Intel Core i7 circuitry and routing (including processor, bridge, power conversion, reset and power-up sequencing, clocking, SDRAM memory, and NV memory blocks • 82574 Ethernet circuit and routing • Optically isolated 28V input / output 	Developed Exclusively at Private Expense H1914R3HF5	Limited Rights	NGSC on behalf of Extreme Engineering Solutions Inc.
7	Quad Antenna Technical Data Package ***** <ul style="list-style-type: none"> • RAS Antenna Assembly: P/N 92500-1 • Associated Drawings • Build Package Documents 	Developed Exclusively at Private Expense	Limited Rights	NGSC on behalf of Randtron
8	Receiver Technical Data Package***** Top Level parts list to include: M1 module outline Video board outline Power supply outline Noise source outline Power divider outline All cable assemblies RF & Control harnesses Mechanical part drawings (base, cover, brackets) Required mounting hardware 3D exploded view assembly drawing Repair procedure to assemble and disassemble the Rx	Developed Exclusively at Private Expense	Limited Rights	NGSC on behalf of Herley Industries Inc.
9	EGR-2500 hardware design and manufacturing information	Developed exclusively at Private Expense	Limited rights	NGSC on behalf of Harris Corporation

	Technical Data/Computer Software to be Furnished with Restrictions*	Basis for Assertion** w/Charge# used & Programs (IRAD and/or direct commercial sale charge number[s] inserted)	Asserted Rights Category***	Name of Person asserting Restrictions ****
10	Upper Application EGR software: 8248476 Executable Code 8248475 Boot Source 8248552 Green Executable 8248479 Green Source 8248482 Red Executable 8248481 Red Source 8248478 Yellow Executable 8248477 Yellow Source	Developed exclusively at Private Expense	Unmodified (original) software module/code and software modules/code which were developed at Harris (Formerly ITT Exelis) expense are provided with Restricted rights. Only modified portions of the software module/code paid for by the USG is provided with Unlimited Rights	NGSC on behalf of Harris Corporation
11	NAV/IO/PS	Developed exclusively at Private Expense	Restricted Rights	NGSC on behalf of Northrop Grumman Italy

*For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such item, component, or process. For computer software or computer software documentation identify the software or documentation.

**Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

***Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specially negotiated licenses).

****Corporation, individual, or other person, as appropriate.

***** Any reproduction of technical data or portion thereof marked with this legend must also reproduce the following markings for the "Asserted Rights Category"

Restricted Rights: The Government's right to use, modify, reproduce, release, perform, display or disclose this software are restricted by paragraph (b)(3) of the Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation clause contained in the above identified contract. Any reproduction of computer software or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such software, must promptly notify the above named Contractor.

Limited Rights: The Government's Right to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data-Noncommercial Items clause contained in the above identified contract. Any reproduction of technical data or portions thereof marked with

this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify the above named Contractor.

Government Purpose Rights: The Government's right to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(2) of the Rights in Technical Data – Noncommercial Items clause contained in the above identified contract. No restrictions apply after the expiration date shown above. Any reproduction of technical data or portion thereof marked with this legend must also reproduce the markings.

***** Data provided under this assertion will not conflict with the requirements identified under DFAR 252.225-7013(b)(1)(ii), (iv) and (v).

Enter "none" when all data or software will be submitted without restrictions.

Date September 25, 2017

Printed Name and Title Esmeralda Soto – Contract Representative

Signature

A handwritten signature in blue ink, appearing to read "Esmeralda Soto", written over a horizontal line.