

<b>SOLICITATION, OFFER AND AWARD</b>			1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)		RATING <b>DO-C9</b>	PAGE OF PAGES 1   230	
2. CONTRACT NO.		3. SOLICITATION NO. <b>W911SR-17-R-0005</b>	4. TYPE OF SOLICITATION [ ] SEALED BID (IFB) [X] NEGOTIATED (RFP)	5. DATE ISSUED <b>21 Sep 2017</b>	6. REQUISITION/PURCHASE NO.		
7. ISSUED BY USA CONTRACTING CMD-APG - W911SR EDGEWOOD CONTRACTING DIVISION E4215 AUSTIN ROAD ABERDEEN PROVING GROUND MD 21010-5401 CODE <b>W911SR</b>			8. ADDRESS OFFER TO (If other than Item 7) <b>See Item 7</b>		CODE		TEL: FAX:
NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".							
<b>SOLICITATION</b>							
9. Sealed offers in original and _____ copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in _____ until _____ local time _____ (Hour) (Date)							
CAUTION - LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.							
10. FOR INFORMATION CALL:		A. NAME	B. TELEPHONE (Include area code) (NO COLLECT CALLS)		C. E-MAIL ADDRESS		
<b>11. TABLE OF CONTENTS</b>							
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<b>OFFER (Must be fully completed by offeror)</b>							
NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.							
12. In compliance with the above, the undersigned agrees, if this offer is accepted within _____ calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.							
13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232-8)							
14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated):			AMENDMENT NO.	DATE	AMENDMENT NO.	DATE	
15A. NAME AND ADDRESS OF OFFEROR		CODE	FACILITY		16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)		
15B. TELEPHONE NO (Include area code)		15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE. <input type="checkbox"/>			17. SIGNATURE		18. OFFER DATE
<b>AWARD (To be completed by Government)</b>							
19. ACCEPTED AS TO ITEMS NUMBERED			20. AMOUNT		21. ACCOUNTING AND APPROPRIATION		
22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304(c)( ) <input type="checkbox"/> 41 U.S.C. 253(c)( )					23. SUBMIT INVOICES TO ADDRESS SHOWN IN ITEM (4 copies unless otherwise specified)		
24. ADMINISTERED BY (If other than Item 7) CODE				25. PAYMENT WILL BE MADE BY CODE			
26. NAME OF CONTRACTING OFFICER (Type or print) TEL: EMAIL:					27. UNITED STATES OF AMERICA (Signature of Contracting Officer)		28. AWARD DATE

**IMPORTANT - Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.**

## Section A - Solicitation/Contract Form

### EXECUTIVE SUMMARY

The Army Contracting Command Aberdeen Proving Ground (ACC-APG) Contracting Center, Edgewood Contracting Division, APG, MD, APG-EA Branch, on behalf of the Joint Project Manager, Nuclear Biological Chemical Contamination Avoidance (JPM NBC CA) is in support of the Next Generation Chemical Detector 1 (NGCD1) program. The JPM NBC CA is conducting the NGCD1 program to fill known operational gaps in chemical detection. NGCD1, now named XM12 Aerosol & Vapor Chemical Agent Detector (AVCAD), shall detect traditional and advanced threat vapors and liquid and solid aerosols. The AVCAD shall detect, identify, alarm, and report the presence of foreign variants of aerosol and vapor chemical hazards. The AVCAD shall also include a wireless remote alarm capability.

The AVCAD shall operate in both dismounted and mounted configurations (a portable system capable of detecting and identifying vapor and aerosol chemical hazards to meet AVCAD requirements). The U.S. Army, Air Force, Navy, and Marine Corps will use the AVCAD to conduct or support their missions. These missions include monitoring, collective protection, base defense, decontamination, unmasking, dismounted reconnaissance, mounted reconnaissance (on the Stryker Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV)), shipboard (replacing the current shipboard chemical detection system), and aviation (CH-47 Chinook, OH-60 Blackhawk, and CH-72 platforms for surveillance and survey of cargo and personnel).

The objective of this effort is to procure AVCADs for Engineering and Manufacturing Development (EMD), with the capability using options, to satisfy Low Rate Initial Production (LRIP) and Full Rate Production (FRP) requirements. Additionally, the contract requirements for the AVCADs include Government testing, program and logistic support, and delivery of technical data (end-item products, software, and logistics). The anticipated contract(s), when including all options, will be for ten years, consisting of twenty seven (27) months EMD, twenty one (21) months LRIP, and six (6) years FRP. The Government may award approximately 2 contract. However, the Government reserves the right to award one contract. If the Government elects award more than one contract, the individual contracts may be for the same technology solution, or for different technology variants and/or solutions in order to support differing mission sets and constraints of various DoD activities.

There will be no "down-select" or future competition between contractors if more than one contractor is selected for award. The Government's intent is to award the EMD options for approximately two contracts. After that point, if successful EMD test results are obtained under multiple contracts, the LRIP and FRP options may be exercised under more than one contract. In this scenario (for example, two contract awards and successful EMD tests for both contractors), the Government reserves the right to either obtain all LRIP and FRP production items from a single contractor or to divide production options between contractors based on (i) price, (ii) sustainment cost, (iii) performance against the PSPEC and any mission requirements to maintain multiple sources of supply.

### **Engineering and Manufacturing Development (EMD)**

The EMD phase covers development and delivery of six (6) prototypes, program management, System Engineering, and support of a limited customer test, along with preliminary and critical design reviews (PDR and CDR). Prototype delivery will be scheduled six (6) months after contract award in order to allow sufficient time to conduct chamber testing and analyze test results prior to the CDR. If more than one EMD Base contract is awarded, the intent is to award the EMD option to all contractors upon successful completion of prototype delivery, customer testing and the CDR.

The EMD Option includes system design and delivery (seventy-five (75) units), system support packages for Preventive Maintenance Checks and Services (PMCS) and testing, packaging and Item Unique Identification Data (IUID), training, consumables and spare parts, repair and maintenance for detectors during test, technical manuals,

logistics support, information assurance support and calibration. The anticipated EMD option award is approximately eight (8) months after contract award. The first scheduled hardware delivery of twenty-four (24) systems is four (4) months after option award to support Production Qualification Testing (PQT) chamber testing, with a second delivery of thirty-six (36) systems six (6) months after option award to support remaining PQT. The third scheduled hardware delivery of fifteen (15) systems is eight (8) months after option award to support the Log Demo and the Operational Assessment (OA).

### **Low-Rate Initial Production (LRIP)**

LRIP is Option 4, which if exercised will cover hardware delivery of one hundred and twenty-eight (128) units. The LRIP option will include support to Production Verification Test (PVT), Item Unique Identification (IUID), packaging, and consumables and spare parts.

### **Full-Rate Production (FRP)**

Full Rate Production (FRP) is covered under Options 5 through 10, and if exercised will have deliveries for over a six (6) year period at the discretion of the Government based on need and results achieved in LRIP. It is anticipated that there will be a maximum production of units per year up to 3200 for first (1st) year; 11,635 for years two (2), three (3), four (4), five (5); and 7,472 for year six (6). Additionally, the FRP options will cover consumables and spare parts, and packaging. The prerequisite for exercising the first FRP option is the FRP decision. Follow-on option awards will occur annually thereafter to meet the Government's requirements.

### **Contract Type**

The EMD phase (EMD Base and EMD Options 1 and 2) will be Cost-Plus-Incentive-Fee (CPIF). LRIP and FRP options will be priced on a Fixed-Price-Incentive (Successive Target) (FPI(S)) basis. Prior to completion of the LRIP option, a decision will be made to restructure to either a Fixed-Price-Incentive (Firm Target) or a Firm-Fixed-Price for each FRP option. A separate decision will occur prior to exercise of the FRP options. Should the alternative aerosol approach be the final AVCAD technical solution, the Government will restructure an adjustment to the LRIP and FRP pricing based on information the contractor provides in the EMD proposal. The acquisition will be negotiated for best-value procurement using the Contracting by Negotiation process prescribed in Federal Acquisition Regulation (FAR) Part 15. The source selection process to be utilized for this acquisition is best value/trade-off method. Information about source selection is listed under Section L and Section M.

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	AVCAD Base CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C. EMD BASE CONTRACT/SUPPLIES AND SERVICES  FOB: Destination	3	Each		
				TARGET COST TARGET FEE	<hr/>
				TOTAL TGT COST + FEE MINIMUM FEE MAXIMUM FEE SHARE RATIO ABOVE TARGET SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	AVCAD with Alternate Design Base CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.  EMD BASE CONTRACT/SUPPLIES AND SERVICES FOB: Destination	3	Each		
				TARGET COST TARGET FEE	<hr/>
				TOTAL TGT COST + FEE MINIMUM FEE MAXIMUM FEE SHARE RATIO ABOVE TARGET SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003	System Support Package (SSP) Base CPIF The contractor, as an independent contractor and not as an agent of the Government, shall deliver SSP for CLIN 0001 and CLIN 0002, 180 calenders days after contract award and furnish the necessary resources to perform the work, as detailed in the PWS Section C.	1	Job		

EMD BASE CONTRACT/SUPPLIES AND SERVICES  
 FOB: Destination

TARGET COST  
 TARGET FEE  
 \_\_\_\_\_  
 TOTAL TGT COST + FEE  
 MINIMUM FEE  
 MAXIMUM FEE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004	IPS EMD, Base CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.	1	Job		

EMD INTEGRATED PRODUCT SUPPORT (IPS)  
 FOB: Destination

TARGET COST  
 TARGET FEE  
 \_\_\_\_\_  
 TOTAL TGT COST + FEE  
 MINIMUM FEE  
 MAXIMUM FEE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
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0005

Accounting for Contract Service  
FFP

The Accounting for Contract Services/Contractor Manpower Reporting requirement has been added to the statement of work, and contractor is required to provide data on contractor manpower (including subcontractor manpower) for performance of this contract. The cost, if any, for providing this data shall be entered into the space provided at this CLIN. If no direct cost is associated with providing the data, enter No Cost.

- b. Suggested rates for determining the proposed price of the Contractor Manpower Reporting as fair and reasonable are:
  - i. Simplified Acquisition Procedures (SAP) action with one performance location – \$200 or less/year;
  - ii. Purchase Order or Contract with numerous performance locations – \$500 or less/year.

FOB: Destination

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NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
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0006

Contract Data Requirement List (CDRLs)

The contractor shall deliver data A001 - F006 in accordance with DD Form 1423 Contract Data Requirements List in Section J.

\*\*\*\* NOT SEPARATELY PRICED\*\*\*\*  
FOB: Destination

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NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0007 OPTION	AVCAD, EMD, OPTION 1				

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

EMD AVCAD PQT HARDWARE

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*  
 FOB: Destination

TARGET COST	
TARGET FEE	
<hr/>	
TOTAL TGT COST + FEE	
MINIMUM FEE	
MAXIMUM FEE	
SHARE RATIO ABOVE TARGET	
SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0007AA OPTION	AVCAD First Delivery CPIF	24	Each		

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

EMD AVCAD HARDWARE  
 FOB: Destination

TARGET COST	
TARGET FEE	
<hr/>	
TOTAL TGT COST + FEE	
MINIMUM FEE	
MAXIMUM FEE	
SHARE RATIO ABOVE TARGET	
SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0007AB OPTION	AVCAD Second Delivery CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C. EMD AVCAD HARDWARE FOB: Destination	36	Each		
				TARGET COST	
				TARGET FEE	
				TOTAL TGT COST + FEE	<hr/>
				MINIMUM FEE	
				MAXIMUM FEE	
				SHARE RATIO ABOVE TARGET	
				SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0007AC OPTION	AVCAD Third Delivery CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C. EMD AVCAD HARDWARE FOB: Destination	15	Each		
				TARGET COST	
				TARGET FEE	
				TOTAL TGT COST + FEE	<hr/>
				MINIMUM FEE	
				MAXIMUM FEE	
				SHARE RATIO ABOVE TARGET	
				SHARE RATIO BELOW TARGET	



ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0008					
OPTION	System Support Package				

CPIF  
The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

EMD AVCAD PQT HARDWARE

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

TARGET COST  
TARGET FEE

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TOTAL TGT COST + FEE  
MINIMUM FEE  
MAXIMUM FEE  
SHARE RATIO ABOVE TARGET  
SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0008AA		1	Job		
OPTION	SSP For 24 AVCAD				

CPIF  
The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

EMD AVCAD PQT HARDWARE

FOB: Destination

TARGET COST  
TARGET FEE

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TOTAL TGT COST + FEE  
MINIMUM FEE  
MAXIMUM FEE  
SHARE RATIO ABOVE TARGET  
SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0008AB OPTION	SSP For 36 AVCAD CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.  EMD AVCAD PQT HARDWARE FOB: Destination	1	Job		
				TARGET COST TARGET FEE	<hr/>
				TOTAL TGT COST + FEE MINIMUM FEE MAXIMUM FEE	
				SHARE RATIO ABOVE TARGET SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0008AC OPTION	SSP For 15 AVCAD CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.  EMD AVCAD PQT HARDWARE FOB: Destination	1	Job		
				TARGET COST TARGET FEE	<hr/>
				TOTAL TGT COST + FEE MINIMUM FEE MAXIMUM FEE	
				SHARE RATIO ABOVE TARGET SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009 OPTION	PLATFORM INTEGRATION, EMD, OPTION 2 CPIF				

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

EMD PLATFORM INTEGRATION

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

TARGET COST  
TARGET FEE

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TOTAL TGT COST + FEE  
MINIMUM FEE  
MAXIMUM FEE  
SHARE RATIO ABOVE TARGET  
SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009AA OPTION	Shipboard Platform CPIF	2	Each		

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

EMD PLATFORM INTEGRATION

FOB: Destination

TARGET COST  
TARGET FEE

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TOTAL TGT COST + FEE  
MINIMUM FEE  
MAXIMUM FEE  
SHARE RATIO ABOVE TARGET  
SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009AB OPTION	NBCRV CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.  EMD PLATFORM INTEGRATION FOB: Destination	2	Each		
				TARGET COST TARGET FEE	<hr/>
				TOTAL TGT COST + FEE MINIMUM FEE MAXIMUM FEE SHARE RATIO ABOVE TARGET SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009AC OPTION	Unmanned Ground Vehicle CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.  EMD PLATFORM INTEGRATION FOB: Destination	2	Each		
				TARGET COST TARGET FEE	<hr/>
				TOTAL TGT COST + FEE MINIMUM FEE MAXIMUM FEE SHARE RATIO ABOVE TARGET SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009AD OPTION	Joint Assault Bridge CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.	2	Each		
	EMD PLATFORM INTEGRATION FOB: Destination				
				TARGET COST TARGET FEE	<hr/>
				TOTAL TGT COST + FEE MINIMUM FEE MAXIMUM FEE	
				SHARE RATIO ABOVE TARGET SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009AE OPTION	ABRAMS Tank CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.	2	Each		
	EMD PLATFORM INTEGRATION FOB: Destination				
				TARGET COST TARGET FEE	<hr/>
				TOTAL TGT COST + FEE MINIMUM FEE MAXIMUM FEE	
				SHARE RATIO ABOVE TARGET SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009AF OPTION	AMPV CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.  EMD PLATFORM INTEGRATION FOB: Destination	2	Each		
				TARGET COST TARGET FEE	<hr/>
				TOTAL TGT COST + FEE MINIMUM FEE MAXIMUM FEE	
				SHARE RATIO ABOVE TARGET SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009AG OPTION	Fixed-wing aircraft CPIF The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.  EMD PLATFORM INTEGRATION FOB: Destination	2	Each		
				TARGET COST TARGET FEE	<hr/>
				TOTAL TGT COST + FEE MINIMUM FEE MAXIMUM FEE	
				SHARE RATIO ABOVE TARGET SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009AH OPTION	Rotary-wing aircraft CPIF	2	Each		

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

EMD PLATFORM INTEGRATION  
 FOB: Destination

TARGET COST  
 TARGET FEE

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TOTAL TGT COST + FEE  
 MINIMUM FEE  
 MAXIMUM FEE

SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0010 OPTION	DEPOT MAINTENANCE MANUAL, OPTION 3 CPIF	1	Job		

The contractor, as an independent contractor and not as an agent of the Government, shall deliver one (1) electronic Technical Manual (TM) 180 days after option award and furnish the necessary resources to perform the work, as detailed in the PWS Section C.

EMD TECHNICAL MANUAL (TM): DEPOT MAINTENANCE MANUAL  
 FOB: Destination

TARGET COST  
 TARGET FEE

---

TOTAL TGT COST + FEE  
 MINIMUM FEE  
 MAXIMUM FEE

SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0011					
OPTION	AVCAD Hardware, LRIP OPTION 4				

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

LOW RATE INITIAL PRODUCTION (LRIP) HARDWARE

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

TARGET COST  
 TARGET PROFIT  
 -----  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0011AA		68	Each		
OPTION	AVCAD LRIP First Delivery				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

LOW RATE INITIAL PRODUCTION (LRIP) HARDWARE

FOB: Destination

TARGET COST  
 TARGET PROFIT  
 -----  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET



ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0011AB	AVCAD Second Delivery	60	Each		

OPTION

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

LOW RATE INITIAL PRODUCTION (LRIP) HARDWARE

FOB: Destination

TARGET COST

TARGET PROFIT

TOTAL TARGET PRICE

CEILING PRICE

SHARE RATIO ABOVE TARGET

SHARE RATIO BELOW TARGET



ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0012			Job		
OPTION	SSP				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

LOW RATE INITIAL PRODUCTION (LRIP) HARDWARE

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

TARGET COST  
 TARGET PROFIT  
 -----  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0012AA		1	Job		
OPTION	SSP for PVT Testing (41,472 hours)				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

LOW RATE INITIAL PRODUCTION (LRIP) HARDWARE

FOB: Destination

TARGET COST  
 TARGET PROFIT  
 -----  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0012AB		1	Job		

OPTION SSP for MOT Testing (32,400 hours)  
FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

LOW RATE INITIAL PRODUCTION (LRIP) HARDWARE

FOB: Destination

TARGET COST

TARGET PROFIT

TOTAL TARGET PRICE

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CEILING PRICE

SHARE RATIO ABOVE TARGET

SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
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0013

OPTION LRIP IPS  
FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

LOW RATE INITIAL PRODUCTION (LRIP) INTEGRATED PRODUCT SUPPORT (IPS)

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

TARGET COST  
TARGET PROFIT  
TOTAL TARGET PRICE  
CEILING PRICE  
SHARE RATIO ABOVE TARGET  
SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0013AA	TM Update	100	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall deliver one (1) electronics TM and 100 hard copies of TM 90 days after option award and furnish the necessary resources to perform the work, as detailed in the PWS Section C.				
	LOW RATE INITIAL PRODUCTION (LRIP) IPS				
	FOB: Destination				
				TARGET COST	
				TARGET PROFIT	
				TOTAL TARGET PRICE	<hr/>
				CEILING PRICE	
				SHARE RATIO ABOVE TARGET	
				SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0013AB	Logistics/Maintenance Demonstration(s)	1	Job		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				
	LOW RATE INITIAL PRODUCTION (LRIP) IPS				
	FOB: Destination				
				TARGET COST	
				TARGET PROFIT	
				TOTAL TARGET PRICE	<hr/>
				CEILING PRICE	
				SHARE RATIO ABOVE TARGET	
				SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0013AC		50	Each		
OPTION	Training Course Update Deliverables				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall deliver one (1) electronics Training Material (TM) and 50 hard copies of TM 90 days after option award and furnish the necessary resources to perform the work, as detailed in the PWS Section C.				
	LOW RATE INITIAL PRODUCTION (LRIP) IPS				
	FOB: Destination				

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0014		1	Job		
OPTION	Consumable and Spare Parts				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				
	LOW RATE INITIAL PRODUCTION (LRIP)				
	FOB: Destination				

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0015			Job		

OPTION      Technical Support  
 FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

LOW RATE INITIAL PRODUCTION (LRIP)  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0016			Job		

OPTION PLATFORM INTEGRATION, LRIP  
FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

LOW RATE INITIAL PRODUCTION (LRIP)

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0016AA	Shipboard Platform	2	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

LOW RATE INITIAL PRODUCTION (LRIP) PLATFORM INTEGRATION  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0016AB	NBCRV	2	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

LOW RATE INITIAL PRODUCTION (LRIP) PLATFORM INTEGRATION  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0016AC		2	Each		
OPTION	Unmanned Ground Vehicle				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

LOW RATE INITIAL PRODUCTION (LRIP) PLATFORM INTEGRATION  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0016AD		2	Each		
OPTION	Joint Assault Bridge				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

LOW RATE INITIAL PRODUCTION (LRIP) PLATFORM INTEGRATION  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0016AE		2	Each		
OPTION	ABRAMS Tank				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

LOW RATE INITIAL PRODUCTION (LRIP) PLATFORM INTEGRATION  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0016AF		2	Each		
OPTION	AMPV				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

LOW RATE INITIAL PRODUCTION (LRIP) PLATFORM INTEGRATION  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0016AG	Fixed -wing aircraft	2	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

LOW RATE INITIAL PRODUCTION (LRIP) PLATFORM INTEGRATION  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0016AH	Rotary-wing aircraft	2	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

LOW RATE INITIAL PRODUCTION (LRIP) PLATFORM INTEGRATION  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0017		168	Each		
OPTION	AVCAD WARRANTY FFP The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work and provide warranties, as detailed in the PWS Section C, FAR 52.246-19 and DFARS 252.246-7001.				

LOW RATE INITIAL PRODUCTION (LRIP)  
 FOB: Destination

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NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018					
OPTION	AVCAD, FRP, 1st YEAR, OPTION 5  The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.				

FULL RATE PRODUCTION (FRP)

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

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TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018AA		3,200	Each		
OPTION	AVCAD Hardware FRP FPI The contractor, as an independent contractor and not as an agent of the Government, shall provide up to 3200 AVCADs and furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.				

FULL RATE PRODUCTION (FRP)  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018AB		1	Job		
OPTION	AVCAD WARRANTY FRP FFP The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, and provide warranties, as detailed in the PWS Section C, FAR 52.246-19 and DFARS 252.246-7001.				

FULL RATE PRODUCTION (FRP)  
 FOB: Destination

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NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018AC		1	Job		
OPTION	Consumables and Spares Parts				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP)  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018AD		30	Each		
OPTION	Shipboard FRP Platform Integration Kits				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018AE		675	Each		
OPTION	NBCRV FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018AF		300	Each		
OPTION	Unmanned Ground Vehicle FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018AG		30	Each		
OPTION	Joint Assault Bridge				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018AH		225	Each		
OPTION	ABRAMS Tank				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018AJ	AMPV	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018AK	Fixed-wing aircraft	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018AL		30	Each		
OPTION	Rotary-wing aircraft				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0019		1	Job		
OPTION	Technical Support				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

Full Rate Production (FRP)  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020					
OPTION	AVCAD, FRP, 2nd YEAR, OPTION 6				

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.

FULL RATE PRODUCTION (FRP)

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

TARGET COST  
TARGET PROFIT  


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TOTAL TARGET PRICE  
CEILING PRICE  
SHARE RATIO ABOVE TARGET  
SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020AA		11,635	Each		
OPTION	AVCAD Hardware 2nd YEAR, OPTION 6				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall provide up to 11,635 AVCAD and furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.

FULL RATE PRODUCTION (FRP)

FOB: Destination

TARGET COST  
TARGET PROFIT  


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TOTAL TARGET PRICE  
CEILING PRICE  
SHARE RATIO ABOVE TARGET  
SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020AB OPTION	AVCAD Warranty FRP 2nd Year, Option 6 FFP	1	Job		
	<p>The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work and provide warranties, as detailed in the PWS Section C, FAR 52.246-19 and DFARS 252.246-7001.</p> <p>FULL RATE PRODUCTION (FRP) FOB: Destination</p>				

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NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020AC OPTION	Consumables and Spare Parts FPI	1	Job		
	<p>The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.</p> <p>FULL RATE PRODUCTION (FRP) FOB: Destination</p>				

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020AD		30	Each		
OPTION	Shipboard Platform Integration Kits				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020AE		675	Each		
OPTION	NBCRV				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020AF		300	Each		
OPTION	Unmanned Ground Vehicle				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020AG		30	Each		
OPTION	Joint Assault Bridge				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020AH		225	Each		
OPTION	ABRAMS Tank FPI The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020AJ		30	Each		
OPTION	AMPV FPI The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020AK		30	Each		
OPTION	Fixed-wing aircraft				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP)      PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020AL		30	Each		
OPTION	Rotary-wing aircraft				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP)      PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0021		1	Job		
OPTION	Technical Support				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022					
	AVCAD FRP, 3rd YEAR, OPTION 7				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.				

FULL RATE PRODUCTION (FRP)

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022AA	AVCAD Hardware	11,635	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall provide up to 11,635 AVCAD and furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.				
	FULL RATE PRODUCTION (FRP)				
	FOB: Destination				
				TARGET COST	
				TARGET PROFIT	
				TOTAL TARGET PRICE	<hr/>
				CEILING PRICE	
				SHARE RATIO ABOVE TARGET	
				SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022AB	AVCAD Warranty, FRP 3rd Year, Option 7	1	Job		
OPTION	FFP				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work and provide warranties, as detailed in the PWS Section C, FAR 52.246-19 and DFARS 252.246-7001.				
	FULL RATE PRODUCTION (FRP)				
	FOB: Destination				
				NET AMT	<hr/>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022AC		1	Job		
OPTION	Consumables and Spare Parts				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP)  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022AD		30	Each		
OPTION	Shipboard Platform Integration Kits				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022AE		675	Each		
OPTION	NBCRV				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022AF		300	Each		
OPTION	Unmanned Ground Vehicle				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022AG	Joint Assault Bridge	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				
	FULL RATE PRODUCTION (FRP) KITS		PLATFORM INTEGRATION		
	FOB: Destination				
				TARGET COST	
				TARGET PROFIT	
				TOTAL TARGET PRICE	<hr/>
				CEILING PRICE	
				SHARE RATIO ABOVE TARGET	
				SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022AH	ABRAMS Tank	225	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				
	FULL RATE PRODUCTION (FRP) KITS		PLATFORM INTEGRATION		
	FOB: Destination				
				TARGET COST	
				TARGET PROFIT	
				TOTAL TARGET PRICE	<hr/>
				CEILING PRICE	
				SHARE RATIO ABOVE TARGET	
				SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022AJ		30	Each		
OPTION	AMPV				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

FULL RATE PRODUCTION (FRP)      PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022AK		30	Each		
OPTION	Fixed-wing aircraft				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

FULL RATE PRODUCTION (FRP)      PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022AL	Rotary-wing aircraft	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0023	Technical Support	1	Job		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP)  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024					
OPTION	AVCAD FRP, 4th YEAR, OPTION 8				

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.

FULL RATE PRODUCTION (FRP)

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

TARGET COST  
TARGET PROFIT  
TOTAL TARGET PRICE  
CEILING PRICE  
SHARE RATIO ABOVE TARGET  
SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024AA		11,635	Each		
OPTION	AVCAD Hardware				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall provide up to 11,635 AVCAD and furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.

FULL RATE PRODUCTION (FRP)

FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

---

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024AB		1	Job		
OPTION	AVCAD Warranty				

FFP

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work and provide warranties, as detailed in the PWS Section C, FAR 52.246-19 and DFARS 252.246-7001.

FULL RATE PRODUCTION (FRP)

FOB: Destination

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NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024AC		1	Job		
OPTION	Consumables and Spare Parts				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP)  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024AD		30	Each		
OPTION	Shipboard Platform Integration Kits				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024AE		675	Each		
OPTION	NBCRV FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024AF		300	Each		
OPTION	Unmanned Ground Vehicle FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024AG	Joint Assault Bridge	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024AH	ABRAM Tank	225	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024AJ	AMPV	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024AK	Fixed-wing aircraft	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024AL	Rotary-wing aircraft	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0025	Technical Support	1	Job		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP)  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026					
OPTION	AVCAD, FRP, 5th YEAR, OPTION 9				

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.

FULL RATE PRODUCTION (FRP)

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

TARGET COST	
TARGET PROFIT	
TOTAL TARGET PRICE	<hr/>
CEILING PRICE	
SHARE RATIO ABOVE TARGET	
SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026AA		11,635	Each		
OPTION	AVCAD Hardware				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall provide up to 11,635 AVCAD and furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.

FULL RATE PRODUCTION (FRP)

FOB: Destination

TARGET COST	
TARGET PROFIT	
TOTAL TARGET PRICE	<hr/>
CEILING PRICE	
SHARE RATIO ABOVE TARGET	
SHARE RATIO BELOW TARGET	



ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026AB OPTION	AVCAD Warranty FFP	1	Job		
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work and provide warranties, as detailed in the PWS Section C, FAR 52.246-19 and DFARS 252.246-7001.				
	FULL RATE PRODUCTION (FRP) FOB: Destination				

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NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026AC OPTION	Consumables and Spare Parts FPI	1	Job		
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				
	FULL RATE PRODUCTION (FRP) FOB: Destination				

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TARGET COST  
TARGET PROFIT  
TOTAL TARGET PRICE  
CEILING PRICE  
SHARE RATIO ABOVE TARGET  
SHARE RATIO BELOW TARGET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026AD		30	Each		
OPTION	Shipboard Platform Integration Kits				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026AE		675	Each		
OPTION	NBCRV				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026AF		300	Each		
OPTION	Unmanned Ground Vehicle				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026AG		30	Each		
OPTION	Joint Assault Bridge				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026AH	ABRAMS Tank	225	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026AJ	AMPV	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

---

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026AK	Fixed-wing aircraft	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026AL	Rotary-wing aircraft	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0027		1	Job		

OPTION      Technical Support  
 FPI

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.

FULL RATE PRODUCTION (FRP)  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET



ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028					
OPTION	AVCAD, FRP, 6th YEAR, OPTION 10				

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.

FULL RATE PRODUCTION (FRP)

\*\*\*\*\*NOT SEPARATELY PRICED--INFORMATIONAL CLIN\*\*\*\*\*

FOB: Destination

TARGET COST	
TARGET PROFIT	
TOTAL TARGET PRICE	<hr/>
CEILING PRICE	
SHARE RATIO ABOVE TARGET	
SHARE RATIO BELOW TARGET	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028AA		7,472	Each		
OPTION	AVCAD Hardware				

FPI

The contractor, as an independent contractor and not as an agent of the Government, shall provide up to 7,472 AVCAD and furnish the necessary resources to perform the work, as detailed in the PWS Section C and as set forth in Section B Range Pricing Schedule.

FULL RATE PRODUCTION (FRP)

FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028AB		1	Job		
OPTION	AVCAD Warranty				

FFP

The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work and provide warranties, as detailed in the PWS Section C, FAR 52.246-19 and DFARS 252.246-7001.

FULL RATE PRODUCTION (FRP)

FOB: Destination

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NET AMT



ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028AC		1	Job		
OPTION	Consumables and Spare Parts				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP)  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028AD		30	Each		
OPTION	Shipboard Platform Integration Kits				
	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028AE		675	Each		
OPTION	NBCRV FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028AF		300	Each		
OPTION	Unmanned Ground Vehicle FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028AG	Joint Assault Bridge	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028AH	ABRAMS Tank	225	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028AJ		30	Each		
OPTION	AMPV FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028AK		30	Each		
OPTION	Fixed-wing aircraft FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028AL	Rotary-wing aircraft	30	Each		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP) PLATFORM INTEGRATION KITS  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0029	Technical Support	1	Job		
OPTION	FPI				
	The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.				

FULL RATE PRODUCTION (FRP)  
 FOB: Destination

TARGET COST  
 TARGET PROFIT  
 TOTAL TARGET PRICE  
 CEILING PRICE  
 SHARE RATIO ABOVE TARGET  
 SHARE RATIO BELOW TARGET

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0030 OPTION	Spare and Consumable TDP, OPTION 11 FFP The contractor, as an independent contractor and not as an agent of the Government, shall furnish the necessary resources to perform the work, as detailed in the PWS Section C.  AVCAD SPARE AND CONSUMABLE PARTS TECHNICAL DATA PACKAGE (TDP) FOB: Destination	1	Job		

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NET AMT

PRICING SCHEDULE

**FPIS INCENTIVE STRUCTURE**

Common FPI(S) Parameters: All FPI(S) CLINs have the following structure: 1) A ceiling price that equates to 130% of the Initial Target Cost (**not** the initial target price), 2) No effective use of a Firm Target Profit Floor/Ceiling, 3) An 85% Government over/under share, and 4) A 15% Contractor over/under share.

**CONSUMABLE AND SPARE PARTS**

Escalation: Proposed initial target costs will be multiplied by an escalation factor appropriate for the production year as follows to arrive at the full Consumables and Spares schedule.

<b>Escalation Factor Calculation</b>	
Escalation Percentage	Proposed by Offeror (Esc)
FY 2018	$(1+Esc)^0 = 1$
LRIP	$(1+Esc)^1$
FRP Year 1	$(1+Esc)^2$
FRP Year 2	$(1+Esc)^3$
FRP Year 3	$(1+Esc)^4$
FRP Year 4	$(1+Esc)^5$
FRP Year 5	$(1+Esc)^6$
FRP Year 6	$(1+Esc)^7$



Initial Target Profit	<Percent> * Initial Target Cost
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**FULL RATE PRODUCTION**

<b>Section B: Total Initial Target Cost Calculation</b>		
	<b>Range</b>	<b>Total Initial Target Cost</b>
FRP Year 1	1 - 49	\$ + [\$ * Quantity]
	50 - 199	\$ + [\$ * Quantity]
	200 - 799	\$ + [\$ * Quantity]
	800 - 1,599	\$ + [\$ * Quantity]
	1,600 - 3,199	\$ + [\$ * Quantity]
	3,200 - 6,399	\$ + [\$ * Quantity]
	6,400 - 11,635	\$ + [\$ * Quantity]
FRP Year 2	1 - 49	\$ + [\$ * Quantity]
	50 - 199	\$ + [\$ * Quantity]
	200 - 799	\$ + [\$ * Quantity]
	800 - 1,599	\$ + [\$ * Quantity]
	1,600 - 3,199	\$ + [\$ * Quantity]
	3,200 - 6,399	\$ + [\$ * Quantity]
	6,400 - 11,635	\$ + [\$ * Quantity]
FRP Year 3	1 - 49	\$ + [\$ * Quantity]
	50 - 199	\$ + [\$ * Quantity]
	200 - 799	\$ + [\$ * Quantity]
	800 - 1,599	\$ + [\$ * Quantity]
	1,600 - 3,199	\$ + [\$ * Quantity]
	3,200 - 6,399	\$ + [\$ * Quantity]
	6,400 - 11,635	\$ + [\$ * Quantity]
FRP Year 4	1 - 49	\$ + [\$ * Quantity]
	50 - 199	\$ + [\$ * Quantity]
	200 - 799	\$ + [\$ * Quantity]
	800 - 1,599	\$ + [\$ * Quantity]
	1,600 - 3,199	\$ + [\$ * Quantity]
	3,200 - 6,399	\$ + [\$ * Quantity]
	6,400 - 11,635	\$ + [\$ * Quantity]
FRP Year 5	1 - 49	\$ + [\$ * Quantity]
	50 - 199	\$ + [\$ * Quantity]
	200 - 799	\$ + [\$ * Quantity]
	800 - 1,599	\$ + [\$ * Quantity]
	1,600 - 3,199	\$ + [\$ * Quantity]
	3,200 - 6,399	\$ + [\$ * Quantity]
	6,400 - 11,635	\$ + [\$ * Quantity]



FRP Year 6	1 - 49	\$ + [\$ * Quantity]
	50 - 199	\$ + [\$ * Quantity]
	200 - 799	\$ + [\$ * Quantity]
	800 - 1,599	\$ + [\$ * Quantity]
	1,600 - 3,199	\$ + [\$ * Quantity]
	3,200 - 6,399	\$ + [\$ * Quantity]
	6,400 - 11,635	\$ + [\$ * Quantity]

Initial Target Profit	<Percent> * Initial Target Cost
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## WARRANTY

Warranty Firm Fixed Prices are determined by multiplying <INSERT: the proposed warranty percentage> by the initial target cost for the AVCAD production lot to arrive at the FFP dollar amount.

## Section C - Descriptions and Specifications

### PERFORMANCE WORK STATEMENT

#### **SECTION C: PERFORMANCE WORK STATEMENT (PWS)**

#### **TITLE: XM12 AEROSOL AND VAPOR CHEMICAL AGENT DETECTOR (AVCAD)**

##### **C.1 SCOPE.**

The Joint Project Manager for Nuclear, Biological and Chemical Contamination Avoidance (JPM NBC CA) is responsible for development, production and fielding of Chemical, Biological, Radiological and Nuclear (CBRN) detection systems. The JPM NBC CA is conducting the Next Generation Chemical Detector 1 (NGCD 1) program to fill known operational gaps in chemical detection. The NGCD 1 also known as XM12 Aerosol and Vapor Chemical Agent Detector (AVCAD), will detect traditional and advanced threat vapors and liquid and solid aerosols.

##### C.1.1 Background.

The NGCD program received a Milestone A decision in March 2014 to enter the Technology Maturation and Risk Reduction (TMRR) Phase. The JPM NBC CA awarded three (3) contracts to develop and conduct CWA chamber testing with prototypes and the results are promising for the continuation of the program into the Engineering and Manufacturing Development (EMD) phase.

##### C.1.2 Objective.

The objective of this contract is to procure NGCD 1 XM12 AVCAD, hereafter referred to as AVCAD, for EMD. Requirements include EMD Government testing, program and logistic support, and delivery of technical data (end-item products, software, and logistics). It also includes options for Low Rate Initial Production (LRIP) and Full Rate Production (FRP), and subsequent documentation updates, test and fielding support.

#### **C.2 APPLICABLE DOCUMENTS**

For purposes of this Performance Work Statement (PWS), “Required” means that the requirements contained in the directly cited document are contractually applicable to the extent specified. The term “For guidance only” means the document is not contractually applicable and is provided for guidance and information only. The documents cited below are “required” unless specifically identified as “For guidance only”. In the event of a conflict between the documents referenced herein and the contents of this PWS, the PWS shall take precedence.

##### C.2.1 Military Standards (MIL-STD) and Performance Specifications (MIL-PRF).

C.2.1.1 MIL-STD-882E, System Safety, 11 May 12.

C.2.1.2 MIL-STD-1472G, Human Engineering, 11 Jan 12.

C.2.1.3 MIL-STD-1839D (For guidance only), Calibration and Measurement Requirements, 12 May 10.

C.2.1.4 MIL-STD 40051-2C, Preparation of Digital Technical Information for Page-based Technical Manuals (TMs), 15 Dec 15.

C.2.1.5 MIL STD-2073-1E Standard Practice for Military Packaging, 07 Jan 11.

C.2.1.6 MIL-STD-129R, Military Marking for Shipment and Storage, 18 Feb 14.

C.2.1.7 MIL-STD-147E, Palletized Unit Loads, 23 Dec 13.

C.2.1.8 MIL-STD-40051-2C Preparation of Digital Technical Information for Page-Based Technical Manuals, 15 Dec 15.

C.2.1.9 MIL-PRF-29612B, Training Data Products, 31 Mar 16.

C.2.1.10 MIL-STD-810G Environmental Engineering Considerations and Laboratory Tests, 15 Apr 14.

(The above Instructions are available at: <http://quicksearch.dla.mil/>)

### C.2.2 Military Handbooks (MIL-HDBK).

C.2.2.1 MIL-HDBK-470 (For guidance only), Designing and Developing Maintainable Products and Systems, Volume 1, 31 May 12.

C.2.2.2 MIL-HDBK-61A (For guidance only), Configuration Management Guidance, 7 Feb 01.

C.2.2.3 MIL-HDBK-502A (For guidance only), Product Support Analysis, 08 Mar 13.

C.2.2.4 MIL-HDBK-2155 (For guidance only), Failure Reporting, Analysis and Corrective Action Taken, 10 Sep 14

(The above Instructions are available at: <http://quicksearch.dla.mil/>)

### C.2.3 Department of Defense Instructions

C.2.3.1 DoD 5220.22-M, National Industrial Security Program (NISP) Operating Manual, 28 Feb 06 through changes dated 18 May 16.

C.2.3.2 DoD Instruction 8510.01, Risk Management Framework (RMF) for DoD Information Technology (IT), 12 Mar 14 through changes dated 24 May 16.

C.2.3.3 DoD Instruction 5200.39 Critical Program Information (CPI) Identification and Protection within Research, Development, Test, and Evaluation (RDT&E), 28 May 15.

C.2.3.4 DODM 4140.27 DoD Shelf-Life Management Program, 06 Jul 16.

(The above Instructions are available from: <http://www.dtic.mil/whs/directives/corres/ins1.html>)

### C.2.4 Department of Defense Documents

C.2.4.1 Defense Acquisition Guidebook (DAG), 15 May 13 or later.  
(This document is available at: <https://dag.dau.mil/Pages/Default.aspx>)

C.2.4.2 Department of Defense Manufacturing Readiness Level (MRL) Deskbook, Version 2.4, Aug 15.  
(This document is available at:  
[http://www.dodmrl.com/MRL\\_Deskbook\\_V2.4%20August\\_2015.pdf](http://www.dodmrl.com/MRL_Deskbook_V2.4%20August_2015.pdf))

C.2.4.3 Department of Defense Security Classification Guide for Non-Traditional Agent Defense Incorporating Change 2, 16 Aug 16.  
(This document is available by request to the Contracting Officer)

C.2.4.4 Risk Management Guide for DoD Acquisition, Sixth Edition, Aug 06.  
(This document is available at:  
<http://www.dau.mil/publications/publicationsDocs/RMG%206Ed%20Aug06.pdf>)

C.2.4.5 DA PAM 738-751, Functional Users Manual for the Army Maintenance Management System – Aviation, 28 Feb 14.  
(This document is available at:  
<https://armypubs.army.mil/Search/ePubsSearch/ePubsSearchDownloadPage.aspx?docID=0902c8518001097e>)

## C.2.5 Army Regulations

C.2.5.1 AR 530-1, Operations Security, 26 Sep 14.  
(This document is available at:  
<http://www.apd.army.mil/Search/ePubsSearch/ePubsSearchDownloadPage.aspx?docID=0902c85180010d7a>)

C.2.5.2 AR 350-1, Army Training and Leader Development, 19 Aug 14.  
(This document is available at:  
<http://www.apd.army.mil/Search/ePubsSearch/ePubsSearchDownloadPage.aspx?docID=0902c851800103c5>)

C.2.5.3 AR 350-38, Policies and Management for Training Aids, Devices, Simulators, and Simulations, 28 Mar 13.  
(This document is available at:  
<http://www.apd.army.mil/Search/ePubsSearch/ePubsSearchDownloadPage.aspx?docID=0902c85180010483>)

C.2.5.4 TRADOC Regulation 350-70, Army Learning Policy and Systems, 6 Dec 11  
(This document is available at: <http://tradoc.army.mil/tpubs/regs/TR350-70.pdf>)

C.2.5.6 AR 70-77 Program Protection, 7 Apr 14

(This document is available at:

<http://www.apd.army.mil/Search/ePubsSearch/ePubsSearchDownloadPage.aspx?docID=0902c851800106e6>)

#### C.2.6 NGCD Program Documents

C.2.6.1 NGCD Program Protection Plan (PPP). (Attachment 6)

C.2.6.2 Security Classification Guide for NGCD. (Attachment 7)

C.2.6.3 NGCD Systems Engineering Plan (SEP). (Attachment 8)

(The above documents are available by request to the Contracting Officer)

C.2.6.4 AVCAD Performance Specification (PSpec). (Attachment 1)

(The above document is found as an attachment in Section J)

#### C.2.7 Other Government Documents

C.2.7.1 Modular Open Systems Architecture in DoD Acquisition, (For guidance only), 29 Oct 14.

(This document is available at: [http://www.acq.osd.mil/se/briefs/16943-2014\\_10\\_29\\_NDIA-SEC-Welby-MOSA-vF.pdf](http://www.acq.osd.mil/se/briefs/16943-2014_10_29_NDIA-SEC-Welby-MOSA-vF.pdf))

C.2.7.2 National Aerospace Standard (NAS) 411: Hazardous Materials Management Program, 3<sup>rd</sup> Edition, (For guidance only), 30 Sept 13.

(This document is available at:

[https://global.ihs.com/doc\\_detail.cfm?&rid=AIA&item\\_s\\_key=00156371&item\\_key\\_date=860301&input\\_doc\\_number=411&input\\_doc\\_title=&org\\_code=AIA%2FNAS](https://global.ihs.com/doc_detail.cfm?&rid=AIA&item_s_key=00156371&item_key_date=860301&input_doc_number=411&input_doc_title=&org_code=AIA%2FNAS))

C.2.7.3 AF 24-204/TM 38-250/NAVSUP PUB 505/MCO P4030.19J/DLAI 4145.3: Preparing Hazardous Materials for Military Air Shipments, 12 Oct 04

(This document is available at:

[https://dap.dau.mil/policy/Documents/Policy/AFMAN24\\_204\\_I%5B1%5D.pdf](https://dap.dau.mil/policy/Documents/Policy/AFMAN24_204_I%5B1%5D.pdf))

C.2.7.4 Title 49 Code of Federal Regulations

(This document is available at:

<https://www.gpo.gov/fdsys/browse/collectionCfr.action?selectedYearFrom=2015&go=Go>)

C.2.7.5 National Institute of Standards and Technology (NIST) Interagency Report 7622, Notional Supply Chain Risk Management Practices for Federal Information Systems, (For guidance only), Oct 12.

(This document is available at: <http://nvlpubs.nist.gov/nistpubs/ir/2012/NIST.IR.7622.pdf>)

C.2.7.6 Common Chemical Biological Radiological Nuclear Sensor Interface (CCSI) Standard 1.1.2

(For proposals, Offerors may submit a request for a copy to the Contracting Officer).

### C.2.8 Commercial Documents.

C.2.8.1 SAE EIA 649B (For guidance only), Configuration Management Standard, 2011. (This document is available at: <http://www.ansi.org>)

C.2.8.2 National Defense Industrial Association (2008) guidebook, *Engineering for System Assurance*, (For guidance only), (This document is available at: <http://www.acq.osd.mil/se/docs/SA-Guidebook-v1-Oct2008.pdf>)

C.2.8.3 ISO 9001, Quality Management Systems, 5<sup>th</sup> edition:15 Sept 15, (This document is available at: [http://www.iso.org/iso/home/store/catalogue\\_ics/catalogue\\_detail\\_ics.htm?csnumber=62085](http://www.iso.org/iso/home/store/catalogue_ics/catalogue_detail_ics.htm?csnumber=62085))

C.2.8.4 ASTM D3951, Standard Practice for Commercial Packaging, (This document is available at: <http://www.astm.org/Standards/D3951.htm>)

C.2.8.5 ASTM D4169 Standard Practice for Performance Testing of Shipping Containers and Systems, (This document is available at: <http://www.astm.org/Standards/D4169.htm>)

C.2.8.6 ISPM 15, International Standards for Phytosanitary Measures, 2009, (This document is available at: [www.ispm15.com/ISPM15\\_Revised\\_2009.pdf](http://www.ispm15.com/ISPM15_Revised_2009.pdf))

C.2.8.7 ANSI-MH1, Pallets, Slip Sheets, and Other Bases for Unit Loads, 08 Jan 16 (This document is available at: <http://www.mhi.org/free/8956>)

C.2.8.8 International Air Transportation Association (IATA) Dangerous Goods Regulation (This document is available at: <https://www.iata.org/publications/dgr/pages/index.aspx>)

C.2.8.9 TA-STD-0017, Product Support Analysis (This document is available at: <http://www.sae.org>)

C.2.8.10 GEIA-STD-0007C, Logistics Product Data, 21 Oct 15, (This document is available at: <http://standards.sae.org/wip/geiastd0007c/>)

C.2.8.11 GEIA-HB-0007B (For guidance only), Logistics Product Data Handbook,10 Feb 14, (This document is available at: <http://standards.sae.org/geiahb0007/>)

### C.3 **REQUIREMENTS.**

The Contractor, as an independent Contractor and not as an agent of the Government, shall provide the necessary services, personnel, labor, facilities, materials, supplies, and equipment to perform the following work.

### C.3.1 Program Management.

The Contractor shall establish a program management organization responsible for the execution of this PWS with the appropriate management controls and processes to ensure that the contract requirements are met. The Contractor shall manage the contract activities by providing integrated program management, program control, contract and subcontracts management, data management, and operations management. The Contractor shall use a well-defined and efficient organizational, management, and development methodology consistent with an Integrated Process and Product Development approach as the primary method of organizing and managing this PWS and ensure that all teams have the expertise and disciplines integrated throughout the process.

#### C.3.1.1 Meetings/Reviews/Teleconferences (Telecons)

The Contractor shall participate in the required meetings, reviews, and telecons as listed in this contract. Whenever possible and appropriate, meetings and reviews shall be conducted virtually using the most appropriate technology. Physical meetings and reviews shall be scheduled in tandem, or groups, to minimize personnel resources and travel expenses, when appropriate. All meetings, reviews, and telecons shall be hosted by the Contractor. The Government may request that an individual meeting or review be held at a Government facility on a case-by-case basis, and such a request must be made thirty (30) days prior to the meeting or review.

#### C.3.1.2 Start of Work Meeting.

The Contractor shall hold a Start-of-Work (SOW) meeting at the Contractor's facility not later than thirty (30) calendar days after award. Briefing agenda shall include, as a minimum, introduction of key personnel, schedule, review of key design features, and information distribution. The meeting shall have a break out session for Integrated Product Support to include Technical Manual(s) (TM). The Contractor shall prepare an agenda and read-ahead package/briefing charts for Government approval in accordance with (IAW) Exhibit Line Item Numbers (ELIN) B001. The Contractor shall record and deliver Meeting Minutes IAW ELIN B002.

#### C.3.1.3 Action Items.

The Contractor shall create and implement a system for tracking, following-up on, and resolving open items ("Action Items") including the review of the status of open items during subsequent meetings. The Contractor shall immediately inform the Contracting Officer (KO) and Contracting Officer Representative (COR) if there are open actions preventing or delaying the completion of program or contract data delivery schedules.

#### C.3.1.4 Work Breakdown Structure (WBS), Integrated Master Schedule (IMS) and Integrated Master Plan (IMP).

The Contractor shall maintain, update and execute to a WBS, IMS and IMP IAW ELIN B018, B003 and B019 respectively, and ensure that they align. The Contractor shall manage their program IAW the WBS, IMS and IMP. The Contractor shall update the WBS and IMS provided in their proposal for use during the SOW. The WBS and IMS presented at the SOW meeting shall reflect detailed planning for the EMD contract performance. The Contractor shall establish, maintain and provide the Government direct access to the Contractor's working IMS on a



continuous basis. The Contractor, in conjunction with the Government, shall update the IMS on an as needed basis. The Contractor shall ensure that the IMS aligns with the Government schedule throughout the contract.

#### C.3.1.5 Monthly Reports.

C.3.1.5.1 The Contractor shall deliver a monthly status report IAW ELIN B004.

C.3.1.5.2 The Contractor shall collect, monitor and report the data associated with labor, material, subcontracting, and overhead costs and include a monthly spend plan.

C.3.1.5.3 The Contractor shall report the status and progress on the development and delivery of technical manuals to include schedule.

#### C.3.1.6 Bi-Weekly Telecons.

The Contractor shall hold bi-weekly telecons with the Government for ongoing activities. The purpose of these meetings is for the Contractor and Government representatives to openly discuss technical progress, issues, and risks. The first bi-weekly telecon shall be held the first month following the SOW meeting. Agenda topics, meeting minutes, read ahead items, if any, and action items shall be provided IAW ELINs B001 and B002. The Contractor and Government may mutually agree to cancel a bi-weekly telecon during a particular month due to lack of discussion topics or a review or meeting being held the same month.

#### C.3.1.7 Program Reviews.

The Contractor shall conduct semi-annual Program Reviews (PRs) that include program management participation, technical management and Subject Matter Expert (SME) participation, as appropriate. The Contractor shall present cost, schedule, performance, and risk status at each PR and be prepared for detailed discussion with the Government. PRs may be held in conjunction with Design Reviews (DRs) and Technical Interchange Meetings (TIMs) to limit meeting proliferation. The Contractor shall prepare an agenda and read-ahead package/briefing charts for Government approval IAW ELIN B001. The Contractor shall record and deliver Meeting Minutes IAW ELIN B002.

#### C.3.1.8 Design Reviews.

##### C.3.1.8.1 Preliminary Design Review (PDR)

The Contractor shall host a Preliminary Design Review (PDR) at the Contractor's facility using the Defense Acquisition Guidebook, Paragraph 4.2.12 as guidance not later than seventy-five (75) calendar days after contract award. The Contractor shall submit a PDR Data Package IAW ELIN A001. The Contractor shall, as a minimum, address requirements; key system features; future material availability; long lead items; estimated life cycle costs for final design and design alternatives; projected cost of the detector system in production; manufacturing risks; estimated failure modes and rates; Logistics Product Data (LPD) considerations; and the draft Technical Data Package (TDP) in this review. The review shall include recommended requirements trade-offs based upon an assessment of cost, schedule, and performance risk. The Contractor shall

prepare an agenda and read-ahead package/briefing charts for Government approval IAW ELIN B001. The Contractor shall record and deliver Meeting Minutes IAW ELIN B002.

#### C.3.1.8.2 Critical Design Review (CDR)

The Contractor shall host a Critical Design Review (CDR) at the Contractor's facility using the Defense Acquisition Guidebook, Paragraph 4.2.13 as guidance. The Contractor shall submit a CDR package IAW ELIN A002. The Contractor shall address requirements specified in the Performance Specification and include updated performance; Size, Weight and Power (SWaP); key system features; future Material Availability ( $A_m$ ); long lead items; estimated life cycle costs for final design and design alternatives; projected cost of the components and systems in production; manufacturing risks; estimated failure modes and rates; logistics management considerations; and the TDP in this review. The review shall include recommended requirements trade-offs based upon an assessment of cost, schedule, and performance risk. The CDR will be 30 days after the Customer Test data delivery is complete. The Contractor shall prepare an agenda and read-ahead package/briefing charts for Government approval IAW ELIN B001. The Contractor shall record and deliver Meeting Minutes IAW ELIN B002.

#### C.3.1.9 Technical Interchange Meetings (TIM)

The Contractor shall conduct quarterly TIMs to facilitate technical discussions at a working level. The TIMs may cover test results, logistic planning, design challenges, etc. The first TIM will be three (3) months after delivery of CLIN 0001 and CLIN 0002. The Contractor shall prepare an agenda and read-ahead package/briefing charts for Government approval IAW ELIN B001. The Contractor shall record and deliver Meeting Minutes IAW ELIN B002.

#### C.3.1.10 Security

The contractor shall follow security requirements outlined in the DD254 (Section J), NGCD Program Protection Plan (PPP) (C.2.6.1, Section J), the NGCD Security Classification Guide (C.2.6.2, Section J), and the Department of Defense Security Classification Guide for Non-Traditional Agent Defense (C.2.4.3).

##### C.3.1.10.1 Program Protection Implementation Plan (PIIP)

The Contractor and all subcontractors shall develop, provide, implement and maintain a Program Protection Implementation Plan (PIIP) IAW ELIN B005. The Contractor shall align their PIIP with the NGCD PPP, and revise their PIIP accordingly if updates to the NGCD PPP occur. If Critical Program Information (CPI) or Critical Components (CC) exists per updates to the PPP IAW DoDI 5200.39, the PIIP shall cover the protection of CPI/CC, compliant with the security requirements imparted by the DD254 and the National Industrial Security Program (NISP) (C.2.3.2). The PIIP should provide sufficient safeguards to ensure that all sensitive information, technical controlled unclassified information (CUI) and/or (CPI) in the possession of the Contractor is protected from unauthorized access and release.

##### C.3.1.10.2 Cybersecurity Management

The Contractor shall include a Cybersecurity Management Strategy in the PIIP (ELIN B005) that aligns with the Cybersecurity Strategy of the PPP. The Contractor shall provide assistance in security control selection and implementation, security control assessment and security control monitoring as outlined in "NIST Special Publication 800-37, Revision 1, Guide for Applying the

Risk Management Framework to Federal Information Systems”. The Contractor's Cybersecurity Management Strategy shall protect information using the DoDI 8510.01 confidentiality, integrity and availability levels described in the Cybersecurity Strategy of the PPP. The Contractor’s Cybersecurity Management Program Plans and related information shall be available to the Government.

#### C.3.1.10.3 Program Protection Working Group (PPWG)/Critical Program Information Assessment (CPIA).

The Contractor shall host a PPWG within four (4) months after contract award and a second PPWG within twelve (12) months after contract award. Subsequent PPWGs shall be held as needed. Each PPWG will be chaired by the Government security manager and co-chaired by the Contractor security manager. The co-chair shall develop the agenda. The agenda shall include a CPIA that will identify potential Critical Program Information or Critical Technology (defined by Army Regulation 70-77 Program Protection, 7 April 2014). Each PPWG will be a one (1) day event. After each event, the Government will provide the results of the meeting via the COR to include but not limited to validating any CPI/Critical Technology for the program, and/or Critical Functional Analysis (CFA).

#### C.3.1.10.4 Anti-Tamper (AT) Planning and Solutions.

The Contractor shall design, develop and integrate Anti-Tamper (AT) solutions for hardware and software to deter, prevent, and detect the compromise and reverse engineering of the AVCAD. The Contractor shall conduct verification and testing of AT solutions and shall provide necessary hardware, consumables, and support equipment necessary to execute testing. The Contractor shall utilize reverse engineering countermeasures that are commensurate with the exposure levels and consequence of Critical Program Information loss using the analysis process identified in the DoD Anti-Tamper (AT) Guidelines (<https://at.dod.mil/>). An Account is required for login. The Government will provide the Contractor with sponsorship and access to the DoD AT Guidelines. The Contractor shall document and deliver the detailed Anti-Tamper solutions as an Anti-Tamper Plan Annex to the PPIP IAW ELIN B0005. Incorporation of validated AT solutions into contractual deliverable hardware shall be in accordance with the IMS.

#### C.3.1.10.5 Contractor Employees who require access to Government Information Systems.

All Contractor and subcontract employees with access to a Government information system must be registered in the Army Training Certification Tracking System (ATCTS) at the commencement of services and must successfully complete the DoD Informational Assurance Awareness Training prior to receiving access to the information system(s) and then annually thereafter.

#### C.3.1.10.6 Operations Security (OPSEC) Standing Operating Procedure/Plan

The Contractor shall develop an OPSEC Standing Operating Procedure (SOP)/Plan within 90 calendar days of contract award, IAW ELIN B006, to be reviewed and approved by the responsible Government OPSEC officer, per AR 530-1. This SOP/Plan shall include the Government's critical information, why it needs to be protected, where it is located, who is responsible for it, and how to protect it. In addition, the Contractor shall identify an individual who shall be an OPSEC Coordinator and ensure this individual becomes OPSEC Level II certified per AR 530-1.

#### C.3.1.10.7 Handling or Access to Classified Information.

The Contractor and subcontractor personnel shall comply with FAR 52.204-2, Security Requirements. This clause involves access to information classified “Confidential,” “Secret,” or “Top Secret” and requires Contractors to comply with the Security Agreement (DD Form 441) and the most recent version of the National Industrial Security Program Operating Manual (DoD 5220.22-M).

### C.3.2 Systems Engineering.

#### C.3.2.1 Systems Engineering Management Plan.

The Contractor shall provide a Systems Engineering Management Plan (SEMP) that describes the Contractor's system engineering process to guide all technical aspects of the development through the AVCAD EMD phase IAW the Contractors IMS. The Contractor's SEMP shall align with the NGCD 1 SEP (C.2.6.3, Section J). The Contractor shall prepare the SEMP IAW ELIN B007.

#### C.3.2.2 Requirements Analysis

The Contractor shall develop, deliver and update the Requirements Compliance Matrix (RCM) that tracks achievement of all AVCAD requirements as the development and tests progress (ELIN B008). The RCM shall be logically organized and clearly depict the level of fidelity for each requirement assessment and trace or link to the supporting basis for the assessment. The RCM shall trace directly to the AVCAD Performance Specification (PSPEC) (C.2.6.4). The Contractor shall brief the overall progress in terms of the RCM at PRs, DRs, and TIMs.

#### C.3.2.3 Reliability, Availability, and Maintainability Program.

The Contractor shall establish, maintain, and operate a Reliability, Availability and Maintainability (RAM) program. The Contractor shall provide the Government an overview of their reliability program at the SOW meeting. The RAM program shall be updated and addressed by the Contractor at each PR, DR, and TIM. The Contractor shall include RAM Rationale in the SEMP as a comprehensive compendium of the Contractor's reliability activities, functions, processes, test strategies, measurements, data collections, resources, and timelines required to ensure that the specified reliability of the system in the AVCAD PSPEC will be achieved before fielding.

#### C.3.2.4 Failure Reporting, Analysis, and Corrective Action System (FRACAS)

C.3.2.4.1 The Contractor shall implement and maintain a Failure Reporting, Analysis and Corrective Action System (FRACAS) for collecting, recording and analyzing hardware, packaging and software failures or nonconformities during conformance and lot acceptance inspections and tests, Production Qualification Test (PQT), Production Verification Test (PVT), and First Article Testing (FAT), Government conducted testing, and from any field reports supplied by the Government. The Contractor shall track these occurrences in a standard format which provides adequate information to conduct failure analysis.

C.3.2.4.2 The Contractor shall establish a system that provides a process for reporting, classifying and analyzing Failure Mode, Effects and Criticality Analysis (FMECA) and planning corrective actions in response to those failures. The Contractor shall analyze failure and nonconformance data to identify the frequency and severity of these problems and to assess the need for corrective actions and to prioritize the implementation of corrective actions to prevent recurrence. (MIL-HDBK-2155 may be used for guidance).

C.3.2.4.3 The Contractor shall include a summary of the open FRACAS items in the Monthly Reports and provide a summary at PRs, DRs, and TIMs.

#### C.3.2.5 Interfaces.

The Contractor shall prepare, deliver and update Interface Control Documentation (ICD) that identify the interface requirements between: Hardware Configuration Items (HWCI) and hardware devices (HWCI to HWCI); Software Configuration Items (SCI) and hardware devices (SCI to HWCI); and HWCI and SCI to systems external to AVCAD IAW ELIN A003. The Contractor shall define and brief the configuration items at PRs, DRs, and TIMs.

#### C.3.2.6 Computer Resources/Software (SW) IPT.

The Contractor shall establish a bi-weekly joint Government and Contractor Software IPT telecon. The purpose of these telecons will be to conduct coordinated discussions to include the following topics (at a minimum); Cybersecurity, Program Protection and Common CBRN Sensor Interface (CCSI). The SW IPT will be responsible for maintaining and updating the Software Development Plan (SDP) as process changes and improvements are identified. The SW IPT may be combined with other meetings or reviews as appropriate. The Contractor and Government may mutually agree to cancel a SW IPT due to lack of discussion topics or a review or meeting being held the same month. Agenda topics, meeting minutes, read ahead items, if any, and action items shall be provided IAW ELINs B001 and B002.

##### C.3.2.6.1 Cybersecurity Support

The Contractor shall implement cybersecurity into the design and development of their system. The SW IPT shall function as the single point of contact for interaction between the Government Cybersecurity team and the Contractor. Cybersecurity support will consist of Contractor cybersecurity management IAW C.3.1.10.2, electronic exchange of Risk Management Framework (RMF) technical implementation documentation and discussions to be held at the SW IPT IAW C.3.2.6, where the Contractor will discuss their implementation of RMF security controls and the Government will provide any updates to regulations and policies. The Contractor shall ensure that all system deliverables meet the requirements of DoD Cybersecurity policy and guidance. Security validation shall be accomplished throughout the system life cycle. The Vulnerability Scan Compliance (VSC) Report shall be submitted IAW ELIN A005.

##### C.3.2.6.2 CCSI Support

The Contractor shall incorporate the CCSI standard into their system. The SW IPT (C.3.2.6) shall function as the single point of contact for interaction between the Government CCSI Subject Matter Expert and the Contractor. Support will include electronic exchange of CCSI technical implementation documentation through the SW IPT (C.3.2.6) for discussion of

implementation of the CCSI standard with the Government. The latest version of the CCSI standard will be provided after contract award.

#### C.3.2.7 Modular Open System Approach (MOSA)

C.3.2.7.1 The Contractor shall use a Modular Open Systems Approach (MOSA) to implement a modular design strategy for building the AVCAD. The Contractor shall apply MOSA considerations in the selection of components and subsystems to meet the AVCAD design functionality. A MOSA and analysis of long term supportability (including obsolescence management), interoperability, and growth for future modifications shall be major factors in the Contractor's final design decisions and integration approach and presented at DRs. All the AVCAD system components and subsystems shall facilitate future upgrades and permit incremental technology insertion to allow for incorporation of additional or substitution of higher performance elements with minimal impact on the existing systems. The "Modular Open Systems Architecture in DoD Acquisition, October 29, 2014" may be used as a reference.

C.3.2.7.2 The Contractor shall ensure that AVCAD modular design and integration preclude dependence on closed or proprietary interface standards, technologies, products or architectures. The Contractor shall design the AVCAD to provide sufficient growth and open interfaces to allow future reconfiguration and addition of new capabilities without large-scale redesign of the system.

#### C.3.2.8 Program Risk Management

The Contractor shall develop, implement, and deliver, as part of the SEMP (ELIN B007) a Risk Management Plan (RMP) following the concepts in the Risk Management Guide for DoD Acquisition. The Contractor's RMP shall include all program and system level plans to identify and mitigate program risks in the areas of cost, schedule, and performance.

C.3.2.8.1 The Contractor's RMP shall address

- Risk Management Strategy and Process
- Responsible/Executing Organization
- Risk Management Process and Procedures
- Risk Identification
- Risk Analysis
- Risk Mitigation Planning
- Risk Mitigation Plan Implementation
- Risk Tracking and Reporting

C.3.2.8.2 Risk management shall be an integral part of all PRs, DRs, TIMs, and bi-weekly telecons. The Contractor shall systematically identify, analyze, and report risk mitigation activities for all risk areas.

C.3.2.8.3 Uncertainty evaluations shall consider overall program objectives, IMS and operational requirements baseline. The Contractor shall develop mitigation plans to identify the recommended critical path for contract completion and the appropriate risk handling approach to lower the level of uncertainty identified. The Contractor shall recommend decision points in

terms of performance, cost, and schedule objectives to facilitate management and technical control. The Contractor shall maintain a database of all risks and their status. Risk reporting shall present standard probability and consequence-screening criteria.

C.3.2.8.4 The Contractor shall establish mechanisms to effectively monitor the introduction of supply chain risk associated with critical components, and implement countermeasures to mitigate such risks, including the application of supply chain risk management best practices, applied as appropriate to the development of the system, and the enumeration of potential suppliers of critical components, as they are identified, including cost, schedule, and performance information and proposed selection decisions for the purposes of obtaining approval from the Government and engaging in the development of mutually agreeable risk management plans for the selected suppliers of critical components. Supply chain risk management key practices may be found in the National Institute of Standards and Technology (NIST) Interagency Report 7622, Notional Supply Chain Risk Management for Federal Information Systems, and the National Defense Industrial Association (2008) guidebook, Engineering for System Assurance.

#### C.3.2.9 Manufacturing

##### C.3.2.9.1 Manufacturing Readiness Assessment

The Contractor shall conduct assessments of manufacturing risk and readiness and determine Manufacturing Readiness Levels throughout the life of the contract (ELIN B015) using the Manufacturing Readiness Level Deskbook as a guide. The Contractor shall identify high manufacturing risk technologies or components and present appropriate risk analysis and associated maturation plans within the IMS (ELIN B003).

##### C.3.2.9.2 Manufacturing Plan

The Contractor shall prepare and submit a Manufacturing Plan, IAW to ELIN B016.

C.3.2.9.3 The Contractor shall manufacture, package, and deliver hardware as specified. All manufacturing shall be IAW the Contractor's Manufacturing Plan, Quality Assurance Program Plan, and Configuration Management Plan.

C.3.2.9.4 The Contractor shall address manufacturing at the PDR and CDR.

#### C.3.2.10 Quality Assurance Program Requirements (All Delivered Hardware and Software).

C.3.2.10.1 The Contractor's Quality Assurance Program (QAP) shall be certified to the current revision of ISO 9001 or a path to be certified prior to any LRIP options must be provided. The Contractor's QAP shall be designed to promptly detect, correct and prevent conditions that adversely affect the quality of contract deliverables including documents, services, products, and software. The Government may perform audits and assessments to assure Contractor ISO 9001 compliance.

C.3.2.10.2 As part of the QAP, the Contractor shall establish, implement, and conduct a software quality program IAW software quality practices identified by the Software Development Plan

(SDP). The SDP shall be included as an appendix to the Quality Assurance Program Plan (QAPP) IAW ELIN B017 (C.3.2.10.4). The Contractor shall ensure that the software quality program complies with the requirements of ISO 9001 approved by the Government.

C.3.2.10.3 The software quality program shall address the following areas, at a minimum: software quality planning including resources, software reviews, in-process software evaluations, evaluator independence, verification and validation, record keeping requirements, problem reporting and corrective action, and software quality product and process metrics.

C.3.2.10.4 Contractor Quality Assurance Program Plan (QAPP). The Contractor shall update and maintain the implementation of the QAP in a Quality Assurance Program Plan (QAPP) throughout the life of the contract. Contractor documents referenced in the QAPP shall be provided to the Government upon request. If the Contractor holds a registration certificate for ISO 9001, the Contractor shall include a copy of the registration certificate in the QAPP. If the Contractor does not hold a registration certificate for ISO 9001, the Contractor shall declare it in the QAPP and describe in the QAPP how compliance to the standard shall be demonstrated and maintained. The Contractor shall address and implement Government comments to the Contractor's QAPP IAW ELIN B017.

#### C.3.2.11 Configuration Management

The Contractor shall implement and maintain a Configuration Management (CM) process, which governs all aspects (hardware and software) of AVCAD development (to include Government Furnished Equipment, Information, and Material) throughout the EMD phase of the systems engineering life cycle. SAE EIA 649B and MIL-HDBK-61A provide guidance. The Contractor shall ensure that the requirements of this CM process are allocated to all levels of organizations internal to the Contractor and its subcontractors to ensure that the basic elements of CM and control are consistent across all members involved and that established baselines are maintained, communicated and understood across all organizations involved. Configuration control of the AVCAD PSpec will be retained by the Government. The Contractor shall manage all prototype design drawings/models, TDP, specification and engineering documentation. The Contractor may request a change to the PSpec through the COR.

##### C.3.2.11.1 Configuration Management Plan (CMP)

The Contractor shall implement and maintain the CM processes and procedures submitted with its proposal. The Contractor shall designate a CM representative to serve as a primary Point of Contact (POC) to the Government for all CM matters. Prototype CM status shall be reported at all DRs. The Contractor shall notify the Government of any changes which affect the Contractor's established CM process. The Contractor shall submit a CMP for Government approval IAW ELIN B009. The approved CMP shall serve as the baseline for all CM activities.

##### C.3.2.11.2 Engineering Change Proposals (ECP)

The Contractor shall provide ECPs IAW ELIN B010. Government approval of an ECP in no way invalidates any contractually required warranty or performance specification unless specifically stated in a contract modification.

##### C.3.2.11.3 Notice of Revision (NOR)



The Contractor shall prepare and submit Notices of Revision (NORs), in conjunction with the ECP submission process, IAW ELIN B011.

#### C.3.2.11.4 Request for Deviation (RFD)

The Contractor shall prepare and submit Requests for Deviation (RFDs) for all hardware changes IAW ELIN B012. Government approval of RFDs in no way invalidates any contractually required warranty or performance specification unless specifically stated in a contract modification.

#### C.3.2.11.5 Configuration Status Accounting Information

The Contractor shall perform configuration management and status accounting of the configuration of all aspects of the AVCAD deliverable hardware IAW the Government approved CMP and the terms of this contract. The Contractor shall ensure that all engineering changes, deviations and use of non-conforming hardware are reflected in the CM documentation IAW ELIN B013. The Contractor's CM Program shall guarantee continuous form, fit, function, and interchangeability of the AVCAD system and auxiliary equipment with the spare and repair parts, and consumable supplies.

#### C.3.2.11.6 Configuration Control Board (CCB)

The Contractor shall establish a Configuration Control Board (CCB) to review changes and recommend appropriate action prior to approval and implementation. The Contractor shall provide the Government at least a ten (10) working day notice prior to convening the CCB so if the Government chooses a representative may attend in person or via telephone or video conference.

#### C.3.2.11.7 Material Review Board

The Contractor shall establish and maintain a Material Review Board (MRB) to determine the acceptance status of nonconforming parts and material used in fabrication of the AVCAD deliverable hardware throughout the life of the contract. The Government may attend all MRBs either in person or via teleconference or video conference.

### C.3.2.12 Environmental, Safety, and Occupational Health

#### C.3.2.12.1 Safety and Occupational Health

##### C.3.2.12.1.1 System Safety Engineering Principles

The Contractor shall follow system safety engineering best-practices and established design standards during the development of the system/subsystem and prototypes.

##### C.3.2.12.1.2 Safety Assessment Reports (SAR)

The Contractor shall provide Safety Assessment Reports (SARs), to summarize safety and health hazard data, provide a comprehensive evaluation of the safety and health risks, and identify procedures/precautions required for safe use of the system/subsystem and prototypes. (ELIN B014). The Contractor shall use the Hazard Severity and Probability categories and definitions along with the Hazard Risk Index Matrix in the MIL-STD-882E to assign Risk Assessment

codes and categorize risk levels. The Contractor shall deliver a SAR 30 calendar days prior to each Government test event.

#### C.3.2.12.2 Hazardous Materials Management.

The Contractor shall evaluate, plan, and implement a program to eliminate and reduce the use of toxic and hazardous materials in processes and products IAW Executive Order No. 13693. The Contractor shall conduct efforts to minimize, eliminate, and control hazardous/toxic waste materials in AVCAD production. Guidance is available in National Aerospace Standard (NAS) 411, sections 4.2, 4.4, and 5.3.

#### C.3.2.12.3 Ozone Depleting Substances (ODS).

The Contractor shall avoid or minimize the use of Class II (ODS). (Reference FAR subparts 23.8 through 23.10, US EPA Class II Ozone Depleting Substances, and US EPA TRI Listed Chemicals.

#### C.3.2.12.4 Hazardous Materials Use.

The Contractor shall develop and implement plans and procedures for the tracking, storing, handling, packaging, transporting, and disposing of such materials and documents when the use of hazardous materials cannot be avoided. In addition, the Contractor shall ensure that the shipping configuration or container, as applicable, be packed to meet all modes of shipment as specified in the most current version of the following required documents: Title 49 Code of Federal Regulations Part 100 thru 180; the International Air Transportation Association (IATA) Dangerous Goods Regulation; the International Maritime Dangerous Good (IMDG) Code; and the AF 24-204/TM 38-250/NAVSUP PUB 505/MCO P4030.19J/DLAI 4145.3 "Preparing Hazardous Materials for Military Air Shipments." In the event the requirements of this PWS conflict with the respective Regulation stated above for the respective mode of transportation, the Regulation listed above shall take precedence. When an item is forbidden for shipment IAW the required document for that mode of transportation, the requirements of this PWS for that particular mode of transportation are not applicable.

#### C.3.2.12.5 Material Safety Data Sheets.

The Contractor shall provide material safety data sheets (OSHA Form 20) for known hazardous materials, to include ozone-depleting substances. (Reference: FAR subpart 23.3.)

#### C.3.2.12.6 Use of Recoverable Materials and Environmentally Preferable and Energy Efficient Products and Services.

The Contractor shall use environmentally preferable, recycled, or recovered materials that exceed or meet the operational and maintenance requirements as well as reduce life-cycle cost to the maximum extent possible. (Reference Executive Order 13101 and FAR subparts 23.4 and 23.7.)

### C.4 **EMD AVCAD Customer Test**

C.4.1 The Government will initially evaluate the AVCAD equipped with two different aerosol sampling approaches. The results of agent chamber testing will inform a decision of which

aerosol approach to be incorporated into the design and delivered with EMD hardware. The Government will also evaluate AVCAD system algorithm performance.

C.4.2 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver three (3) AVCAD systems meeting at least Technology Readiness Level (TRL) 6, with lab personnel training. The AVCAD systems delivered shall include all accessories required for external power and communications. (CLIN 0001)

C.4.3 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver three (3) AVCAD systems that have an alternative Aerosol Approach meeting at least TRL 4, with lab personnel training. The AVCAD systems delivered shall include all accessories required for external power and communications. (CLIN 0002).

C.4.4 CLIN 0001 and CLIN 0002 shall be delivered six (6) months after contract award.

C.4.5 The detectors delivered in CLIN 0001 and CLIN 0002 will undergo CWA chamber testing for one hundred sixty (160) hours and shipboard false alarm testing for thirty (30) hours. The Government may elect to require rework to resolve system hardware or software issues prior to additional customer testing.

#### C.4.6 System Support Package

The Contractor shall identify to the Government all Preventive Maintenance Checks and Services (PMCS) and calibrations that may be required during the course of testing. The Contractor shall provide a System Support Package List (SSPL), as part of the proposal for CLIN 0003, which details all consumables and operator repair parts recommended for supporting for six (6) AVCADs for testing (see C.4.5). The Contractor shall supply the parts listed in the SSPL as a system support package. CLIN 0003 will deliver together with CLIN 0001 and CLIN 0002.

### C.5 **INTEGRATED PRODUCT SUPPORT (IPS) (CLIN 0004)**

#### C.5.1 IPS Management

C.5.1.1 The Contractor shall conduct Integrated Product Support (IPS) management and associated technical efforts to influence the design with respect to IPS (formerly referred to as integrated logistics support) and to identify and acquire the elements of IPS. The IPS elements include product support management, design interface, sustaining engineering, supply support, maintenance planning, PHS&T, technical data, support equipment, training and training support, manpower and personnel, facilities and infrastructure, and computer resources. The IPS management effort shall be conducted as an integral part of the development process and pursued to ensure realistic application of each IPS element. The Contractor shall assess the impact of design changes on each of the IPS elements, identify risks to include achieving the necessary support for each of the IPS elements, and outline strategies to mitigate these risks. The objective in this phase is to ensure the program develops an integrated logistics system that meets readiness requirements, sustains system performance capability threshold criteria, manages operating and support costs, optimizes the logistics footprint, and complies with environmental

and other logistics-related regulations. The Contractor shall use MIL-HDBK-502 as a guide for the IPS effort.

C.5.1.2 The Contractor shall form an IPS Integrated Process Team (IPT) to support the requirements generation and acquisition processes as they apply to supportability, and integrate activities across the IPS elements to achieve requirements for AVCAD. The IPS IPT shall track all integrated product/logistics support efforts and changes to the IPS elements as well as mass properties data, engineering investigations, safety, Quality Deficiency Reports, configuration identification, requests for deviations, and performance based logistics.

C.5.1.3 The chairperson of the IPT shall be appointed by the Government with the Contractor's IPS manager acting as co-chairperson. The IPT shall provide a means for coordinating and monitoring schedules and contract performance, thereby ensuring adequacy, timeliness, and compliance with established regulatory guidance and contractual requirements. The Contractor shall prepare or assist in the preparation of meeting agendas, minutes, and presentation materials IAW ELIN B001 and B002.

#### C.5.2 Integrated Product Support Planning

C.5.2.1 The Contractor shall develop/update and maintain the AVCAD Integrated Product Support Plan (IPSP) IAW ELIN D001, which describes the Contractor's IPS Program and explains how the Contractor addresses the IPS elements and the Human Systems Integration (HSI) domains (Manpower, Personnel, Training, Human Factors Engineering, System Safety, Health Hazards, and Personnel Survivability) in a systematic manner in order to develop and provide logistics products and support throughout each phase of the program while minimizing Operations and Support (O&S) cost projections for the system. The IPSP shall also detail how the Contractor intends to optimize RAM and reduce the system's logistics footprint and total ownership cost. The Contractor shall seek and propose ways to reduce Product Support Package costs. The Contractor shall coordinate any changes when updating Product Support Strategies based on analysis results, program schedule modifications, and program decisions with the Government IPS Manager and address/mitigate support plan risks associated with each support alternative in terms of cost, performance, schedule, and impact to the other IPS elements.

C.5.2.2 The IPSP will identify specific plans for the use of mock-ups, prototypes, and simulations as part of the IPS effort.

#### C.5.3 Product Support Analysis (PSA) Program

The Contractor shall establish, perform, and maintain a PSA Program to identify, develop, and acquire product support resources required for system support IAW TA-STD-0017 and GEIA-STD-0007C and using GEIA-HB-0007B and using MIL-HDBK-502A as a guide. The Contractor shall review the outcomes of design and trade studies and testing to identify impacts to and requirements for Supply Support. The Contractor shall consider the following prioritized supply attributes in the design: responsiveness, sustainability, flexibility, survivability, attainability, economy, and simplicity. The Contractor shall ensure supply support concepts are

compatible with the Government provided requirements and provide estimates on product support resource implications.

#### C.5.3.1 PSA Documentation and Data

The IPSP shall include a Product Support Analysis (PSA) Plan IAW Activity 2.1-2 of TA-STD-0017. The Contractor shall document and maintain data generated from the supportability analyses in a PSA database. PSA documentation shall consist of all data resulting from product support/supportability analysis activities conducted for this program.

#### C.5.3.2 PSA Reviews and IPS Evaluations.

The Contractor shall conduct Quarterly supportability analysis reviews IAW TA-STD-0017, Activity 3, and incremental IPS evaluations to identify supportability issues, risk, mitigation actions, and provide technical interchange between the Contractor and Government. The Contractor shall prepare or assist in the preparation of procedures, agendas, minutes, and presentation materials IAW ELIN B001 and B002. Reviews may include Built-in Test (BIT) and maintainability demonstrations.

#### C.5.3.3 Evaluation of Product Support Alternatives and Tradeoff Analysis.

The Contractor shall perform tradeoff analyses to include those for new/critical support, sensitivity of support, manpower/personnel, job/duty, diagnostics, baseline comparative system/new system, energy, damage/repair, transportability, and facility.

C.5.3.3.1 The manpower and personnel tradeoff analysis shall include assessment of manpower and personnel constraints in both quantity and skill levels, whether the system might require any aptitude-sensitive critical tasks, and include personnel factors, such as availability, recruitment, skill identifiers, promotion, and assignment considerations.

C.5.3.3.2 The Contractor shall conduct training trade-off studies to validate and forecast training and training support outcomes as a result of design of the system and its intended sustainment footprint encompassing all 12 IPS elements. The analysis shall consider alternatives that provide for the individual, collective, and joint training for system operators, maintainers, and support personnel. The training system may include simulators and other training equipment, as well as supporting material such as computer-based interactive courseware or interactive electronic TMs. Where possible, the alternatives shall consider options to exploit the use of new learning techniques, simulation technology, embedded training (i.e., training capabilities built into, strapped onto, or plugged into operational systems) and/or distributed learning to promote the goals of enhancing user capabilities, maintaining skill proficiencies, and reducing individual and collective training costs.

#### C.5.4 Maintenance Planning.

##### C.5.4.1 Level of Repair Analysis (LORA).

The Contractor shall conduct a LORA IAW TA-STD-0017, Activity 11, and document results for the LORA IAW ELIN D003.

C.5.4.2 Calibration. The Contractor in coordination with the Government shall develop a Calibration and Measurement Requirements Summary IAW ELIN D005 for all items requiring calibration that do not currently have organic calibration support. Calibration shall be accomplished by comparison to external standards traceable to the National Institute of Standards and Technology (NIST) or industry consensus standards. The Contractor shall propose alternative approaches that allow the AVCAD to be checked for operational readiness by the using organization.

C.5.4.2.1 Standards. The Contractor shall, for all items requiring calibration that do not currently have organic calibration support, accomplish calibration by comparison to external standards traceable to the NIST or industry consensus standards. The Contractor shall provide a certification label and documentation stating traceability to NIST or industry consensus standards with each item for which calibration services are provided. The Contractor may use MIL-STD-1839D for guidance.

C.5.4.2.2 TM Calibration Data. The Contractor shall include a calibration section as part of the operation and service manual furnished with the unit. The calibration procedure may be in Contractor format to include a list of required calibration support equipment, by recommended part number, minimum performance specifications for all recommended test equipment connection diagram and step-by-step instructions to follow for completing the calibration.

C.5.4.2.3 Calibration Data Report. The Contractor shall provide calibration data to return the instrument to an in tolerance condition. The calibration data shall include as found, as left for all AVCAD calibration, to include all adjustments. Contractor format is authorized and the data shall be submitted IAW ELIN D006

C.5.4.3 Logistics/Maintenance Demonstration(s)

C.5.4.3.1 The Contractor shall conduct Log/Maintenance Demonstrations and supportability testing in developmental Test and Evaluation (T&E) and in representative field conditions of operational T&E (either at the Contractor's facility or a Government designated facility). The Contractor shall prepare a Log/Maintenance Demo Test Plan IAW ELIN D007. To the extent possible, the Contractor shall also provide a critical path list and a fault insertion list for verification of trouble-shooting procedures. The Log/Maintenance Demo is a joint Government/Contractor activity to verify by demonstration the actual maintainability characteristics of the system against the maintainability requirements.

C.5.4.3.2 The Log/Maintenance Demo(s) shall also evaluate the field maintenance requirement. The Contractor shall provide all the tools, test equipment, support equipment, TM procedures, a list of fault insertions to test the BIT/built-in-test-equipment, and engineering hardware/software support as part of the Product Support Package (PSP). (Note that the demo may test the initial or components of the initial PSP, and the Government will procure the final PSP components during the next acquisition phase.) The Contractor shall be responsible for the set-up and tear-down of the Log/Maintenance Demonstration events.

C.5.4.3.3 Supportability testing shall stress use of Government personnel skills for maintaining the system, support equipment, TMs, tools, and TMDE, including embedded diagnostics, prognostics, instrumentation and Test Program Sets (TPSS) projected for the operational environment. A final report for the Log/Maintenance Demo activity shall be prepared IAW ELIN D004.

C.5.4.3.4 The Log/Maintenance Demo will use MIL-HDBK-470 as a guide.

C.5.4.4 Item Unit Identification (IUID). The Contractor shall apply Item Unit Identification (IUID) criteria (found in “DOD Guide to Uniquely Identifying Items”) to identify and recommend configuration items/ components for IUID marking. The Contractor shall submit a list of recommended IUID Candidates ELIN D008. Upon Government approval of the IUID Candidates List, the Contractor shall perform all non-recurring engineering necessary to incorporate IUID-marking into design and production of the approved IUID candidates. The IUID marking method and location shall be defined in the drawing for each IUID candidate and delivered IAW the Product Baseline drawings. If granted, exceptions to IUID marking requirements will be processed as specified in DFARS 211.274-2. The Contractor is not required to register IUID marked items during EMD. The Contractor’s IUID Plan shall be documented in the SEMP (ELIN B007).

#### C.5.5 Human System Integration (HSI).

The Contractor shall develop and execute an HSI program in the areas of human factors engineering, manpower, personnel, training, survivability, habitability, health hazards, and system safety in accordance with MIL-STD-1472G. The main focus of the HSI program is to ensure that human considerations are effectively integrated into the AVCAD design, development, and deliverable documentation under this contract. The Contractor shall develop and maintain a single database for all HSI issues. These issues shall be included in the HSI Plan (DI-HFAC-81743) as a means to identify HSI issues and to ensure that the AVCAD is built to accommodate the characteristics of the user population that will operate, maintain, and support the system. All issues shall have mitigation plans that identify what organization and person is responsible for resolution of the issue, with the resourced schedule for resolution. The Contractor shall include a list of all major issues related to HSI, and establish mitigation and corrective action plans for each issue in support of all design and program reviews. The HSI Plan shall describe the approach and procedures for identifying, documenting, validating, prioritizing, tracking, reporting, resolving and mitigation verification of HSI issues and risks over the life of the program. It shall describe the process for trading off the HSI risk and issues in HSI domains, and between HSI and other disciplines and explain the Contractor procedures for communication and conflict resolution. The Contractor shall present the method and process for HSI and the process for tracking issues and risks. The HSI Plan shall be included as an appendix to the Systems Engineering Management Plan ELIN B007.

#### C.5.6 Provisioning.

The Contractor shall continue the provisioning process as described below.

##### C.5.6.1 Subcontractor Requirements.

The Contractor shall ensure that provisioning, TMs, and Rights in Data requirements of this contract are levied on all subcontractors and are fulfilled. The Contractor shall ensure that subcontractor-provided data is accurate and meets all requirements. The prime Contractor shall be responsible for obtaining subcontractor data necessary to develop provisioning/ publication change requests. The prime Contractor shall be the interface between the Government and subcontractors and shall support communications deemed necessary by the Government regarding technical matters.

#### C.5.6.2 Provisioning Guidance Conference.

The Provisioning Guidance Conference will be conducted between the Government and Contractor personnel No Later Than (NLT) 45 days after contract award to ensure that the Contractor and the Government have an understanding of the contractual requirements reflected in the PWS and ELINs. The Contractor and the Government will mutually agree to the specific date and place for the guidance conference.

#### C.5.6.3 Provisioning Technical Documentation (PTD)

The Contractor shall develop and document Provisioning Technical Documentation to include a Long Lead Time Items List (LLTIL), Tools and Test Equipment List (TTEL), Common and Bulk Items List (CBIL), and any Design Change Notices (DCN) IAW the LPD selection worksheet (see attachment 2, ELIN D002). The Government will designate the format and medium of delivery at the Provisioning Guidance Conference (PGC). For frequency of submission, see ELIN D002. GEIA-STD-0007, and GEIA-HB-0007-A provide guidance. The Contractor shall establish and maintain a LPD database IAW GEIA-STD-0007 and the requirements that will be contained in the AVCAD Performance Specification. The LPD database shall be used to satisfy applicable and related data items as specified in the LPD selection worksheets (attachment 2). The Contractor shall provide the Government full on-line access to the LPD database at all times.

##### C.5.6.3.1 Provisioning Parts List (PPL).

The Contractor shall develop and prepare a PPL IAW ELIN C002 and the LPD selection worksheets.

C.5.6.3.1.1 Media. The Contractor shall prepare and deliver the PPL in paper hard copy and Compact Disc (CD) using the electronic format as specified in the next paragraph.

C.5.6.3.1.2 Input media requirements for provisioning data: TACOM Life Cycle Management Command uses the Army Material Command (AMC) developed Logistics Modernization Program (LMP) to process provisioning data. This program is designed to accept a CD which meets the following criteria:

- a) Must be either MIL-STD 1388-2B (Preferred), MIL-STD 1388-2A or MIL-STD-1552 File Format
- b) American Standard Code for Information Interchange (ASCII) text file
- c) No header data
- d) 80 columns in width
- e) Carriage return code for line end



C.5.6.3.1.3 Government Acceptance. The PPL shall contain all data fields selected from GEIA-STD-0007, Appendix B, may also be used as guidance, before being accepted by the Government. Appendix B is provided as an attachment to this PWS, the PPL report shall pass the LMP Provisioning validation edit operation with an error rate of less than (<) 2% before final acceptance by the Government. The Provisioning Master Record (PMR) edit operation was developed for editing certain data element values against other specific data element values to ensure compatibility. Payment of the CDRL is contingent upon Government acceptance of the FINAL submittal.

C.5.6.3.1.4 Provisioning List Item Sequence Number (PLISN) Numbering. The End Item (EI) Model Record shall be numbered AAAA. Subsequent EI Model Records shall be numbered AAAB, AAAC, and so on with individual Use on Codes (UOC) for each model record. Model record PLISNs are reserved as: AAAA thru AAAHZ, no secondary items shall have a PLISN within this range.

C.5.6.3.1.5 The Contractor shall follow the Government structure of model records, i.e., part numbers, use on codes, and sequence. The Contractor will coordinate with the Government representative and structure the model records as the Government has structured the files within the PMR within the LMP. Submittals structured in a different manner will be rejected and must be corrected.

C.5.6.3.1.6 Approved Item Name.

The Contractor shall use an Approved Item Name (AIN) for all entries in the PPL and TM processes and procedures involving repair parts. The Contractor shall review the H6 Federal Name Directory and select the most appropriate nomenclature for the item. Selected AIN will be used in all TM maintenance processes and procedural references. Contractor naming will be reviewed at the Government provisioning conference to determine Government acceptance or rejection of the submitted AIN. Deviation from an AIN may be addressed at this conference. If the nomenclature is changed, the Contractor shall update the TM references, PPL, and Repair Parts and Special Tools List (RPSTL) with the Government approved AIN of the provisioned item.

C.5.6.3.1.7 Reference Number Category Code (RNCC).

The Reference Number Category Code (RNCC) indicates the relationship of the part number to an NSN or another part number. A detailed definition can be found in DOD 4100.38-M. The following use of the RNCC shall be adhered to when preparing a PPL:

Reference Number/CAGEC	RNCC	Card # on PPL
Prime Reference Number	Actual	01A
Drawing Number	D	02-99A
Specification Number	C, 7	02-99A
Interchangeable/Additional Reference Number	1-6, 8, A, B	02-99A

C.5.6.3.1.7.1 Reference Number Variation Code (RNVC).

The Reference Number Variation Code (RNVC) indicates whether a specific REFNO item identifying, is not item identifying, or is a REFNO used for information only. A detailed definition can be found in DOD 4100.38-M. The following use of the RNCC shall be adhered to when preparing a PPL:

Reference Number/CAGEC	RNVC	Card # on PPL
Prime Reference Number	2	01A
Drawing Number		
Specification Number		
Interchangeable/Additional Reference Number		

#### C.5.6.3.1.7.2 Repair Kits.

If an item is identified and meets the standard as a Repair Kit or a component of a repair kit, the Contractor shall enter an asterisk in Card Column 13 of the “A” card (Indenture Code) and an asterisk in the sixth position of the Next Higher Assembly (NHA) PLISN for the kit, Card Column 18 of the “C” card. Kit components shall require a minimum of two NHA PLISN’s; one for the kit and one for its normal appearance within its NHA assembly.

#### C.5.6.3.1.7.3 J&K Cards.

The PPL shall include J and K card RPSTL Data formatted IAW Appendix 4. Items with an “O” or “F” in the 3rd position of the SMR Code shall have a “J” card. A “K” card shall be provided when further information/descriptive data is required. For items coded “MO” or “MF,” the Contractor shall ensure that the applicable NSN associated with the part number (CAGEC) is identified on the K card for that application. When the Government and the Contractor mutually agree that an item is not required to be shown in the RPSTL, no J and K card data will be included on the PPL.

#### C.5.6.3.1.8 Maintenance Allocation Chart (MAC).

The Contractor shall prepare and deliver the MAC for the AVCAD IAW DI-SESS-81759, Appendices 5 and 6 (Maintenance Allocation Chart (2 Level) and Maintenance Allocation Chart (MAC), respectively), and ELIN C003. MAC shall be in a top down pyramidal breakdown sequence of the end item by functional groups defined in DA PAM 738-751 that require maintenance. The MAC shall include all maintenance significant components, assemblies, subassemblies, and modules. For each repairable assembly or subassembly, the MAC shall identify the maintenance function to be performed, the level of responsibility for the function, the active repair time, and tools and test equipment necessary to perform the function. The MAC shall include all items unless deletion has been authorized by the Government. If a maintenance function is a replacement function only for a repair part, the item shall not be listed in the MAC, unless not listing the item would result in deletion of the group number, in this case, the item shall be listed in order to retain the functional group number.

#### C.5.6.3.1.9 Functional Group Codes (FGC).

The Contractor shall assign Functional Group Codes (FGC) to the MAC IAW DI-SESS-81759 (ELIN C004), DA PAM 738-751, and Appendix 7 (FGC). The FGC will be utilized as an indexing system and will be standard across the AVCAD databases. This paragraph only

addresses the first two characters on the TM FGC. When the Contractor finds an item that they believe is not addressed in DA PAM 738-751 and Appendices 1, 4 and 7, the Government will determine what FGC the item will be addressed under.

#### C.5.6.3.2 Engineering Data for Provisioning (EDFP).

The Contractor shall provide an EDFP IAW ELIN C005 for items that are contained in the NG-CD. The parts/equipment EDFP shall consist of data such as specifications, standards, drawings, photographs, sketches and descriptions, and necessary assembly and general arrangement drawings, schematic drawings, schematic diagrams, wiring and cable diagrams necessary to indicate the physical characteristics, location, and/or function of the item. As a minimum, the Contractor's EDFP shall include:

- a. Technical information of items for maintenance support considerations
- b. Item identification/descriptions necessary for:
  - (1) Cataloging actions and assignment of a NSN
  - (2) Review for item entry control
  - (3) Standardization to include standardization/interchangeability
  - (4) Item management coding
  - (5) Identification/procurement of initial spares
  - (6) Preparation of allowance/issue lists
  - (7) Review for potential interchangeability and substitutability

The Contractor shall furnish EDFP in the following order of precedence:

- a. Government or industry recognized specifications or standards
- b. Engineering drawings
- c. Technical data equivalent to in-process/incomplete engineering drawings
- d. Commercial drawings
- e. Commercial manuals, catalogs or catalog descriptions
- f. Sketches or photographs with brief descriptions of dimensional, material, mechanical, electrical, or other descriptive characteristics.

The parts/equipment EDFP shall be submitted electronically IAW ELIN C005. EDFP shall be marked in such a manner as to identify the proprietary rights (limited or unlimited). EDFP shall also be marked with the PLISN in the upper right hand corner. EDFP shall NOT be provided when the item is:

- a. Identified as a Government specification or standard which completely describes the item including its dimensional, mechanical, and electrical characteristics
- b. Previously cataloged/assigned an active NSN with type 1 item identification
- c. Item is listed as a reference item (subsequent appearance of an item) on a parts list.

#### C.5.6.4 Provisioning Conference(s).

The Contractor shall host a Provisioning Conference(s) at the Contractor's facility IAW the IMS at a time and location to be mutually agreed to between the Government and the Contractor. The Contractor shall provide production grade equipment for disassembly as deemed necessary by the Government to validate and verify all provisioning documentation. The Contractor shall incorporate all additions, deletions, and corrections, as a result of the Provisioning Conferences into the final PPL.

##### C.5.6.4.1 The Contractor shall provide the following to support each conference:

- a. Sample article(s) for disassembly/assembly shall be made available for proper identification of the maintenance philosophy and maintenance procedures. The Contractor may, at the Government's discretion, provide sample articles that may be viewed only without disassembly or assembly.
- b. Personnel with expert technical knowledge of the end item with regard to the design, reliability and the maintenance characteristics of the end item or the portion of the end item being provisioned.
- c. Supplemental Data for Provisioning and EDP.

C.5.6.4.2 Selected Essential Item Stockage to Availability Method (SESAME) Initial Spares List. The Contractor shall determine initial spares requirements against the initial product baseline following CDR. The range and quantity of spares shall be based on a peacetime Operational Tempo (OPTEMPO) of 30 operating hours per system per month with an Operational Availability ( $A_o$ ) of 90, and shall be calculated using the Selected Essential Item Stockage to Availability Method (SESAME) model. Actual field failure data, if available and current at the time of requirements determination, shall be used. This determination of initial spares requirements shall also consider the additional hours required for flight test, training, IOT&E and FDT&EA.

C.5.6.4.3 The Contractor shall provide a SESAME report IAW ELIN C006.

C.5.6.4.4 Interim Allowance List.

The Contractor shall develop and deliver interim supply allowance lists as needed IAW ELIN C001.

#### C.5.7 Operator and Maintainer Technical Manuals (TM) Development.

C.5.7.1 The Contractor shall develop TMs to support the operation and maintenance of the AVCAD.

C.5.7.2 TM Validation. The Contractor shall hold a TM validation event to validate the TM, work packages, tasks, and procedures presented to the Government. The purpose of the TM Validation is to ensure that each required matrix item is properly addressed (see MIL-STD 40051-2), adequate for the target audience, includes the most recent LPD, supports the maintenance concept, and accurately reflects the TDP. The Contractor shall prepare a TM Validation Plan IAW ELIN E002 to coordinate resources and provide the opportunity for the Government to witness the event. The plan shall include the schedule of procedures, tasks, and work packages to be performed, the method of validation (hands on, etc.), and date of performance. The plan shall ensure that personnel performing tasks are not those associated with the development process. The Contractor shall include a time table for preparing and coordinating the TM Validation events. The TM development events shall be included in the IMS. The Contractor shall maintain records showing dates of validation reviews, material reviewed by task or action, findings with applicable remarks, and action taken IAW ISO 9001:2000. The Government TM representative reserves the right to examine these records at the

Contractor's facility. The Contractor shall provide facilities, equipment, tools, and materials necessary to support the TM Validation.

C.5.7.3 TM Deliveries. The Contractor shall deliver TM drafts to support TM Validation, and Operational Test. Each draft shall contain validated procedures sufficient to support the intended event and contain all elements required by MIL-STD 40051-2C and the Government – approved Matrix (see attachment 3 and 4). Each draft delivery of the TM shall be safe, accurate, and validated against TM content for each member of the target audience, to include operation and maintenance instructions. The Contractor shall deliver the manual IAW ELIN E001 and E004

C.5.7.3.1 Validation Draft TM. The Contractor shall prepare a draft technical manual complete and sufficient in detail to support the TM Validation Event. TM content delivered after the TM Validation is complete shall be validated to ensure the TM is safe, accurate, concise, consistent, and maintains continuity with previous iterations.

C.5.7.3.2 Logistics Demonstration (LD) Draft TM. The Contractor shall prepare a LD Draft TM which incorporates all approved Government comments from operational test. This draft shall include any updates to the Technical Data Package (TDP), Logistic Product Data (LPD), procedures, and reflect Government guidance publications. The LD TM shall be sufficient in detail to support the AVCAD supportability strategy, LD plan, and ensure that LD event is successful.

C.5.7.3.3 Operational Assessment Draft TM. The Contractor shall prepare an Operational Assessment draft TM which includes all TDP, LPD, and approved Government comments from the TM Validation event. TM Validation draft shall contain accurate, safe, complete content sufficient in detail to support Operational Test and safety training for test.

C.5.7.4 Operation and Maintenance TMs in both electronic and paper media require MIL-STD 40051-2 Matrices. (Attachments 3 and 4)

C.5.7.5 TM Validation Certificates. The Contractor shall provide TM Validation Certificates for each TM submitted to the Government after TM Validation IAW ELIN E003. The TM Validation Certificate shall disclose the TM is hereby certified to be accurate and complete, and the information, instructions, text, and illustrations conform in all respects to the contract requirements to include LPD, target audience, MIL-STD 40051-2, technical data, and Government guidance.

C.5.7.6 TM IPT. The Contractor shall hold quarterly TM IPTs to report on progress, status, and communicate accomplishments and issues. The forum shall be used as a method to coordinate, discuss, and resolve any issues impeding progress. Agenda topics, meeting minutes, read ahead items, if any, and action items shall be provided IAW ELINs B001 and B002

C.5.7.7 Technical Manual Source Data. Notwithstanding Trade Compliance restrictions, Technical Data restrictions or security classifications, all source data developed exclusively with Government funds shall be delivered with unlimited rights to the Government for reproduction, use, and distribution. The Contractor shall package and deliver all source material, defined as

operating plans, standard procedures, computer documents and residual material, source codes, computer disks, computer tapes, and all other media containing digital files developed to fulfill the requirements of this contract to accompany each technical manual FRC, that are deliverables under this contract. All artwork, sketches, photographs, line art, modeling, schematics delivered under this contract shall be turned over concurrent to FRC submission. The Contractor shall grant the Government unlimited rights to any and all data/products under this effort that are developed and funded by the Government. Examples of source data are as follows:

C.5.7.8 All Extensible Markup Language (XML) tagged data files using MIL-STD-40051-2 and Document Type Definitions (DTD's) and style sheets in accordance with MIL-STD-40051-2. Notwithstanding Trade Compliance restrictions, Technical Data restrictions or security classifications, all source data developed exclusively with Government funds shall be delivered with unlimited rights to the Government for reproduction, use, and distribution. The Contractor shall package and deliver all source material, defined as operating plans, standard procedures, computer documents and residual material, source codes, computer disks, computer tapes, and all other media containing digital files developed to fulfill the requirements of this contract to accompany each technical manual FRC, that are deliverables under this contract. All artwork, sketches, photographs, line art, modeling, schematics delivered under this contract shall be turned over concurrent to FRC submission. The Contractor shall grant the Government unlimited right to any and all data/products under this effort that are developed and funded entirely by the Government. Examples of source data are as follows: All digital Graphic/Illustrations (figure, graphic, drawing, diagram, art work) to include line drawings, photographs, engineering drawings, diagrams, charts and graphs, sketches, schematics, tools and test equipment illustrations; All digital electronic files (PDF) on Digital Versatile Disc (DVD) in searchable, editable, linkable and intelligent format with 100% embedded fonts, no Unicode issues and Windows 7 compatible; Any and all validation/verification records, reports and certifications; All Original Equipment Manufacturer (OEM) or other vendor technical data and graphics used in the TM development and Final Reproducible Copy (FRC). All copyright releases as applicable.

#### C.5.8 Training and Training Support.

##### C.5.8.1 General.

The Contractor shall review the outcomes of T&E activities and trade studies to identify impacts to and requirements for training and training support. Development of the training deliverables shall make maximum use of the supportability analysis, LPD database, and existing training materials, such as from previous contracts and similar or commercial systems. Training and training support shall be addressed in the PSA, documented in the LPD. During this phase, the Contractor shall perform the final Training Needs Analysis to identify required training systems/products and acquire them after Government approval.

##### C.5.8.2 Training Analyses.

The Contractor shall develop the Training Systems Requirements Analysis (TSRA) and Training Situation Analysis (TSA) to identify training information. The AVCAD shall include embedded training. The Contractor shall deliver IAW:

- ELIN F001, Training Situation Document.
- ELIN F002, Training Device Requirements Document (TDRD), using AR 350-38 as a guide.
- ELIN F003, Training System Functional Description (TSFD).

#### C.5.8.3 Courses

Training courses shall be prepared and conducted IAW MIL PRF-29612B, using TRADOC Regulation 350-70 as a reference. Development of the training materials shall make maximum use of the PSA and the LPD database and existing training materials. All personnel used for the training effort shall have the necessary technical knowledge to accomplish training. The Contractor shall provide all training materials required by the students. Training and technical support shall be provided to all subcontractors.

C.5.8.3.1 Technical Specialist Course. The Contractor shall prepare and conduct a course designed to train Government personnel who will participate in or support integrated product support test programs.

C.5.8.3.2 Test Support Training. The Contractor shall prepare and conduct training to support the system test requirements. The Operator MOS course will provide the skills and knowledge required to perform missions with the AVCAD.

C.5.8.3.3 Tester/Data Collector Training. The Contractor shall prepare and conduct training for testers and data collectors in support of the test program.

C.5.8.3.4 Instructor and Key Personnel Training. The Contractor shall prepare and conduct training for Instructors and Key personnel.

#### C.5.8.4 Training Course Deliverables.

C.5.8.4.1 Preparation of Course Instruction Material. The Contractor shall prepare and deliver course documentation training materials for all courses conducted IAW the following:

- Instructional Media (ELIN F004)
- Training Conduct Support Document (ELIN F005)
- Training Conduct Information Package (ELIN F006)
- Instructional Media Design Package (ELIN F007)

C.5.8.4.2 Multimedia Courseware. The Contractor shall incorporate Interactive Courseware (ICW), Interactive Multimedia Instruction (IMI), and Computer Aided Instruction (CAI) into operator and maintainer training to the fullest extent possible.

C.5.8.4.3 Training Support Package. The Contractor shall design, prepare, develop and/or update an exportable multimedia Training Support Package (TSP). The TSP shall be used for NETT, to train institutional trainers and shall be the foundation for institutional and unit sustainment training. The TSP shall be prepared IAW Army Regulation 350-1, TRADOC Regulation 350-70 and the Analysis, Design, Development, Implementation, and Evaluation

(ADDIE) process. The Contractor shall develop all course documentation using the ADDIE process in the Training Development Capability (TDC) database.

### C.5.8.5 Anticipated Training Events

#### C.5.8.5.1 Event PQT

Course	Location
Technical Specialist Course	Edgewood Chemical Biological Center (ECBC), MD
Technical Specialist Course	Army Test and Evaluation Command (ATEC), Aberdeen Proving Ground (APG), MD
Technical Specialist Course	West Desert Test Center (WDTC), Dugway Proving Ground, UT
Test Support Training	ECBC, MD
Test Support Training	ATEC, MD
Test Support Training	WDTC, UT
Tester/Data Collector Training	ECBC, MD
Tester/Data Collector Training	ATEC, MD
Tester/Data Collector Training	WDTC, UT

#### C.5.8.5.2 Event OA

Course	Location
Test Support Training	ECBC, MD
Test Support Training	APG, MD
Test Support Training	WDTC, UT
Tester/Data Collector Training	ECBC, MD
Tester/Data Collector Training	APG, MD
Tester/Data Collector Training	WDTC, UT
New Equipment Training Team (NETT)	Ft. Leonard Wood (FLW), MO
New Equipment Training <sup>1</sup>	Fort Hood, TX
New Equipment Training <sup>2</sup>	San Diego, CA
New Equipment Training <sup>3</sup>	Tyndall AFB, FL

<sup>1</sup> Technical support only to JPM CA NETT.

<sup>2</sup> Technical support only to JPM CA NETT.

<sup>3</sup> Technical support only to JPM CA NETT.

#### C.5.8.5.3 Event Logistics Demonstration

Course	Location
Technical Specialist Course	Contractor Site
Test Support Training	Contractor Site
Tester/Data Collector Training	Contractor Site

#### C.5.8.5.4 Event Instructor and Key Personnel (I&KP) for PQT



Course	Location
I&KP Training	FLW, MO

### C.5.9 Government Furnished Equipment, Property and Information

C.5.9.1 The Contractor shall deliver a list of all Contractor Acquired Property (CAP) IAW ELIN D009.

### **C.6 ACCOUNTING FOR CONTRACT SERVICES REQUIREMENT –ENTERPRISE-WIDE CONTRACTOR MANPOWER REPORTING APPLICATION - ACC-APG 5152.4900** (CLIN 0005)

C.6.1 The contractor shall report ALL contractor labor hours (including subcontractor labor hours) required for performance of services related to Cost-Plus-Incentive-Fee (CPIF) CLINs only provided under this contract for AVCAD via 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/>, and then click on “Department of the Army CMRA” or the icon of the DOD organization that is receiving or benefitting from the contracted services.

C.6.2 Reporting inputs will 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, beginning with 2018. Contractors may direct questions to the help desk by clicking on “Send an email” which is located under the Help Resources ribbon on the right side of the login page of the applicable Services/Component’s Contractor Manpower Reporting website.

### **C.7 OPTION 1: EMD AVCAD HARDWARE**

#### **C.7.1 First AVCAD EMD Hardware Delivery**

C.7.1.1 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver twenty-four (24) AVCAD systems, each system in a reusable carrying case with one (1) User Guide or Operator Manual in each case IAW the AVCAD PSPEC (Attachment 1) and this PWS. The AVCAD systems delivered shall include all accessories required for external power and communications. The delivery of twenty-four (24) AVCAD shall be four (4) months after contract option award. CLIN 0007AA

C.7.1.2 The following table shows the test hours associated with the Production Qualification Test (PQT) events. The Government requires on-site availability within 24-hours of request to a CONUS location for repairs at higher than the Organizational Level.

<b>PQT Events</b>	<b>Number of Systems Scheduled for Test</b>	<b>Test Duration Days</b>	<b>Hours per Test day</b>	<b>Maximum Test Hours</b>
Chemical Chamber Testing	24	120	10	28,800
Environmental False Alarm/Interoperability	6	35	24	5,040
Cybersecurity -CVPA	2	10	10	200
Coastal Operation Service Life	3	90	24	6,480
Physical Characteristics/ Signature Test	9	5	8	360
MIL-STD-810*	9	45	8	3,240
Shipboard Operations	4	10	8	320
Chemical Biological Radiological Contamination Survivability (CBRCS)*	4	30	10	1,200
Electromagnetic Survivability	6	30	8	1,440
Natural Desert Environmental Storage	3	2	8	48
Platform Integration*	6	10	8	480
Explosive Atmosphere/Battery Venting*	2	10	8	160
Rotary Wing Compatibility	3	2	8	36
Fixed Wing Compatibility*	3	2	8	36
Mil-S 901D Ship Shock Test & Mil-Std 167-1 Vibration Test*	2	5	8	80
Logistics/Maintenance Demonstration*	6	10	8	480
Post Field Chemical Chamber Testing*	12	60	10	7,200
<b>Total PQT Hours</b>				<b>55,600</b>

\* These systems are in multiple tests.

C.7.1.3 The Contractor shall identify to the Government all Preventive Maintenance Checks and Services (PMCS) and calibrations that may be required during the course of testing. The Contractor shall provide a System Support Package List (SSPL), as part of the proposal for CLIN 0013AA, which details all consumables and operator repair parts recommended for supporting the 24 AVCADs during testing (see C.7.1.2 for hours chamber testing). The Contractor shall supply the parts listed in the SSPL as a System Support Package (SSP) (CLIN 0008AA) at the same time with CLIN 0007AA.

#### C.7.2 Second AVCAD EMD Hardware Delivery

C.7.2.1 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver thirty-six (36) AVCAD systems, each system in a reusable carrying case with one (1) User Guide or Operator Manual in each case IAW the AVCAD PSPEC (Attachment 1) and this PWS. The AVCAD systems delivered shall include all accessories required for

external power and communications. The delivery of thirty-six (36) AVCAD systems shall be six (6) months after contract option award (CLIN 0007AB).

C.7.2.2 The Contractor shall identify to the Government all PMCS and calibrations that may be required during the course of testing. The Contractor shall provide a SSPL, as part of the proposal for CLIN 0008AB, which details all consumables and operator repair parts recommended for supporting for 36 AVCADs for testing (see C.7.1.2 for hours, excluding chamber testing ). The Contractor shall supply the parts listed in the SSPL as a SSP (CLIN 0008AB) at the same time with CLIN 0007AB.

C.7.2.3 The Contractor shall provide onsite support to a CCSI networking demonstration using 2 systems from the First EMD AVCAD Hardware Delivery. This demonstration will be scheduled for one day at APG, MD within 30 days of hardware delivery. The Government will connect the prototype to a CCSI Test Device and perform several basic CCSI commands. The connection to the CCSI Test Device will be through a direct wired connection or through a network switch or hub. The Contractor shall be able to record the data sent and received by their systems. The CCSI commands shall be identified during the CCSI discussions. Wireless connectivity of the remote alarm component of the AVCAD will also be demonstrated.

### C.7.3 Third AVCAD EMD Hardware Delivery

C.7.3.1 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver fifteen (15) AVCAD systems, each system in a reusable carrying case with one (1) User Guide or Operator Manual in each case IAW the AVCAD PSPEC (Attachment 1) and this PWS. The AVCAD systems delivered shall include all accessories required for external power and communications. The delivery of fifteen (15) AVCAD systems shall be eight (8) months after contract option award. CLIN 0007AC

C.7.3.2 The fifteen (15) AVCAD systems will go thru a Logistics Demonstration (LD) and an Operational Assessment (OA) for a total of 8,640 hours testing.

C.7.3.3 The Contractor shall identify to the Government all PMCS and calibrations that may be required during the course of testing. The Contractor shall provide a SSPL, as part of the proposal for CLIN 0013AC, which details all consumables and operator repair parts recommended for supporting for 15 AVCADs for testing (see C.7.3.2 for hours testing) . The Contractor shall supply the parts listed in the SSPL as a SSP (CLIN 0008AC) at the same time as CLIN 0007AC.

### C.7.4 Packaging, Handling, Storage and Transportation (PHS&T)

#### C.7.4.1 Military Packaging.

C.7.4.1.1 The Contractor shall ensure that all items purchased under this contract that are entering the military supply system are packaged in military packaging, as defined in MIL STD-2073-1, and in accordance with the Special Packaging Instructions (SPIs) developed by the Edgewood Chemical Biological Center's Packaging Branch personnel for those items. The

Contractor shall supply drawings for the items for the Special Packaging Instruction development.

C.7.4.1.2 The Contractor shall supply samples of the repair and spare parts to the respective member of the Packaging Team of ECBC to weigh, measure, and design military packaging for these items.

C.7.4.2 Commercial Packaging. The Contractor shall package items not entering the military distribution system (as defined in MIL-STD-2073-1) IAW ASTM D3951. The Contractor shall ensure commercially packaged items arrive at their final destination undamaged and in operable condition. The Contractor shall resolve all shipping issues, including all damaged items.

C.7.4.2.1 The Contractor shall ship all items in reusable containers that permit rapid packing and unpacking at the final destinations. The reusable containers shall not require the use of tools to secure items within the container or to close and secure the container.

C.7.4.2.2 The reusable containers shall permit at least one hundred (100) shipments of the packaged items without requiring maintenance to the unit pack containers or shipping containers or replacement of the unit pack containers and shipping containers.

C.7.4.2.3 The reusable unit pack containers and shipping containers shall be designed at the minimum size and weight to permit economical transport via commercial overnight freight services.

C.7.4.2.4 The packaging of these items must be capable of providing environmental protection to the contents for 10 years.

C.7.4.2.5 The packaging shall be capable of providing environmental protection to its contents under the rough handling conditions as specified in ASTM D4169, Distribution Cycle 18, Assurance Level I (for Level A) or Assurance Level II (for Level B), Criterion 3.

C.7.4.2.6 For items with a cost greater than \$1,000 or a fragility rating greater than 25 G's, the packaging design shall be validated through testing IAW ASTM D4169, Distribution Cycle 18.

C.7.4.3 Marking.

C.7.4.3.1 In addition to special markings required by the contract, all unit packages, intermediate packs, exterior shipping containers, and unitized loads (if applicable) shall be marked IAW MIL-STD-129.

C.7.4.3.2 Shelf life items and other material susceptible to deterioration in storage must be date marked to aid in first-in and first-out issuing of supplies IAW DoDM 4140.27.

C.7.4.3.3 The marking of pilferable and sensitive material shall not identify the nature of the material.

C.7.4.3.4 If bar code markings are specified in the contract, they shall be IAW MIL-STD-129.

C.7.4.4 Wood Packaging. The Contractor shall:

C.7.4.4.1 Heat Treatment Process. In accordance with ISPM 15, ensure that all wood used in packaging, including pallets, boxes, crates, load boards and pallet collars, produced entirely or in part of non-manufactured wood species, shall be constructed of wood heat treated to a minimum core temperature of 56 degrees Centigrade for at least 30 minutes.

C.7.4.4.2 Wood packaging materials shall be bark-free; certified and marked accordingly by an accredited agency recognized by American Lumber Standard Committee (ALSC) in accordance with their Wood Packaging Material Policy and Wood Packaging Material Enforcement Regulations.

C.7.4.4.3 Identification of Materials. Ensure the wood displays an official ALSC certification marking in an unobstructed area that will be readily visible to inspectors. Box/pallet manufacturers and the manufacturer of wood used as inner packaging, containers, and pallets shall ensure traceability to the original source of heat treatment.

C.7.4.4.4 Pallets shall have contrasting and clearly visible markings, applied to the stringer or block on diagonally opposite sides and ends of the pallet. Container markings shall be contrasting and clearly visible on two sides other than the top or bottom.

C.7.4.4.5 Dunnage. Comply with ISPM 15 in the use of all dunnage utilized for configuring and securing the load. Dunnage shall be marked with an ALSC-approved dunnage stamp in a location that is readily visible.

C.7.4.4.6 Procurement of Materials from Non-U.S. Locations. Wood packaging materials procured outside of the U.S. shall meet the United Nations International Plant Protection Convention guidelines. The country's designated national authority shall inspect and approve the wood packaging materials. That country's authorized certifier's certification markings shall be applied to the packaging materials in accordance with ISPM 15.

C.7.4.5 Palletization and Unitization. Palletize and unitize in accordance with ANSI-MH1 and MIL-STD-147 and as follows:

C.7.4.5.1 The Contractor shall palletize shipments of identical items going to the same destination if they have a total cubic displacement of 48 cubic feet or more unless skids or other forklift handling features are included on the containers. Pallet loads shall be stable and provide a level top for stacking. Palletized loads shall be of a size to allow for placement of two loads high and wide in a conveyance. The Contractor shall contain loads in a manner that permits safe handling during shipment and storage.

C.7.4.5.2 When the total number of containers going to the same destination is 250 pounds or greater (excluding pallet), or a volume of 20 cubic feet or greater, palletize in accordance with guidance provided in MIL-STD-147.

C.7.4.5.3 Export shipment loads shall be stable and shall not exceed the size and overseas limitations of Section 5 of MIL-STD-147.

C.7.4.6 Regulated Hazardous Materials. In addition to the general instructions listed above, the Contractor shall ensure that the shipping configuration or container, as applicable, be packed to meet all modes of shipment as specified in the most current version of the following required documents: Title 49 Code of Federal Regulations Part 100 thru 180; the International Air Transportation Association (IATA) Dangerous Goods Regulation; the International Maritime Dangerous Good (IMDG) Code; and the AF 24-204/TM 38-250/NAVSUP PUB 505/MCO P4030.19J/DLAI 4145.3 "Preparing Hazardous Materials for Military Air Shipments." In the event the requirements of this PWS conflict with the respective Regulation stated above for the respective mode of transportation, the Regulation listed above shall take precedence. When an item is forbidden for shipment in accordance with the required document for that mode of transportation, the requirements of this PWS for that particular mode of transportation are not applicable.

## **C.8 OPTION 2: PLATFORM INTEGRATION**

The Contractor shall provide all necessary materials, supplies, and manufacturing services to design, fabricate, and deliver Platform Interface Kits (PIK) for the AVCAD to be integrated onto platforms. Potential platforms are listed in the following subsections, but are not limited to these systems. The Government will provide required Interface Control Documentation (ICD) for each platform prior to the exercise of this option. This option may be exercised multiple times for multiple systems. (CLIN 0009)

C.8.1 PIK for Shipboard: The AVCAD shall replace the Improved Point Detection System Lifecycle Replacement (IPDS-LR) on Navy ships. The Contractor shall deliver two (2) PIKs for Shipboard eight (8) months after contract option award. (CLIN 0009AA)

C.8.1.1 Each Shipboard PIK must contain:

- Two (2) AVCAD Detector Units (DU) developed IAW the AVCAD Performance Specification
- One (1) Control Display (CD) Remote Alarm IAW the AVCAD Performance Specification.
- One (1) Remote Display (RD) Remote Alarm IAW the AVCAD Performance Specification.
- Two (2) External Air Sampling Units (EASU) IAW the AVCAD Performance Specification.
- Required mounting hardware, electrical interfaces, and communication interfaces IAW the AVCAD Performance Specification for installation of the AVCAD on-board Navy ships.

C.8.2 PIK on Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV): For proposal purposes, bid basis should be the non-recurring engineering of platform physical, electrical and communication interfaces to form the PIK and projections of integration hardware and software costs, including assumptions. (CLIN 0009AB)

C.8.3 PIK on Unmanned Ground Vehicle: For proposal purposes, bid basis should be the non-recurring engineering of platform physical, electrical and communication interfaces to form the PIK and projections of integration hardware and software costs, including assumptions. (CLIN 0009AC)

C.8.4 PIK on Joint Assault Bridge: For proposal purposes, bid basis should be the non-recurring engineering of platform physical, electrical and communication interfaces to form the PIK and projections of integration hardware and software costs, including assumptions. (CLIN 0009AD)

C.8.5 PIK on ABRAMS Tank: For proposal purposes, bid basis should be the non-recurring engineering of platform physical, electrical and communication interfaces to form the PIK and projections of integration hardware and software costs, including assumptions. (CLIN 0009AE)

C.8.6 PIK on Armored Multipurpose Vehicle (AMPV): For proposal purposes, bid basis should be the non-recurring engineering of platform physical, electrical and communication interfaces to form the PIK and projections of integration hardware and software costs, including assumptions. (CLIN 0009AF)

C.8.7 PIK on fixed-wing aircraft: For proposal purposes, bid basis should be the non-recurring engineering of platform physical, electrical and communication interfaces to form the PIK and projections of integration hardware and software costs, including assumptions. (CLIN 0009AG)

C.8.8 PIK on rotary-wing aircraft: For proposal purposes, bid basis should be the non-recurring engineering of platform physical, electrical and communication interfaces to form the PIK and projections of integration hardware and software costs, including assumptions. (CLIN 0009AH)

### **C.9 OPTION 3: TECHNICAL MANUAL (TM): DEPOT MAINTENANCE MANUAL**

C.9.1 The Contractor shall develop the Depot Maintenance TM. CLIN 0010

C.9.2 TM start of work meeting shall be held within fifteen (15) calendar days after option award. The Contractor shall prepare an agenda and read-ahead package/briefing charts for Government approval IAW ELIN B001. The Contractor shall record and deliver Meeting Minutes IAW ELIN B002.

C.9.3 Depot Maintenance TM in both electronic and paper media require MIL-STD 40051-2 Matrix. (Attachment 5)

C.9.4 The Contractor shall deliver the manual IAW ELIN E005

C.9.5 The requirement of Operator and Maintainer Technical Manuals (TM) development (C.5.7) shall apply to this option.

C.9.6 Depot Maintenance TM shall be delivered one hundred eighty (180) days after option award.

## C.10 **OPTION 4: LOW RATE INITIAL PRODUCTION (LRIP)**

### C.10.1 First AVCAD LRIP Hardware Delivery

C.10.1.1 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver sixty-eight (68) AVCAD systems, each system in a reusable carrying case with one (1) Government TM developed in EMD phase in each case IAW the AVCAD PSPEC (Attachment 1) and this PWS. The AVCAD systems delivered shall be field-able hardware and software. The delivery of sixty-eight (68) AVCADs shall be four (4) months after option award. The Contractor shall deliver the detector system identical to the units delivered under EMD (CLIN 0007AA, 0007AB, or 0007AC) unless configuration changes have been approved by the Government. CLIN 0011AA

C.10.1.2 The following table shows the hours that the sixty-eight (68) detector systems will undergo Production Verification Test (PVT). The Government requires on-site availability within 24-hours of request to a CONUS location for repairs higher than the Organizational level.

<b>PVT Events</b>	<b>Number of Systems Scheduled for Test</b>	<b>Test Duration Days</b>	<b>Hours per Test day</b>	<b>Maximum Test Hours</b>
Chemical Chamber Testing	24	100	10	24,000
Environmental False Alarm/Interoperability	6	28	24	4,032
Cybersecurity -CVPA	2	10	10	200
MIL-STD-810	9	45	8	3,240
Chemical Biological Radiological Contamination Survivability (CBRCS)	4	30	10	1,200
Electromagnetic Survivability	6	30	8	1,440
Explosive Atmosphere/Battery Venting*	2	10	8	160
Logistics/Maintenance Demonstration	6	10	8	480
<b>Total PVT Hours</b>				<b>34,752</b>

\*These systems are in multiple tests.

C.10.1.3 The Contractor shall identify to the Government all PMCS and calibrations that may be required during the course of testing. The Contractor shall provide a SSPL, as part of the proposal for CLIN 0012AA, which details all consumables and operator repair parts recommended supporting for 68 AVCADs during testing (see C.10.1.2 for hours testing). The Contractor shall supply the parts listed in the SSPL as a SSP (CLIN 0012AA) at the same time with CLIN 0011AA

C.10.1.4 The Contractor shall deliver the detector systems and SSP using the SPIs that were developed during the EMD PQT stage.



C.10.1.5 The Contractor shall provide onsite support to a CCSI networking demonstration using 2 systems from LRIP. This demonstration will be scheduled for one day at APG, MD within 30 days of hardware delivery. The Government will connect the prototype to a CCSI Test Device and perform several basic CCSI commands. The connection to the CCSI Test Device will be through a direct wired connection or through a network switch or hub. The Contractor shall be able to record the data sent and received by their systems. The CCSI commands shall be identified during the CCSI discussions. Wireless connectivity of the remote alarm component of the AVCAD will also be demonstrated.

C.10.1.6 TM Update. (CLIN 0013AA) The Contractor shall continue TM development IAW paragraph C.5.7.8 with deliverables as follows:

C.10.1.6.1 Verification Draft TM. The Contractor shall prepare a Verification Draft TM to include all TDP, LPD, and approved Government comments from the LD event. The Verification Draft TM shall contain safe, accurate, and complete content sufficient in detail to support a hands-on TM Verification event.

C.10.1.6.2 TM Verification Support to Government. The Contractor shall support the Government TM Verification. Verification by the Government will be performed at the Contractor's facility. The TM Verification plan shall be prepared by the Contractor, reviewed and approved by the Government publications SME. The verification timeframe will be mutually agreed upon by the Government and the Contractor. The Contractor shall provide all necessary resources to support the Government verification as outlined in the TM Verification plan.

C.10.1.6.3 Contractor shall deliver one hundred (100) TM thirty days (30) before the first PVT event

#### C.10.2 Second AVCAD LRIP Hardware Delivery

C.10.2.1 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver sixty (60) AVCAD systems, each system in a reusable carrying case with one (1) Government TM developed in EMD phase in each case IAW the AVCAD PSPEC (Attachment 1) and this PWS. The AVCAD systems delivered shall be field-able hardware and software. The delivery of sixty (60) AVCADs shall commence five (5) months after contract option 5 award at a rate of ten (10) AVCADs per month. The Contractor shall deliver the detector systems identical to the units delivered under first AVCAD LRIP Hardware (CLIN 0011AA) unless configuration changes have been approved by the Government. (CLIN 0011AB)

C.10.2.2 The Contractor shall deliver the detector systems using the SPI that was developed during EMD PQT stage.

C.10.2.3 Multiservice Operational Test (MOT)

C.10.2.3.1 The Government will use fifty (50) AVCADs from the CLIN 0011AB to conduct MOT. Total operating hours is 32,400. The Government requires on-site availability within 24-hours of request to a CONUS location for repairs at higher than the Organizational Level.

C.10.2.3.2 The Contractor shall identify to the Government all PMCS and calibrations that may be required during the course of testing. The Contractor shall provide a SSPL, as part of the proposal for CLIN 0012AB, which details all consumables and operator repair parts recommended supporting for fifty (50) AVCADs during testing (see C.10.2.3.1 for hours of testing). The Contractor shall supply the parts listed in the SSPL as a SSP (CLIN 0012AB) five (5) months after option award.

C.10.3 Consumable and Spare Parts: To Be Determined (TBD) (CLIN 0014)

The Contractor shall deliver consumable and Spare Parts using the SPIs that were developed by the ECBC packaging team during the EMD PQT stage.

C.10.4 The IPS requirements for Logistics/Maintenance Demonstration(s) (LMD) (0013AB) (C.5.4.3), and Training Course Update Deliverables (0013AC) (C.5.8.4) shall apply to this option.

C.10.5 The LMD shall be conducted at the same time with MOT. The contractor shall deliver fifty (50) copies of the training material thirty (30) days before the first PVT event.

C.10.6 Technical Support (CLIN 0015 (for LRIP), 0019 (for FRP 1), 0021 (for FRP 2), 0023 (for FRP 3), 0025 (for FRP 4), 0027 (for FRP 5), 0029 (for FRP 6))

C.10.6.1.1 General Technical Support. The Contractor shall provide technical support such as testing, data collection, engineering, training, and sustainment when identified.

C.10.6.1.2 Refurbishments/Upgrades. The Contractor shall perform system refurbishments or upgrades, or perform analysis to determine the scope of refurbishments or upgrades, when identified.

C.10.6.1.3 Repairs. The Contractor shall perform repairs for systems not under warranty, or perform analysis to determine the scope of repair, when identified.

C.10.6.1.4 Technical Documents. The Contractor shall prepare technical documents and update existing documents when identified. Technical documents include documents such as test plans, test reports, operating procedures, maintenance manuals, and training lesson plans.

C.10.6.1.5 Obsolescence. The Contractor shall notify the Government of any obsolescence risks pertinent to continued production and support of the AVCAD and related items as they may arise during the contract. The notification to the Government shall describe the issue in detail, including the following information:

- Full identification of the item
- A complete description of the item's role and criticality within the AVCAD program,

- Current item cost,
- Existence of substitutable items and associated costs (to include retesting),
- The expected date of the affected item's unavailability,
- The number of items known to be available in supplier stockpiles,
- The usage forecasts for the remainder of the AVCAD program (including option period),
- Suggested item stockpile management strategy
- Recommendation for path forward, to include all associated costs

C.10.6.1.6 Pursual of Performance Objectives. During the course of the contract, the Government may request and the Contractor may submit, proposals under FAR 52.243-2, Alt IV to pursue performance specification objective requirements which may improve performance, reduce the unit price, or reduce sustainment costs of the AVCAD.

C.10.7 Platform Integration Kit (PIK). Deliver two (2) PIKs five (5) months after the option award for the following platforms:

- C.10.7.1 Shipboard (CLIN 0016AA)
- C.10.7.2 NBCRV (CLIN 0016AB)
- C.10.7.3 Unmanned Ground Vehicle (CLIN 0016AC)
- C.10.7.4 Joint Assault Bridge (CLIN 0016AD)
- C.10.7.5 ABRAMS Tank (CLIN 0016AE)
- C.10.7.6 AMPV (CLIN 0016AF)
- C.10.7.7 Fixed-wing aircraft (CLIN 0016AG)
- C.10.7.8 Rotary-wing aircraft (CLIN 0016AH)

C.10.8 The requirements of Program Management (C.3.1); Systems Engineering (C.3.2); Packaging, Handling, Storage and Transportation (PHS&T) (C.7.4); and IUID (C.5.4.4) shall apply to this option.

C.10.9 AVCAD WARRANTY. AVCAD warranty shall apply to this option and options 5 through 10 (CLIN 0017 for LRIP, CLIN 0018AB for 1<sup>st</sup> FRP, CLIN 0020AB for 2<sup>nd</sup> FRP, CLIN 0022AB for 3<sup>rd</sup> FRP, CLIN 0024AB for 4<sup>th</sup> FRP, CLIN 0026AB for 5<sup>th</sup> FRP, and CLIN 0028AB 6<sup>th</sup> FRP). The following requirements are in addition to the warranties provided by the warranty clauses contained in the contract, primarily 52.246-19 and DFARS 252.246-7001.

C.10.9.1 Definitions.

C.10.9.1.1 Systemic Defect means any condition or characteristic of supplies that is not in compliance with the requirements of the contract or that does not otherwise function or is not expected to function as required and which is predicted from or present in the performance of a significant group or quantity of all supplies already accepted.

C.10.9.1.2 Correction. The elimination of a Defect.

C.10.9.1.3 Systemic Defect Coverage is warranty coverage where a single warranty claim shall apply to a group of Items produced under like circumstances regardless of whether all Items have patent Defects. The systemic defect coverage assumes that all systems produced under like circumstances are defective.

#### C.10.9.2 Warranty Periods.

C.10.9.2.1 Item Coverage begins at final acceptance of each item and ends thirty-six (36) months following the acceptance of that item. The Individual Item Warranty End date shall be indicated on Invoicing, Receipt, Acceptance, and Property Transfer (iRAPT) Receiving Reports and DD Form 1149.

C.10.9.2.2 In addition to the warranties provided by contract clause, Contractor shall provide, and Items shall have, Systemic Defect Coverage, which begins at final acceptance and delivery of the first warranted item to final destinations in accordance with the delivery schedule and ends at the individual item warranty expiration date of the last production warranted item and includes all Systemic Defects during this term and applies to all items regardless of whether individual item coverage has expired on some items.

C.10.9.2.3 Warranty repair of any item, inclusive of Systemic Defect repairs, by the Contractor shall initiate a new warranty period of one year effective upon Government acceptance of the repaired item, or the remainder of the individual item coverage, whichever is greater. The Contractor shall submit a failure report IAW CLIN A006.

#### C.10.9.3 Systemic Defect

C.10.9.3.1 Systemic Defect coverage is invoked when the Government determines that a Systemic Defect exists and that Systemic contract remedies should be initiated.

C.10.9.3.2 Systemic Defect coverage may also be invoked when the system Mean Time Between Failure/Mean Time Between False Alarm (MTBF/MTBFA) average falls below the specified values.

C.10.9.3.3 Systemic Defect coverage may also be required when the actual Defect rate for particular Item (part) exceeds the predicted failure rate for the Item.

C.10.9.3.4 When Systemic Defect coverage is invoked, the Contractor shall prepare and provide a Corrective Action Plan IAW ELIN A004. Upon Government approval of the plan the Contractor shall take corrective action. The Contracting Officer, using the contract remedies, will arrange with the Contractor for an inventory wide or total asset remedy when applicable. The Government may presume that all Items produced under like circumstances, such as Items grouped by production lots, manufacturing dates or other common factors, are similarly defective and require their replacement or correction at its discretion dependent upon a review of the failure mode data. Included are all such component parts delivered under the contract's respective delivery orders, whether installed on AVCAD or delivered individually as spare parts. This remedy includes redesign if required to meet warranty requirements.

## C.11 **OPTION 5: FULL RATE PRODUCTION, 1<sup>st</sup> YEAR**

C.11.1 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver up to thirty-two hundred (3200) AVCAD systems, each system in a reusable carrying case with one (1) Government TM in each case IAW the AVCAD Performance Specification (Attachment 1) and this PWS. The AVCAD systems delivered shall be field-able hardware and software. The Contractor shall deliver the detector systems identical to the units delivered under LRIP option , unless configuration changes have been approved by the Government (CLIN 0018AA).

### C.11.2 First Article Test (FAT).

The Government may require, at its election, the Contractor to submit to and pass FAT (or Re-FAT) if: (1) there is any break in production greater than one hundred eighty (180) days; (2) if the configuration of AVCAD hardware or software is changed; (3) if AVCAD manufacturing is moved to or started in a new location; or (4) the Government identifies significant quality or process control failures during AVCAD production. If the Contractor is responsible for the condition necessitating the FAT requirement (for example, by moving manufacturing locations, requesting a configuration change, stopping production for more than 180 days despite pending Government orders, etc.) then the Contractor is responsible for all costs associated with the FAT, including the costs of both the test articles and the tests themselves. Additionally, the Contractor is responsible for all costs associated with retesting after any failed FAT, regardless of which party was originally responsible for the cost of the failed FAT. The Government's discretion and authority to require FAT applies at all times during all Full Rate Production options (not just the initial FRP Option). The Government may require FAT multiple times throughout the life of the contract if the above described conditions warranting FAT occur multiple times.

C.11.2.1 If the Government requires FAT, the Contractor shall deliver twenty (20) AVCAD systems, using the most recent approved configuration, ninety (90) days after Government notification of the requirement for FAT.

C.11.2.2 When the Government requires FAT, the following will be conducted:

C.11.2.2.1 Environmental Test Methods and Engineering Guidelines. Various environmental tests will be accomplished IAW MIL-STD-810G.

<b>TEST</b>	<b>TEST METHOD</b>	<b>CONDITION</b>
High Temperature: Operations	Method 501.5 Procedure II	Operation: 49 degrees Celsius (°C), 72 hours
High Temperature: Storage	Method 501.5 Procedure I	Storage: 52 °C, 168 hours
Low Temp: Storage	Method 502.5 Procedure I	Storage: -39 °C, 168 hours
Blowing Rain	Method 506.5 Procedure I	10 cm/hour and 18 m/s

TEST	TEST METHOD	CONDITION
Vibration	Method 514.6 Procedure I	Rotary Wing vibration profiles
Shock	Method 516.6 Procedure I	Operator drop: 36-inch height

C.11.2.2.2 AVCAD FAT units will also undergo Chemical Agent testing. AVCAD must detect GB, HD, and an aerosol NTA IAW AVCAD Performance Specification. The Government will conduct four trials for each of the three CWAs at four different concentrations and environmental conditions. Each trial will consist of five (5) replicates.

C.11.2.2.3 AVCAD FAT units will also undergo the Electromagnetic Environmental Effects using Radiated Susceptibility methods RS101 and RS103 per MIL-STD-461G. Finally, the Government may physically inspect the FAT units to ensure they comply with contractual requirements.

C.11.2.3 The Contractor shall not deliver the remainder of AVCAD systems until notified by the Government that FAT is successful.

C.11.3 The Contractor shall deliver the detector systems using the SPI that was developed by the ECBC packaging team during the EMD PQT stage.

C.11.4 Consumable and Spare Parts: TBD (CLIN 0018AC).

The Contractor shall deliver consumable and Spare Parts using the SPIs that were developed by the ECBC packaging team during the EMD PQT stage.

C.11.5 Platform Integration Kit (PIK). Deliver PIKs (delivery schedule TBD) for the following platforms:

C.11.5.1 Shipboard: 30 PIKs (CLIN 0018AD)

C.11.5.2 NBCRV: 675 PIKs (CLIN 0018AE)

C.11.5.3 Unmanned Ground Vehicle: 300 PIKs (CLIN 0018AF)

C.11.5.4 Joint Assault Bridge: 30 PIKs (CLIN 0018AG)

C.11.5.5 ABRAMS Tank: 225 PIKs (CLIN 0018AH)

C.11.5.6 AMPV: 30 PIKs (CLIN 0018AJ)

C.11.5.7 Fixed-wing aircraft: 30 PIKs (CLIN 0018AK)

C.11.5.8 Rotary-wing aircraft: 30 PIKs (CLIN 0018AL)

C.11.6 The requirements of Program Management (C.3.1, excluding C.3.1.6, C.3.1.7 and C.3.1.9); Systems Engineering (C.3.2, excluding C.3.2.6); Packaging, Handling, Storage and Transportation (PHS&T) (C.7.4); IUID (C.5.4.4); XM12 AVCAD system warranty (C.10.9) (CLIN 0018AB) and Technical Support (C.10.6) (CLIN 0019) shall apply to this option.

## C.12 **OPTION 6: FULL RATE PRODUCTION, 2<sup>nd</sup> YEAR**

C.12.1 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver up to eleven thousand six hundred thirty-five (11,635) AVCAD systems,

each system in a reusable carrying case with one (1) Government TM in each case IAW the AVCAD Performance Specification (Attachment 1) and this PWS. The AVCAD systems delivered shall be field-able hardware and software. The Contractor shall deliver the detector systems identical to the units delivered under the LRIP option, unless configuration changes have been approved by the Government. (CLIN 0020AA)

C.12.2 The Contractor shall deliver the detector systems using the SPI that was developed by the ECBC packaging team during the EMD PQT stage.

C.12.3 Consumable and Spare Parts: TBD (CLIN 0020AC)

The Contractor shall deliver consumable and Spare Parts using the SPIs that were developed by the ECBC packaging team during the EMD PQT stage.

C.12.4 Platform Integration Kit (PIK). Deliver PIKs (delivery schedule TBD) for the following platforms:

C.12.4.1 Shipboard: 30 PIKs (CLIN 0020AD)

C.12.4.2 NBCRV: 675 PIKs (CLIN 0020AE)

C.12.4.3 Unmanned Ground Vehicle: 300 PIKs (CLIN 0020AF)

C.12.4.4 Joint Assault Bridge: 30 PIKs (CLIN 0020AG)

C.12.4.5 ABRAMS Tank: 225 PIKs (CLIN 0020AH)

C.12.4.6 AMPV: 30 PIKs (CLIN 0020AJ)

C.12.4.7 Fixed-wing aircraft: 30 PIKs (CLIN 0020AK)

C.12.4.8 Rotary-wing aircraft: 30 PIKs (CLIN 0020AL)

C.12.5 The requirements of Program Management (C.3.1, excluding C.3.1.6, C.3.1.7 and C.3.1.9); Systems Engineering (C.3.2, excluding C.3.2.6); PHS&T (C.7.4); IUID (C.5.4.4); AVCAD system warranty (C.10.9) (CLIN 0020AB), Technical Support (C.10.6) (CLIN 0021) and FAT (C.11.2) shall apply to this option.

### **C.13 OPTION 7: FULL RATE PRODUCTION, 3<sup>rd</sup> YEAR**

C.13.1 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver up to eleven thousand six hundred thirty-five (11,635) AVCAD systems, each system in a reusable carrying case with one (1) Government TM in each case IAW the AVCAD PSPEC (Attachment 1) and this PWS. The AVCAD systems delivered shall be field-able hardware and software. The Contractor shall deliver the detector systems identical to the units delivered under LRIP option, unless configuration changes have been approved by the Government (CLIN 0022AA).

C.13.2 The Contractor shall deliver the detector systems using the SPI that was developed by the ECBC packaging team during the EMD PQT stage.

C.13.3 Consumable and Spare Parts: TBD (CLIN 0022AC)

The Contractor shall deliver consumable and Spare Parts using the SPIs that were developed by the ECBC packaging team during the EMD PQT stage.

C.13.4 Platform Integration Kit (PIK). Deliver PIKs (delivery schedule TBD) for the following platforms:

- C.13.4.1 Shipboard: 30 PIKs (CLIN 0022AD)
- C.13.4.2 NBCRV: 675 PIKs (CLIN 0022AE)
- C.13.4.3 Unmanned Ground Vehicle: 300 PIKs (CLIN 0022AF)
- C.13.4.4 Joint Assault Bridge: 30 PIKs (CLIN 0022AG)
- C.13.4.5 ABRAMS Tank: 225 PIKs (CLIN 0022AH)
- C.13.4.6 AMPV: 30 PIKs (CLIN 0022AJ)
- C.13.4.7 Fixed-wing aircraft: 30 PIKs (CLIN 0022AK)
- C.13.4.8 Rotary-wing aircraft: 30 PIKs (CLIN 0022AL)

C.13.5 The requirements of Program Management (C.3.1, excluding C.3.1.6, C.3.1.7 and C.3.1.9); Systems Engineering (C.3.2, excluding C.3.2.6); PHS&T (C.7.4); IUID (C.5.4.4); AVCAD system warranty (C.10.9) (CLIN 0022AB); Technical Support (C.10.6) (CLIN 0023) and FAT (C.11.2) shall apply to this option.

#### **C.14 OPTION 8: FULL RATE PRODUCTION, 4<sup>th</sup> YEAR**

C.14.1 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver up to eleven thousand six hundred thirty-five (11,635) AVCAD systems, each system in a reusable carrying case with one (1) Government TM in each case IAW the AVCAD PSPEC (Attachment 1) and this PWS. The AVCAD systems delivered shall be fieldable hardware and software. The Contractor shall deliver the detector systems identical to the units delivered under LRIP option, unless configuration changes have been approved by the Government. (CLIN 0024AA).

C.14.2 The Contractor shall deliver the detector systems using the SPI that developed by the ECBC packaging team during the EMD PQT stage.

C.14.3 Consumable and Spare Parts: TBD (CLIN 0024AC)  
The Contractor shall deliver consumable and Spare Parts using the SPIs that were developed by the ECBC packaging team during the EMD PQT stage.

C.14.4 Platform Integration Kit (PIK). Deliver PIKs (delivery schedule TBD) for the following platforms:

- C.14.4.1 Shipboard: 30 PIKs (CLIN 0024AD)
- C.14.4.2 NBCRV: 675 PIKs (CLIN 0024AE)
- C.14.4.3 Unmanned Ground Vehicle: 300 PIKs (CLIN 0024AF)
- C.14.4.4 Joint Assault Bridge: 30 PIKs (CLIN 0024AG)
- C.14.4.5 ABRAMS Tank: 225 PIKs (CLIN 0024AH)
- C.14.4.6 AMPV: 30 PIKs (CLIN 0024AJ)
- C.14.4.7 Fixed-wing aircraft: 30 PIKs (CLIN 0024AK)
- C.14.4.8 Rotary-wing aircraft: 30 PIKs (CLIN 0024AL)



C.14.5 The requirements of Program Management (C.3.1, excluding C.3.1.6, C.3.1.7 and C.3.1.9); Systems Engineering (C.3.2, excluding C.3.2.6); PHS&T (C.7.4); IUID (C.5.4.4); AVCAD system warranty (C.10.9) (CLIN 0024AB); Technical Support (C.10.6) (CLIN 0025) and FAT (C.11.2) shall apply to this option.

#### **C.15 OPTION 9: FULL RATE PRODUCTION, 5<sup>th</sup> YEAR**

C.15.1 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver up to eleven thousand six hundred thirty-five (11,635) AVCAD systems, each system in a reusable carrying case with one (1) Government TM in each case IAW the AVCAD PSPEC (Attachment 1) and this PWS. The AVCAD systems delivered shall be fieldable hardware and software. The Contractor shall deliver the detector systems identical to the units delivered under LRIP option, unless configuration changes have been approved by the Government (CLIN 0026AA).

C.15.2 The Contractor shall deliver the detector systems using the SPI that was developed by the ECBC packaging team during the EMD PQT stage.

C.15.3 Consumable and Spare Parts: TBD (CLIN 0026AC)

The Contractor shall deliver consumable and Spare Parts using the SPIs that were developed by the ECBC packaging team during the EMD PQT stage.

C.15.4 Platform Integration Kit (PIK). Deliver PIKs (delivery schedule TBD) for the following platforms:

C.15.4.1 Shipboard: 30 PIKs (CLIN 0026AD)

C.15.4.2 NBCRV: 675 PIKs (CLIN 0026AE)

C.15.4.3 Unmanned Ground Vehicle: 300 PIKs (CLIN 0026AF)

C.15.4.4 Joint Assault Bridge: 30 PIKs (CLIN 0026AG)

C.15.4.5 ABRAMS Tank: 225 PIKs (CLIN 0026AH)

C.15.4.6 AMPV: 30 PIKs (CLIN 0026AJ)

C.15.4.7 Fixed-wing aircraft: 30 PIKs (CLIN 0026AK)

C.15.4.8 Rotary-wing aircraft: 30 PIKs (CLIN 0026AL)

C.15.5 The requirements of Program Management (C.3.1, excluding C.3.1.6, C.3.1.7 and C.3.1.9); Systems Engineering (C.3.2 excluding C.3.2.6); PHS&T (C.7.4); IUID (C.5.4.4); AVCAD system warranty (C.10.9) (CLIN 0026AB); Technical Support (C.10.6) (CLIN 0027) and FAT (C.11.2) shall apply to this option.

#### **C.16 OPTION 10: FULL RATE PRODUCTION, 6<sup>th</sup> YEAR**

C.16.1 The Contractor shall provide all necessary material, supplies, and manufacturing services to produce and deliver up to Seven thousand four hundreds and seven two (7472) AVCAD systems, each system in a reusable carrying case with one (1) Government TM in each case IAW the AVCAD PSPEC (Attachment 1) and this PWS. The AVCAD systems delivered shall be

field-able hardware and software. The Contractor shall deliver the detector systems identical to the units delivered under LRIP option, unless configuration changes have been approved by the Government (CLIN 0028AA).

C.16.2 The Contractor shall deliver the detector systems using the SPI that was developed by the ECBC packaging team during the EMD PQT stage.

C.16.3 Consumable and Spare Parts: TBD (CLIN 0028AC)

The Contractor shall deliver consumable and Spare Parts using the SPIs that were developed by the ECBC packaging team during the EMD PQT stage.

C.16.4 Platform Integration Kit (PIK). Deliver PIKs (delivery schedule TBD) for the following platforms:

C.16.4.1 Shipboard: 30 PIKs (CLIN 0028AD)

C.16.4.2 NBCRV: 675 PIKs (CLIN 0028AE)

C.16.4.3 Unmanned Ground Vehicle: 300 PIKs (CLIN 0028AF)

C.16.4.4 Joint Assault Bridge: 30 PIKs (CLIN 0028AG)

C.16.4.5 ABRAMS Tank: 225 PIKs (CLIN 0028AH)

C.16.4.6 AMPV: 30 PIKs (CLIN 0028AJ)

C.16.4.7 Fixed-wing aircraft: 30 PIKs (CLIN 0028AK)

C.16.4.8 Rotary-wing aircraft: 30 PIKs (CLIN 0028AL)

C.16.5 The requirements of Program Management (C.3.1 excluding C.3.1.6, C.3.1.7, and C.3.1.9); Systems Engineering (C.3.2 excluding C.3.2.6); PHS&T (C.7.4); IUID (C.5.4.4); AVCAD system warranty (C.10.9) (CLIN 0028AB); Technical Support (C.10.6) (Clin 0029) and FAT (C.11.2) shall apply to this option.

#### **C.17 OPTION 11: AVCAD SPARE AND CONSUMABLE PARTS TECHNICAL DATA PACKAGE (TDP) (CLIN 0030)**

The Government may choose to purchase the Technical Data Package (TDP) for spare and consumable parts for the AVCAD system. The Contractor shall prepare and deliver product-level technical data for spare and consumable parts for AVCAD to the Government suitable for competitive procurement.

##### C.17.1 Technical Data

Technical data includes the Production baseline. The term does not include computer software. Examples include, but are not limited to: drawings; specifications; associated lists; software documentation; processes; manufacturing instructions; operating procedures; maintenance, overhaul and repair procedures, training materials, and media.

##### C.17.2 Software Data

Software data means computer programs, source code, source code listings, object code listings, design details, algorithms, processes, flow charts, formulae and related material that would

enable the software to be reproduced, recreated, or recompiled. Software data does not include computer databases or computer software documentation.

### C.17.3 Form, Fit, and Function Data

Form fit and function data is technical data that describes the required overall physical, functional, and performance characteristics (along with the qualification requirements, if applicable) of an item, component, or process to the extent necessary to identify physically and functionally interchangeable items

### C.18 List of Acronyms

ACRONYM	DEFINITION
ADDIE	Analysis, Design, Development, Implementation, and Evaluation
AIN	Approved Item Name
ALSC	American Lumber Standard Committee
AMPV	Armored Multipurpose Vehicle
AMC	Army Material Command
APG	Aberdeen Proving Ground
ASCII	American Standard Code for Information Interchange
ATCTS	Army Training Certification Tracking System
ATEC	Army Test and Evaluation Command
ATI	Anti-Tamper
AVCAD	Aerosol and Vapor Chemical Agent Detector
BIT	Built-in Test
CAI	Computer Aided Instruction
CBIL	Common and Bulk Items List
CBRCS	Chemical Biological Radiological Contamination Survivability
CBRN	Chemical, Biological, Radiological and Nuclear
CC	Critical Components
CCB	Configuration Control Board
CCSI	Common Chemical Biological Radiological Nuclear Sensor Interface
CD	Compact Disc
CDR	Critical Design Review
CFA	Critical Functional Analysis
CM	Configuration Management
CMP	Configuration Management Plan
COR	Contracting Officer Representative
CPI	Critical Program Information
CPIA	Critical Program Information Assessment
CUI	Controlled Unclassified Information
CWA	Chemical Warfare Agent
DAG	Defense Acquisition Guidebook
DCC	Damage Control Central
DCN	Design Change Notice

ACRONYM	DEFINITION
DFARS	Defense Federal Acquisition Regulation Supplement
DRs	Design Reviews
DTD	Document Type Definitions
DVD	Digital Versatile Disc
ECBC	Edgewood Chemical Biological Center
ECP	Engineering Change Proposal
EDFP	Engineering Data for Provisioning
EI	End Item
ELIN	Exhibit Line Item Number
EMD	Engineering and Manufacturing Development
FAT	First Article Testing
FGC	Functional Group Codes
FLW	Ft. Leonard Wood
FMECA	Failure Mode, Effects and Criticality Analysis
FRACAS	Failure Reporting, Analysis, and Corrective Action System
FRC	Final Reproducible Copy
FRP	Full Rate Production
HSI	Human Systems Integration
HWCI	Hardware Configuration Items
IATA	International Air Transportation Association
IAW	In Accordance With
ICD	Interface Control Documentation
ICW	Interactive Courseware
IMDG	International Maritime Dangerous Good
IMI	Interactive Multimedia Instruction
IMS	Integrated Master Schedule
IOT&E	Initial Operational Test & Evaluation
IPDS-LR	Improved Point Detection System Lifecycle Replacement
IPS	Integrated Product Support
IPSP	Integrated Product Support Plan
IPT	Integrated Process Team
iRAPT	Invoicing, Receipt, Acceptance, and Property Transfer
IT	Information Technology
IUID	Item Unit Identification
JPM NBC CA	Joint Project Manager for Nuclear, Biological and Chemical Contamination Avoidance
KO	Contracting Officer
LD	Logistics Demonstration
LLTIL	Long Lead Time Items List
LMP	Logistics Modernization Program
LORA	Level of Repair Analysis
LPD	Logistics Product Data

ACRONYM	DEFINITION
LRIP	Low Rate Initial Production
MAC	Maintenance Allocation Chart
MC	Main Circuit
MIL-HDBK	Military Handbooks
MIL-PRF	Military Performance Specification
MIL-STD	Military Standard
MOSA	Modular Open System Approach
MOT	Multiservice Operational Test
MRB	Material Review Board
MRL	Manufacturing Readiness Level
MTBF/MTBFA	Mean Time between Failure/Mean Time between False Alarm
NAS	National Aerospace Standard
NBCRV	Nuclear Biological Chemical Reconnaissance Vehicle
NETT	New Equipment Training Team
NGCD	Next Generation Chemical Detector
NHA	Next Higher Assembly
NISP	National Industrial Security Program
NIST	National Institute of Standards and Technology
NLT	No Later Than
NOR	Notice of Revision
NSN	National Stock Number
ODS	Ozone Depleting Substance
OEM	Original Equipment Manufacturer
OPSEC	Operations Security
OPTEMPO	Operational Tempo
O&S	Operations and Support
PDR	Preliminary Design Review
PGC	Provisioning Guidance Conference
PHS&T	Packaging, Handling, Storage and Transportation
PIK	Platform Interface Kit
PLISN	Provisioning List Item Sequence Number
PMR	Provisioning Master Record
POC	Point of Contact
PPIP	Program Projection Implementation Plan
PPL	Provisioning Parts List
PPP	Program Protection Plan
PPWG	Program Protection Working Group
PQT	Production Qualification Test
PRs	Program Reviews
PSA	Product Support Analysis
PSP	Product Support Package
P-SPEC	Performance Specification

ACRONYM	DEFINITION
PTD	Provisioning Technical Documentation
PVT	Production Verification Test
PWS	Performance Work Statement
QAP	Quality Assurance Program
QAPP	Quality Assurance Program Plan
RADU	Remote Alarm Display Unit
RAM	Reliability, Availability and Maintainability
RCM	Requirements Compliance Matrix
RDT&E	Research Development, Test, and Evaluation
RFD	Request for Deviation
RNCC	Reference Number Category Code
RNVC	Reference Number Variation Code
RPSTL	Repair Parts and Special Tools List
PMCS	Preventive Maintenance Checks and Services
RMF	Risk Management Framework
RMP	Risk Management Plan
SAR	Safety Assessment Report
SCI	Software Configuration Items
SDP	Software Development Plan
SEMP	System Engineering Management Plan
SEP	Systems Engineering Plan
SESAME	Stockage to Availability Method
SMEs	Subject Matter Experts
SOP	Standard Operating Procedure
SOW	Start-of-Work
SPIs	Special Packaging Instructions
SSP	System Support Package
SSPL	System Support Package List
SW	Software
SWaP	Size, Weight and Power
TBD	To Be Determined
TDC	Training Development Capability
TDP	Technical Data Package
TDRD	Training Device Requirements Document
T&E	Test and Evaluation
TIMs	Technical Interchange Meetings
TMs	Technical Manuals
TMRR	Technology Maturation and Risk Reduction
TPS	Test Program Set
TRL	Technology Readiness Level
TSA	Training Situation Analysis
TSP	Training Support Package

ACRONYM	DEFINITION
TSFD	Training System Functional Description
TSRA	Training Systems Requirements Analysis
TTEL	Tools and Test Equipment List
UOC	Use on Codes
VSC	Vulnerability Scan Compliance
WDTC	West Desert Test Center
XML	All Extensible Markup Language

## Section D - Packaging and Marking

D.1 Items entering into the military stock and distribution system shall require military packaging. The successful Offeror(s) shall package items not going into military stock following standard commercial practices IAW ASTM D3951, and marked IAW MIL-STD-129R.

D.2 PACKAGING OF DATA-Data shall be transmitted in accordance with DD Form 1423 Contract Data Requirements List in Section J, Exhibits.

D.3 PACKAGING OF HARDWARE--Packaging shall be in accordance with the Performance Work Statement, Section C.

D.4. PACKAGING, HANDLING, STORAGE AND TRANSPORTATION requirements are contained in the PWS and shall be delivered in accordance with the Performance Work Statement, Section C.



Section E - Inspection and Acceptance

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
0002	Origin	Government	Origin	Government
0003	Origin	Government	Origin	Government
0004	Origin	Government	Origin	Government
0005	N/A	N/A	N/A	Government
0006	N/A	N/A	N/A	Government
0007	Origin	Government	Origin	Government
0007AA	Origin	Government	Origin	Government
0007AB	Origin	Government	Origin	Government
0007AC	Origin	Government	Origin	Government
0008	Origin	Government	Origin	Government
0008AA	Origin	Government	Origin	Government
0008AB	Origin	Government	Origin	Government
0008AC	Origin	Government	Origin	Government
0009	Origin	Government	Origin	Government
0009AA	Origin	Government	Origin	Government
0009AB	Origin	Government	Origin	Government
0009AC	Origin	Government	Origin	Government
0009AD	Origin	Government	Origin	Government
0009AE	Origin	Government	Origin	Government
0009AF	Origin	Government	Origin	Government
0009AG	Origin	Government	Origin	Government
0009AH	Origin	Government	Origin	Government
0010	Origin	Government	Origin	Government
0011	Origin	Government	Origin	Government
0011AA	Origin	Government	Origin	Government
0011AB	Origin	Government	Origin	Government
0012	Origin	Government	Origin	Government
0012AA	Origin	Government	Origin	Government
0012AB	Origin	Government	Origin	Government
0013	Origin	Government	Origin	Government
0013AA	Origin	Government	Origin	Government
0013AB	Origin	Government	Origin	Government
0013AC	Origin	Government	Origin	Government
0014	Origin	Government	Origin	Government
0015	Origin	Government	Origin	Government
0016	Origin	Government	Origin	Government
0016AA	Origin	Government	Origin	Government
0016AB	Origin	Government	Origin	Government
0016AC	Origin	Government	Origin	Government
0016AD	Origin	Government	Origin	Government
0016AE	Origin	Government	Origin	Government
0016AF	Origin	Government	Origin	Government
0016AG	Origin	Government	Origin	Government
0016AH	Origin	Government	Origin	Government



0026AC Origin	Government	Origin	Government
0026AD Origin	Government	Origin	Government
0026AE Origin	Government	Origin	Government
0026AF Origin	Government	Origin	Government
0026AG Origin	Government	Origin	Government
0026AH Origin	Government	Origin	Government
0026AJ Origin	Government	Origin	Government
0026AK Origin	Government	Origin	Government
0026AL Origin	Government	Origin	Government
0027 Origin	Government	Origin	Government
0028 Origin	Government	Origin	Government
0028AA Origin	Government	Origin	Government
0028AB Origin	Government	Origin	Government
0028AC Origin	Government	Origin	Government
0028AD Origin	Government	Origin	Government
0028AE Origin	Government	Origin	Government
0028AF Origin	Government	Origin	Government
0028AG Origin	Government	Origin	Government
0028AH Origin	Government	Origin	Government
0028AJ Origin	Government	Origin	Government
0028AK Origin	Government	Origin	Government
0028AL Origin	Government	Origin	Government
0029 Origin	Government	Origin	Government
0030 Origin	Government	Origin	Government

CLAUSES INCORPORATED BY REFERENCE

52.246-2	Inspection Of Supplies--Fixed Price	AUG 1996
52.246-2 Alt I	Inspection Of Supplies Fixed Price (Aug 1996) - Alternate I	JUL 1985
52.246-5	Inspection Of Services Cost-Reimbursement	APR 1984
52.246-16	Responsibility For Supplies	APR 1984

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	DODAAC
0001	180 dys. ADC	3	N/A FOB: Destination	
0002	180 dys. ADC	3	N/A FOB: Destination	
0003	180 dys. ADC	1	N/A FOB: Destination	
0004	N/A	N/A	N/A	N/A
0005	N/A	N/A	N/A	N/A
0006	N/A	N/A	N/A	N/A
0007	N/A	N/A	N/A	N/A
0007AA	120 dys. ADC	24	N/A FOB: Destination	
0007AB	180 dys. ADC	36	N/A FOB: Destination	
0007AC	240 dys. ADC	15	N/A FOB: Destination	
0008	N/A	N/A	N/A	N/A
0008AA	120 dys. ADC	1	N/A FOB: Destination	
0008AB	180 dys. ADC	1	N/A FOB: Destination	
0008AC	240 dys. ADC	1	N/A FOB: Destination	
0009	N/A	N/A	N/A	N/A
0009AA	240 dys. ADC	2	N/A FOB: Destination	
0009AB	240 dys. ADC	2	N/A FOB: Destination	

0009AC	240 dys. ADC	2	N/A FOB: Destination	
0009AD	240 dys. ADC	2	N/A FOB: Destination	
0009AE	240 dys. ADC	2	N/A FOB: Destination	
0009AF	240 dys. ADC	2	N/A FOB: Destination	
0009AG	240 dys. ADC	2	N/A FOB: Destination	
0009AH	240 dys. ADC	2	N/A FOB: Destination	
0010	180 dys. ADC	1	N/A FOB: Destination	
0011	N/A	N/A	N/A	N/A
0011AA	120 dys. ADC	68	N/A FOB: Destination	
0011AB	150 dys. ADC	60	N/A FOB: Destination	
0012	N/A	N/A	N/A	N/A
0012AA	120 dys. ADC		N/A FOB: Destination	
0012AB	150 dys. ADC		N/A FOB: Destination	
0013	N/A	N/A	N/A	N/A
0013AA	90 dys. ADC	100	N/A FOB: Destination	
0013AB	120 dys. ADC	1	N/A FOB: Destination	
0013AC	90 dys. ADC	50	N/A FOB: Destination	
0014	N/A	N/A	N/A	N/A
0015	N/A	N/A	N/A	N/A
0016	N/A	N/A	N/A	N/A
0016AA	150 dys. ADC		N/A FOB: Destination	

0016AB	150 dys. ADC	2	N/A FOB: Destination	
0016AC	150 dys. ADC	2	N/A FOB: Destination	
0016AD	150 dys. ADC	2	N/A FOB: Destination	
0016AE	150 dys. ADC	2	N/A FOB: Destination	
0016AF	150 dys. ADC	2	N/A FOB: Destination	
0016AG	150 dys. ADC	2	N/A FOB: Destination	
0016AH	150 dys. ADC	2	N/A FOB: Destination	
0017	N/A	N/A	N/A	N/A
0018	N/A	N/A	N/A	N/A
0018AA	N/A	N/A	N/A	N/A
0018AB	N/A	N/A	N/A	N/A
0018AC	N/A	N/A	N/A	N/A
0018AD	N/A	N/A	N/A	N/A
0018AE	N/A	N/A	N/A	N/A
0018AF	N/A	N/A	N/A	N/A
0018AG	N/A	N/A	N/A	N/A
0018AH	N/A	N/A	N/A	N/A
0018AJ	N/A	N/A	N/A	N/A
0018AK	N/A	N/A	N/A	N/A
0018AL	N/A	N/A	N/A	N/A
0019	N/A	N/A	N/A	N/A
0020	N/A	N/A	N/A	N/A
0020AA	N/A	N/A	N/A	N/A
0020AB	N/A	N/A	N/A	N/A

0020AC	N/A	N/A	N/A	N/A
0020AD	N/A	N/A	N/A	N/A
0020AE	N/A	N/A	N/A	N/A
0020AF	N/A	N/A	N/A	N/A
0020AG	N/A	N/A	N/A	N/A
0020AH	N/A	N/A	N/A	N/A
0020AJ	N/A	N/A	N/A	N/A
0020AK	N/A	N/A	N/A	N/A
0020AL	N/A	N/A	N/A	N/A
0021	N/A	N/A	N/A	N/A
0022	N/A	N/A	N/A	N/A
0022AA	N/A	N/A	N/A	N/A
0022AB	N/A	N/A	N/A	N/A
0022AC	N/A	N/A	N/A	N/A
0022AD	N/A	N/A	N/A	N/A
0022AE	N/A	N/A	N/A	N/A
0022AF	N/A	N/A	N/A	N/A
0022AG	N/A	N/A	N/A	N/A
0022AH	N/A	N/A	N/A	N/A
0022AJ	N/A	N/A	N/A	N/A
0022AK	N/A	N/A	N/A	N/A
0022AL	N/A	N/A	N/A	N/A
0023	N/A	N/A	N/A	N/A
0024	N/A	N/A	N/A	N/A
0024AA	N/A	N/A	N/A	N/A
0024AB	N/A	N/A	N/A	N/A
0024AC	N/A	N/A	N/A	N/A
0024AD	N/A	N/A	N/A	N/A

0024AE	N/A	N/A	N/A	N/A
0024AF	N/A	N/A	N/A	N/A
0024AG	N/A	N/A	N/A	N/A
0024AH	N/A	N/A	N/A	N/A
0024AJ	N/A	N/A	N/A	N/A
0024AK	N/A	N/A	N/A	N/A
0024AL	N/A	N/A	N/A	N/A
0025	N/A	N/A	N/A	N/A
0026	N/A	N/A	N/A	N/A
0026AA	N/A	N/A	N/A	N/A
0026AB	N/A	N/A	N/A	N/A
0026AC	N/A	N/A	N/A	N/A
0026AD	N/A	N/A	N/A	N/A
0026AE	N/A	N/A	N/A	N/A
0026AF	N/A	N/A	N/A	N/A
0026AG	N/A	N/A	N/A	N/A
0026AH	N/A	N/A	N/A	N/A
0026AJ	N/A	N/A	N/A	N/A
0026AK	N/A	N/A	N/A	N/A
0026AL	N/A	N/A	N/A	N/A
0027	N/A	N/A	N/A	N/A
0028	N/A	N/A	N/A	N/A
0028AA	N/A	N/A	N/A	N/A
0028AB	N/A	N/A	N/A	N/A
0028AC	N/A	N/A	N/A	N/A
0028AD	N/A	N/A	N/A	N/A
0028AE	N/A	N/A	N/A	N/A
0028AF	N/A	N/A	N/A	N/A



0028AG	N/A	N/A	N/A	N/A
0028AH	N/A	N/A	N/A	N/A
0028AJ	N/A	N/A	N/A	N/A
0028AK	N/A	N/A	N/A	N/A
0028AL	N/A	N/A	N/A	N/A
0029	N/A	N/A	N/A	N/A
0030	N/A	N/A	N/A	N/A

CLAUSES INCORPORATED BY REFERENCE

52.247-29	F.O.B. Origin	FEB 2006
52.247-34	F.O.B. Destination	NOV 1991
52.247-35	F.O.B. Destination, Within Consignee's Premises	APR 1984
52.247-48	F.O.B. Destination--Evidence Of Shipment	FEB 1999

Section G - Contract Administration Data

CLAUSES INCORPORATED BY REFERENCE

252.204-7006 Billing Instructions

OCT 2005

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).

---

(Contracting Officer: Insert applicable document type(s). Note: If a "Combo" document type is identified but not supportable by the Contractor's business systems, an "Invoice" (stand-alone) and "Receiving Report" (stand-alone) document type may be used instead.)

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

\_\_\_\_\_

(Contracting Officer: Insert inspection and acceptance locations or “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\*

Field Name in WAWF	Data to be entered in WAWF
Pay Official DoDAAC	_____
Issue By DoDAAC	_____
Admin DoDAAC	_____
Inspect By DoDAAC	_____
Ship To Code	_____
Ship From Code	_____
Mark For Code	_____
Service Approver (DoDAAC)	_____
Service Acceptor (DoDAAC)	_____
Accept at Other DoDAAC	_____
LPO DoDAAC	_____
DCAA Auditor DoDAAC	_____
Other DoDAAC(s)	_____

(\*Contracting Officer: Insert applicable DoDAAC information or “See schedule” if multiple ship to/acceptance locations apply, or “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.

\_\_\_\_\_

(Contracting Officer: Insert applicable email addresses or “Not applicable.”)

(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.

\_\_\_\_\_

(Contracting Officer: Insert applicable information or “Not applicable.”)

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

(End of clause)

252.232-7007 LIMITATION OF GOVERNMENT'S OBLIGATION (APR 2014)

(a) Contract line item(s) \_\_\_\_\_ is/are incrementally funded. For this/these item(s), the sum of \$---- \_\_\_\_\_ of the total price is presently available for payment and allotted to this contract. An allotment schedule is set forth in paragraph (j) of this clause.

(b) For items(s) identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those item(s) for the Government's convenience, approximates the total amount currently allotted to the contract. The Contractor is not authorized to continue work on those item(s) beyond that point. The Government will not be obligated in any event to reimburse the Contractor in excess of the amount allotted to the contract for those item(s) regardless of anything to the contrary in the clause entitled "TERMINATION FOR THE CONVENIENCE OF THE GOVERNMENT." As used in this clause, the total amount payable by the Government in the event of termination of applicable contract line item(s) for convenience includes costs, profit and estimated termination settlement costs for those item(s).

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (j) of this clause, the Contractor will notify the Contracting Officer in writing at least ninety days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount then allotted to the contract for performance of the applicable item(s). The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of applicable line items up to the next scheduled date for allotment of funds identified in paragraph (j) of this clause, or to a mutually agreed upon substitute date. The notification will also advise the Contracting Officer of the estimated amount of additional funds that will be required for the timely performance of the item(s) funded pursuant to this clause, for subsequent period as may be specified in the allotment schedule in paragraph (j) of this clause, or otherwise agreed to by the parties. If after such notification additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause of this contract entitled "TERMINATION FOR THE CONVENIENCE OF THE GOVERNMENT".

(d) When additional funds are allotted for continued performance of the contract line item(s) identified in paragraph (a) of this clause, the parties will agree as to the period of contract performance which will be covered by the funds. The provisions of paragraph (b) through (d) of this clause will apply in like manner to the additional allotted funds and agreed substitute date, and the contract will be modified accordingly.

(e) If, solely by reason of failure of the Government to allot additional funds, by the dates indicated below, in amounts sufficient for timely performance of the contract line item(s) identified in paragraph (a) of this clause, the Contractor incurs additional costs or is delayed in the performance of the work under this contract and if additional funds are allotted, an equitable adjustment will be made in the price or prices (including appropriate target, billing, and ceiling prices where applicable) of the item(s), or in the time of delivery, or both. Failure to agree to any such equitable adjustment hereunder will be a dispute concerning a question of fact within the meaning of the clause entitled "disputes."

(f) The Government may at any time prior to termination allot additional funds for the performance of the contract line item(s) identified in paragraph (a) of this clause.

(g) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "DEFAULT." The provisions of this clause are limited to work and allotment of funds for the contract line item(s) set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded except with regard to the rights or obligations of the parties concerning equitable adjustments negotiated under paragraphs (d) or (e) of this clause.

(h) Nothing in this clause affects the right of the Government to this contract pursuant to the clause of this contract entitled "TERMINATION FOR CONVENIENCE OF THE GOVERNMENT."

(i) Nothing in this clause shall be construed as authorization of voluntary services whose acceptance is otherwise prohibited under 31 U.S.C. 1342.

(j) The parties contemplate that the Government will allot funds to this contract in accordance with the following schedule:

On execution of contract \$--

(month) (day), (year) \$----

(month) (day), (year) \$----

(month) (day), (year) \$----

(End of clause)

## Section H - Special Contract Requirements

### SECTION H

#### H.1. Security.

H.1.1 This contract contains a Contract Security Classification Specification, DD Form 254.

H.1.2 In accordance with the Arms Export Control Act (Title 22, USC (Sec 275)), the International Traffic in Arms Regulation (ITAR), and/or Department of Defense (DoD) Directive 5230.25, foreign nationals shall not work on this contract without the express permission of the Contracting Officer. If requesting approval, the contractor shall provide: the full name; date of birth; place of birth; citizenship; registration number; type of visa; clear copy of picture identification of visa, green card, or permanent resident card; port of entry; title of position to be filled; abbreviated curriculum vitae; and justification for employment to the Contract Specialist. These items will be reviewed by the Security Office with subsequent approval by the Contracting Officer. Previously approved foreign nationals must be re-approved if the nature of their work under this contract differs from that performed under the prior year's contract.

#### H.2. Contract Types.

H.2.1 Converting FPI(S) to FPIF CLINs: FPI(S) options may be unilaterally exercised and converted to FPIF CLINs by the Government as follows:

Successive Target Cost: Any value the Contracting Officer considers to be reasonably challenging, but achievable.

Successive Target Profit:  $\text{Initial Target Profit} + 15\% * (\text{Initial Target Cost} - \text{Successive Target Cost})$ ; however, this may not exceed the ceiling price minus the successive target cost.

Overrun Share: 85% Gov't : 15% Contractor

Underrun Share:  $\leq 85\%$  Gov't :  $\geq 15\%$  Contractor, determined by the Contracting Officer

Ceiling Price: 130% of the Initial Target Cost

Note: The Government intends to reach bilateral agreements with the contractor; however, this unilateral right may be invoked for any reason, including: 1) There are significant differences between the Contractor's proposed successive target cost and the Government's estimate of a "Reasonably Challenging, but Achievable" successive target cost; 2) There are significant cost uncertainties; and 3) There is insufficient time to agree on a successive target cost and incentive structure.

H.2.2 Converting FPI(S) to FFP CLINs: FPI(S) to FFP will be accomplished through negotiations and bilateral agreement.

### H.3. Generation of CLINs

H.3.1 The Government may, at its sole discretion, unilaterally add a CLIN or SubCLIN to the contract, to facilitate the proper depiction of accounting details, pricing, inspection/delivery, or other distinguishing information.

### H.4. Award of LRIP and FRP OPTIONS

H.4.1 If the Government determines it is in its best interest to enter into LRIP of the contract (CLINs 0011 through 0018), the government reserves the right to either obtain all LRIP and FRP production items from a single contractor or to divide production options between contractors based on price, sustainment cost, performance against the PSPEC and any mission requirements to maintain multiple sources of supply.

### H.5. 52.217-5 EVALUATION OF OPTIONS (JUL 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

### H.6 Earned Value Management System (EVMS)

H.6.1 This solicitation includes the following DFARS clauses:

252.234-7001 – Notice of Earned Value Management System

252.234-7002 – Earned Value Management System

H.6.2. It is anticipated that the estimated cost of CLIN 0001 will not meet the threshold requirement for EVMS identified at DFARS 234.201. In light of this, EVMS will not be required until the total estimated value of the cost and incentive portions of the contract meet the specified threshold.

### H.7. Release of Information.

The contractor shall receive the Contracting Officer's or Contracting Officers Representative's approval before making a public release (including by posting on-line) of any information produced in or related to the performance of this contract, which includes but is not limited to the following: data, documentation, webpages, manuals, press releases, announcements, software, shareware, or test reports. The contractor shall require all subcontractors to meet the same criteria regarding release of information.

### H.8. AMC-LEVEL PROTEST PROGRAM(Aug 2012)

ACC-APG 5152.233-4900

If you have complaints about this procurement, it is preferable that you first attempt to resolve those concerns with the responsible Contracting Officer.

However, you can also protest to Headquarters, AMC. The HQ, AMC-Level Protest Program is intended to encourage interested parties to seek resolution of their concerns within AMC as an Alternative Dispute Resolution forum, rather than filing a protest with the General Accounting Office (GAO) or other external forum. Contract award or performance is suspended during the protest to the same extent, and within the same time periods, as if filed at the GAO. The AMC protest decision goal is to resolve protests within 20 working days from filing. To be timely, protests must be filed within the periods specified in FAR 33.103.

Send protests (other than protests to the Contracting Officer) to:

Headquarters U.S. Army Materiel Command  
Office of Command Counsel-Deputy Command Counsel 4400 Martin Road Rm: A6SE040.001  
Redstone Arsenal, AL 35898-5000 Phone: (256) 450-8165

#### H.9. NOTICE OF INCORPORATION OF SECTION K

Sections K, L and M of the solicitation will not be distributed with the contract. However, Section K is incorporated in and forms a part of the resultant contract as though furnished in full text therewith.



## Section I - Contract Clauses

## CLAUSES INCORPORATED BY REFERENCE

52.202-1	Definitions	NOV 2013
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	MAY 2014
52.203-6	Restrictions On Subcontractor Sales To The Government	SEP 2006
52.203-7	Anti-Kickback Procedures	MAY 2014
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	MAY 2014
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	MAY 2014
52.203-12	Limitation On Payments To Influence Certain Federal Transactions	OCT 2010
52.203-13	Contractor Code of Business Ethics and Conduct	OCT 2015
52.203-16	Preventing Personal Conflicts of Interest	DEC 2011
52.203-17	Contractor Employee Whistleblower Rights and Requirement To Inform Employees of Whistleblower Rights	APR 2014
52.204-2	Security Requirements	AUG 1996
52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper	MAY 2011
52.204-9	Personal Identity Verification of Contractor Personnel	JAN 2011
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards	OCT 2016
52.204-13	System for Award Management Maintenance	OCT 2016
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	OCT 2015
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters	JUL 2013
52.209-10	Prohibition on Contracting With Inverted Domestic Corporations	NOV 2015
52.210-1	Market Research	APR 2011
52.211-5	Material Requirements	AUG 2000
52.215-2	Audit and Records--Negotiation	OCT 2010
52.215-8	Order of Precedence--Uniform Contract Format	OCT 1997
52.215-14	Integrity of Unit Prices	OCT 2010
52.215-15	Pension Adjustments and Asset Reversions	OCT 2010
52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other than Pensions	JUL 2005
52.215-19	Notification of Ownership Changes	OCT 1997
52.215-21	Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data -- Modifications	OCT 2010
52.215-23	Limitations on Pass-Through Charges	OCT 2009
52.216-16 Alt I	Incentive Price Revision-Firm Target (Oct 1997) - Alternate I	APR 1984
52.216-17 Alt I	Incentive Price Revision--Successive Targets (Oct 1997) - Alternate I	APR 1984
52.219-8	Utilization of Small Business Concerns	NOV 2016
52.219-9	Small Business Subcontracting Plan	JAN 2017
52.222-3	Convict Labor	JUN 2003
52.222-19	Child Labor -- Cooperation with Authorities and Remedies	OCT 2016
52.222-20	Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000	MAY 2014
52.222-21	Prohibition Of Segregated Facilities	APR 2015

52.222-26	Equal Opportunity	SEP 2016
52.222-35	Equal Opportunity for Veterans	OCT 2015
52.222-36	Equal Opportunity for Workers with Disabilities	JUL 2014
52.222-37	Employment Reports on Veterans	FEB 2016
52.222-40	Notification of Employee Rights Under the National Labor Relations Act	DEC 2010
52.222-50	Combating Trafficking in Persons	MAR 2015
52.222-54	Employment Eligibility Verification	OCT 2015
52.223-6	Drug-Free Workplace	MAY 2001
52.225-13	Restrictions on Certain Foreign Purchases	JUN 2008
52.227-1	Authorization and Consent	DEC 2007
52.227-1 Alt I	Authorization And Consent (Dec 2007) - Alternate I	APR 1984
52.227-2	Notice And Assistance Regarding Patent And Copyright Infringement	DEC 2007
52.227-3	Patent Indemnity	APR 1984
52.227-10	Filing Of Patent Applications--Classified Subject Matter	DEC 2007
52.228-7	Insurance--Liability To Third Persons	MAR 1996
52.229-3	Federal, State And Local Taxes	FEB 2013
52.230-2	Cost Accounting Standards	OCT 2015
52.232-1	Payments	APR 1984
52.232-8	Discounts For Prompt Payment	FEB 2002
52.232-11	Extras	APR 1984
52.232-17	Interest	MAY 2014
52.232-18	Availability Of Funds	APR 1984
52.232-22	Limitation Of Funds	APR 1984
52.232-23	Assignment Of Claims	MAY 2014
52.232-25	Prompt Payment	JAN 2017
52.232-33	Payment by Electronic Funds Transfer--System for Award Management	JUL 2013
52.232-39	Unenforceability of Unauthorized Obligations	JUN 2013
52.232-40	Providing Accelerated Payments to Small Business Subcontractors	DEC 2013
52.233-1	Disputes	MAY 2014
52.233-2	Service Of Protest	SEP 2006
52.233-3	Protest After Award	AUG 1996
52.233-4	Applicable Law for Breach of Contract Claim	OCT 2004
52.239-1	Privacy or Security Safeguards	AUG 1996
52.242-1	Notice of Intent to Disallow Costs	APR 1984
52.242-2	Production Progress Reports	APR 1991
52.242-3	Penalties for Unallowable Costs	MAY 2014
52.242-4	Certification of Final Indirect Costs	JAN 1997
52.242-13	Bankruptcy	JUL 1995
52.242-15	Stop-Work Order	AUG 1989
52.242-15 Alt I	Stop-Work Order (Aug 1989) - Alternate I	APR 1984
52.242-17	Government Delay Of Work	APR 1984
52.243-1	Changes--Fixed Price	AUG 1987
52.243-2 Alt II	Changes--Cost Reimbursement (Aug 1987) - Alternate II	APR 1984
52.243-4	Changes	JUN 2007
52.243-6	Change Order Accounting	APR 1984
52.243-7	Notification Of Changes	JAN 2017
52.244-5	Competition In Subcontracting	DEC 1996
52.244-6	Subcontracts for Commercial Items	JAN 2017
52.245-1	Government Property	JAN 2017
52.245-9	Use And Charges	APR 2012
52.246-3	Inspection Of Supplies Cost-Reimbursement	MAY 2001

52.246-4	Inspection Of Services--Fixed Price	AUG 1996
52.246-7	Inspection Of Research And Development Fixed Price	AUG 1996
52.246-8	Inspection Of Research And Development Cost Reimbursement	MAY 2001
52.246-11	Higher-Level Contract Quality Requirement	DEC 2014
52.246-15	Certificate of Conformance	APR 1984
52.246-23	Limitation Of Liability	FEB 1997
52.246-25	Limitation Of Liability--Services	FEB 1997
52.249-2	Termination For Convenience Of The Government (Fixed-Price)	APR 2012
52.249-6	Termination (Cost Reimbursement)	MAY 2004
52.249-8	Default (Fixed-Price Supply & Service)	APR 1984
52.249-14	Excusable Delays	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2008
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	SEP 2013
252.203-7003	Agency Office of the Inspector General	DEC 2012
252.203-7004	Display of Hotline Posters	OCT 2016
252.204-7000	Disclosure Of Information	OCT 2016
252.204-7002	Payment For Subline Items Not Separately Priced	DEC 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004 Alt A	System for Award Management Alternate A	FEB 2014
252.204-7005	Oral Attestation of Security Responsibilities	NOV 2001
252.204-7008	Compliance With Safeguarding Covered Defense Information Controls	OCT 2016
252.204-7009	Limitations on the Use or Disclosure of Third-Party Contractor Reported Cyber Incident Information	OCT 2016
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting	OCT 2016
252.204-7015	Notice of Authorized Disclosure of Information for Litigation Support	MAY 2016
252.205-7000	Provision Of Information To Cooperative Agreement Holders	DEC 1991
252.209-7008	Notice of Prohibition Relating to Organizational Conflict of Interest--Major Defense Acquisition Program	DEC 2010
252.209-7009	Organizational Conflict of Interest--Major Defense Acquisition Program	OCT 2015
252.211-7001	Availability of Specifications, Standards, and Data Item Descriptions Not Listed in the Acquisition Streamlining and Standardization Information System (ASSIST), and Plans, Drawings, and Other Pertinent Documents	MAY 2006
252.211-7007	Reporting of Government-Furnished Property	AUG 2012
252.219-7003	Small Business Subcontracting Plan (DOD Contracts)--Basic	MAR 2016
252.222-7007	Representation Regarding Combating Trafficking in Persons	JAN 2015
252.223-7004	Drug Free Work Force	SEP 1988
252.223-7006	Prohibition On Storage, Treatment, and Disposal of Toxic or Hazardous Materials	SEP 2014
252.225-7001	Buy American And Balance Of Payments Program-- Basic (Dec 2016)	DEC 2016
252.225-7002	Qualifying Country Sources As Subcontractors	DEC 2016
252.225-7003	Report of Intended Performance Outside the United States and Canada--Submission with Offer	OCT 2015
252.225-7004	Report of Intended Performance Outside the United States and Canada--Submission after Award	OCT 2015

252.225-7012	Preference For Certain Domestic Commodities	DEC 2016
252.225-7035	Buy American--Free Trade Agreement--Balance Of Payments Program Certificate--Basic (Nov 2014)	NOV 2014
252.225-7036	Buy American--Free Trade Agreement--Balance of Payments Program--Basic (DEC 2016)	DEC 2016
252.225-7048	Export--Controlled Items	JUN 2013
252.226-7001	Utilization of Indian Organizations and Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns	SEP 2004
252.227-7013	Rights in Technical Data--Noncommercial Items	FEB 2014
252.227-7013 Alt I	Rights in Technical Data--Noncommercial Items (FEB 2014) - Alternate I	JUN 1995
252.227-7014	Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation	FEB 2014
252.227-7015	Technical Data--Commercial Items	FEB 2014
252.227-7016	Rights in Bid or Proposal Information	JAN 2011
252.227-7017	Identification and Assertion of Use, Release, or Disclosure Restrictions	JAN 2011
252.227-7019	Validation of Asserted Restrictions--Computer Software	SEP 2016
252.227-7025	Limitations on the Use or Disclosure of Government-Furnished Information Marked with Restrictive Legends	MAY 2013
252.227-7026	Deferred Delivery Of Technical Data Or Computer Software	APR 1988
252.227-7027	Deferred Ordering Of Technical Data Or Computer Software	APR 1988
252.227-7028	Technical Data or Computer Software Previously Delivered to the Government	JUN 1995
252.227-7030	Technical Data--Withholding Of Payment	MAR 2000
252.227-7037	Validation of Restrictive Markings on Technical Data	SEP 2016
252.227-7038	Patent Rights--Ownership by the Contractor (Large Business)	JUN 2012
252.231-7000	Supplemental Cost Principles	DEC 1991
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	JUN 2012
252.232-7004	DOD Progress Payment Rates	OCT 2014
252.232-7010	Levies on Contract Payments	DEC 2006
252.234-7001	Notice of Earned Value Management System	APR 2008
252.234-7002	Earned Value Management System	MAY 2011
252.234-7004	Cost and Software Data Reporting System--Basic (Nov 2014)	NOV 2014
252.235-7011	Final Scientific or Technical Report	JAN 2015
252.239-7001	Information Assurance Contractor Training and Certification	JAN 2008
252.242-7004	Material Management And Accounting System	MAY 2011
252.242-7005	Contractor Business Systems	FEB 2012
252.242-7006	Accounting System Administration	FEB 2012
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	DEC 2012
252.244-7000	Subcontracts for Commercial Items	JUN 2013
252.244-7001	Contractor Purchasing System Administration	MAY 2014
252.245-7001	Tagging, Labeling, and Marking of Government-Furnished Property	APR 2012
252.245-7002	Reporting Loss of Government Property	APR 2012
252.245-7003	Contractor Property Management System Administration	APR 2012
252.245-7004	Reporting, Reutilization, and Disposal	SEP 2016
252.246-7000	Material Inspection And Receiving Report	MAR 2008
252.246-7001 Alt I	Warranty Of Data (Mar 2014) - Alternate I	MAR 2014
252.246-7005	Notice of Warranty Tracking of Serialized Items	MAR 2016
252.246-7006	Warranty Tracking of Serialized Items	MAR 2016
252.247-7006	Removal of Contractor's Employees	DEC 1991

252.247-7023	Transportation of Supplies by Sea	APR 2014
252.247-7024	Notification Of Transportation Of Supplies By Sea	MAR 2000

## CLAUSES INCORPORATED BY FULL TEXT

52.209-4 FIRST ARTICLE APPROVAL--GOVERNMENT TESTING (SEP 1989) - ALTERNATE I (JAN 1997)

(Contracting Officer shall insert details)

(a) The Contractor shall deliver twenty (20) unit(s) of Lot/Item within **ninety (90)** calendar days from the date the Government provides written notice of the requirement for FAT, to the **Government at West Desert Test Center, Dugway Proving Ground (DPG), UT**, for the first article tests. The shipping documentation shall contain this contract number and the Lot/Item identification. The characteristics that the first article must meet and the testing requirements are specified elsewhere in this contract.

(b) Within **sixty (60) calendar** days after the Government receives the first article, the Contracting Officer shall notify the Contractor, in writing, of the conditional approval, approval, or disapproval of the first article. The notice of conditional approval or approval shall not relieve the Contractor from complying with all requirements of the specifications and all other terms and conditions of this contract. A notice of conditional approval shall state any further action required of the Contractor. A notice of disapproval shall cite reasons for the disapproval.

(c) If the first article is disapproved, the Contractor, upon Government request, shall submit an additional first article for testing. After each request, the Contractor shall make any necessary changes, modifications, or repairs to the first article or select another first article for testing. All costs related to these tests are to be borne by the Contractor, including any and all costs for additional tests following a disapproval. The Contractor shall furnish any additional first article to the Government under the terms and conditions and within the time specified by the Government. The Government shall act on this first article within the time limit specified in paragraph (b) of this clause. The Government reserves the right to require an equitable adjustment of the contract price for any extension of the delivery schedule or for any additional costs to the Government related to these tests.

(d) If the Contractor fails to deliver any first article on time, or the Contracting Officer disapproves any first article, the Contractor shall be deemed to have failed to make delivery within the meaning of the Default clause of this contract.

(e) Unless otherwise provided in the contract, the Contractor--

(1) May deliver the approved first article as a part of the contract quantity, provided it meets all contract requirements for acceptance and was not consumed or destroyed in testing; and

(2) Shall remove and dispose of any first article from the Government test facility at the Contractor's expense.

(f) If the Government does not act within the time specified in paragraphs (b) or (c) of this clause, the Contracting Officer shall, upon timely written request from the Contractor, equitably adjust under the Changes clause of this contract the delivery or performance dates and/or the contract price, and any other contractual term affected by the delay.

(g) The Contractor is responsible for providing operating and maintenance instructions, spare parts support, and repair of the first article during any first article test.

(h) Before first article approval, the acquisition of materials or components for, or the commencement of production of, the balance of the contract quantity is at the sole risk of the Contractor. Before first article approval, the costs thereof shall not be allocable to this contract for (1) progress payments, or (2) termination settlements if the contract

is terminated for the convenience of the Government.

(i) The Government may waive the requirement for first article approval test where supplies identical or similar to those called for in the schedule have been previously furnished by the Offeror/Contractor and have been accepted by the Government. The Offeror/Contractor may request a waiver.

(j) The Contractor shall produce both the first article and the production quantity at the same facility.  
(End of clause)

#### 52.215-6 PLACE OF PERFORMANCE (OCT 1997)

(a) The offeror or respondent, in the performance of any contract resulting from this solicitation, ( ) intends, ( ) does not intend (check applicable block) to use one or more plants or facilities located at a different address from the address of the offeror or respondent as indicated in this proposal or response to request for information.

(b) If the offeror or respondent checks “intends” in paragraph (a) of this provision, it shall insert in the following spaces the required information:

Place of Performance(Street Address, City, State, County, Zip Code)

Name and Address of Owner and Operator of the Plant or Facility if Other Than Offeror or Respondent

(End of provision)

#### 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 (Contracting Officer insert day as prescribed by agency head; if not prescribed, insert “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 the clause, 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 forms 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/](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)(I) 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, the 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.

(End of clause)

#### 52.216-10 INCENTIVE FEE (JUN 2011)

(a) General. The Government shall pay the Contractor for performing this contract a fee determined as provided in this contract.

(b) Target cost and target fee. The target cost and target fee specified in the Schedule are subject to adjustment if the contract is modified in accordance with paragraph (d) below.

(1) "Target cost," as used in this contract, means the estimated cost of this contract as initially negotiated, adjusted in accordance with paragraph (d) below.

(2) "Target fee," as used in this contract, means the fee initially negotiated on the assumption that this contract would be performed for a cost equal to the estimated cost initially negotiated, adjusted in accordance with paragraph (d) below.

(c) Withholding of payment.

(1) Normally, the Government shall pay the fee to the Contractor as specified in the Schedule. However, when the Contracting Officer considers that performance or cost indicates that the Contractor will not achieve target, the Government shall pay on the basis of an appropriate lesser fee. When the Contractor demonstrates that performance or cost clearly indicates that the Contractor will earn a fee significantly above the target fee, the Government may, at the sole discretion of the Contracting Officer, pay on the basis of an appropriate higher fee.

(2) Payment of the incentive fee shall be made as specified in the Schedule; provided that the Contracting Officer withholds a reserve not to exceed 15 percent of the total incentive fee or \$100,000, whichever is less, to protect the Government's interest. The Contracting Officer shall release 75 percent of all fee withholds under this contract after receipt of an adequate certified final indirect cost rate proposal covering the year of physical completion of this contract, provided the Contractor has satisfied all other contract terms and conditions, including the submission of the final patent and royalty reports, and is not delinquent in submitting final vouchers on prior years' settlements. The Contracting Officer may release up to 90 percent of the fee withholds under this contract based on the Contractor's past performance related to the submission and settlement of final indirect cost rate proposals.

(d) Equitable adjustments. When the work under this contract is increased or decreased by a modification to this contract or when any equitable adjustment in the target cost is authorized under any other clause, equitable adjustments in the target cost, target fee, minimum fee, and maximum fee, as appropriate, shall be stated in a supplemental agreement to this contract.

(e) Fee payable. (1) The fee payable under this contract shall be the target fee increased by **40** cents for every dollar that the total allowable cost is less than the target cost or decreased by **40** cents for every dollar that the total allowable cost exceeds the target cost. In no event shall the fee be greater than **TBD before contract award** percent or less than **TBD before contract award** percent of the target cost.

(2) The fee shall be subject to adjustment, to the extent provided in paragraph (d) above, and within the minimum and maximum fee limitations in subparagraph (1) above, when the total allowable cost is increased or decreased as a consequence of (i) payments made under assignments or (ii) claims excepted from the release as required by paragraph (h)(2) of the Allowable Cost and Payment clause.

(3) If this contract is terminated in its entirety, the portion of the target fee payable shall not be subject to an increase or decrease as provided in this paragraph. The termination shall be accomplished in accordance with other applicable clauses of this contract.

(4) For the purpose of fee adjustment, "total allowable cost" shall not include allowable costs arising out of--

(i) Any of the causes covered by the Excusable Delays clause to the extent that they are beyond the control and without the fault or negligence of the Contractor or any subcontractor;

(ii) The taking effect, after negotiating the target cost, of a statute, court decision, written ruling, or regulation that results in the Contractor's being required to pay or bear the burden of any tax or duty or rate increase in a tax or duty;

(iii) Any direct cost attributed to the Contractor's involvement in litigation as required by the Contracting Officer pursuant to a clause of this contract, including furnishing evidence and information requested pursuant to the Notice and Assistance Regarding Patent and Copyright Infringement clause;

(iv) The purchase and maintenance of additional insurance not in the target cost and required by the Contracting Officer, or claims for reimbursement for liabilities to third persons pursuant to the Insurance Liability to Third Persons clause;

(v) Any claim, loss, or damage resulting from a risk for which the Contractor has been relieved of liability by the Government Property clause; or

(vi) Any claim, loss, or damage resulting from a risk defined in the contract as unusually hazardous or as a nuclear risk and against which the Government has expressly agreed to indemnify the Contractor.

(5) All other allowable costs are included in "total allowable cost" for fee adjustment in accordance with this paragraph (e), unless otherwise specifically provided in this contract.

(f) Contract modification. The total allowable cost and the adjusted fee determined as provided in this clause shall be evidenced by a modification to this contract signed by the Contractor and Contracting Officer.

(g) Inconsistencies. In the event of any language inconsistencies between this clause and provisioning documents or Government options under this contract, compensation for spare parts or other supplies and services ordered under such documents shall be determined in accordance with this clause.

(End of clause)

#### 52.216-17 INCENTIVE PRICE REVISION--SUCCESSIVE TARGETS (OCT 1997)

(a) General. The supplies or services identified in the Schedule as Items **Fixed Price Incentive CLINs** are subject to price revision in accordance with this clause; provided, that in no event shall the total final price of these items exceed the ceiling price of **130% of their respective Initial Target Costs**. The prices of these items shown in the Schedule are the initial target prices, which include an initial target profit of **TBD before contract award** percent of the the initial target cost. Any supplies or services that are to be (1) ordered separately under, or otherwise added to, this contract and (2) subject to price revision in accordance with this clause shall be identified as such in a modification to this contract.

(b) Definition. "Costs," as used in this clause, means allowable costs in accordance with Part 31 of the Federal Acquisition Regulation (FAR) in effect on the date of this contract.

(c) Submitting data for establishing the firm fixed price or a final profit adjustment formula. (1) Within [*see note 1*] days after the end of the month in which the Contractor has completed [see Note 1], the Contractor shall submit the following data:

**Note 1:**

***For each LRIP CLIN: Within 30 days after the end of the month in which the Cumulative Budgeted Cost of Work Performed (BCWP) exceeds 40% of the Budget at Completion (BAC).***

***For Each CLIN under Full Rate Production (FRP) Years 1 and 2: Within 30 days after the end of the month in which the Cumulative Budgeted Cost of Work Performed (BCWP) exceeds 40% of the Budget at Completion (BAC).***

***For Each CLIN under Full Rate Production (FRP) Years 3 through 6: Within 30 days after the end of the month in which the Cumulative Budgeted Cost of Work Performed (BCWP) exceeds 20% of the Budget at Completion (BAC).***

(i) A proposed firm fixed price or total firm target price for supplies delivered and to be delivered and services performed and to be performed.

(ii) A detailed statement of all costs incurred in the performance of this contract through the end of the month specified above, in the format of Table 15-2, FAR 15.408 (or in any other form on which the parties may agree), with sufficient supporting data to disclose unit costs and cost trends for--

(A) Supplies delivered and services performed; and

(B) Inventories of work in process and undelivered contract supplies on hand (estimated to the extent necessary).

(iii) An estimate of costs of all supplies delivered and to be delivered and all services performed and to be performed under this contract, using the statement of costs incurred plus an estimate of costs to complete performance, in the format of Table 15-2, FAR 15.408 (or in any other form on which the parties may agree), together with--

(A) Sufficient data to support the accuracy and reliability of the estimate; and

(B) An explanation of the differences between this estimate and the original estimate used to establish the initial target prices.

(2) The Contractor shall also submit, to the extent that it becomes available before negotiations establishing the total firm price are concluded--

(i) Supplemental statements of costs incurred after the end of the month specified in subparagraph (1) of this section for--

(A) Supplies delivered and services performed; and

(B) Inventories of work in process and undelivered contract supplies on hand (estimated to the extent necessary); and

(ii) Any other relevant data that the Contracting Officer may reasonably require.

(3) If the Contractor fails to submit the data required by subparagraphs (1) and (2) of this section within the time specified and it is later determined that the Government has overpaid the Contractor, the Contractor shall repay the excess to the Government immediately. Unless repaid within 30 days after the end of the data submittal period, the

amount of the excess shall bear interest, computed from the date the data were due to the date of repayment, at the rate established in accordance with the Interest clause.

(d) Establishing firm fixed price or final profit adjustment formula. Upon the Contracting Officer's receipt of the data required by paragraph (c) of this section, the Contracting Officer and the Contractor shall promptly establish either a firm fixed price or a profit adjustment formula for determining final profit, as follows:

(1) The parties shall negotiate a total firm target cost, based upon the data submitted under paragraph (c) of this section.

(2) If the total firm target cost is more than the total initial target cost, the total initial target profit shall be decreased. If the total firm target cost is less than the total initial target cost, the total initial target profit shall be increased. The initial target profit shall be increased or decreased by **15** percent [see Note 2] of the difference between the total initial target cost and the total firm target cost. The resulting amount shall be the total firm target profit; provided, that in no event shall the total firm target profit be less than **TBD before contract award** percent or more than percent **TBD before contract award** of the total initial cost.

(3) If the total firm target cost plus the total firm target profit represent a reasonable price for performing that part of the contract subject to price revision under this clause, the parties may agree on a firm fixed price, which shall be evidenced by a contract modification signed by the Contractor and the Contracting Officer.

(4) Failure of the parties to agree to a firm fixed price shall not constitute a dispute under the Disputes clause. If agreement is not reached, or if establishment of a firm fixed price is inappropriate, the Contractor and the Contracting Officer shall establish a profit adjustment formula under which the total final price shall be established by applying to the total final negotiated cost an adjustment for profit or loss, determined as follows:

(i) If the total final negotiated cost is equal to the total firm target cost, the adjustment is the total firm target profit.

(ii) If the total final negotiated cost is greater than the total firm target cost, the adjustment is the total firm target profit, less **15** percent of the amount by which the total final negotiated cost exceeds the total firm target cost.

(iii) If the total final negotiated cost is less than the total firm target cost, the adjustment is the total firm target profit, plus **greater than or equal to 15** percent **at the Contracting Officer's discretion**, of the amount by which the total final negotiated cost is less than the total firm target cost.

(iv) The total firm target cost, total firm target profit, and the profit adjustment formula for determining final profit shall be evidenced by a modification to this contract signed by the Contractor and the Contracting Officer.

(e) Submitting data for final price revision. Unless a firm fixed price has been established in accordance with paragraph (d) of this section within **30** days after the end of the month in which the Contractor has delivered the last unit of supplies and completed the services specified by item number in paragraph (a) of this section, the Contractor shall submit in the format of Table 15-2, FAR 15.408 (or in any other form on which the parties agree)--

(1) A detailed statement of all costs incurred up to the end of that month in performing all work under the items;

(2) An estimate of costs of further performance, if any, that may be necessary to complete performance of all work under the items;

(3) A list of all residual inventory and an estimate of its value; and

(4) Any other relevant data that the Contracting Officer may reasonably require.

(f) Final price revision. Unless a firm fixed price has been agreed to in accordance with paragraph (d) of this section, the Contractor and the Contracting Officer shall, promptly after submission of the data required by paragraph (e) of this section, establish the total final price, as follows:

(1) On the basis of the information required by paragraph (e) of this section, together with any other pertinent information, the parties shall negotiate the total final cost incurred or to be incurred for the supplies delivered (or services performed) and accepted by the Government and which are subject to price revision under this clause.

(2) The total final price shall be established by applying to the total final negotiated cost an adjustment for final profit or loss determined as agreed upon under subparagraph (d)(4) of this section.

(g) Contract modification. The total final price of the items specified in paragraph (a) of this section shall be evidenced by a modification to this contract, signed by the Contractor and the Contracting Officer. This price shall not be subject to revision, notwithstanding any changes in the cost of performing the contract, except to the extent that--

(1) The parties may agree in writing, before the determination of total final price, to exclude specific elements of cost from this price and to a procedure for subsequent disposition of these elements; and

(2) Adjustments or credits are explicitly permitted or required by this or any other clause in this contract.

(h) Adjustment of billing prices. (1) Pending execution of the contract modification (see paragraph (e) of this section), the Contractor shall submit invoices or vouchers in accordance with billing prices as provided in this paragraph. The billing prices shall be the initial target prices shown in this contract until firm target prices are established under paragraph (d) of this section. When established, the firm target prices shall be used as the billing prices.

(2) If at any time it appears from information provided by the contractor under subparagraph (i)(1) of this section that the then-current billing prices will be substantially greater than the estimated final prices, the parties shall negotiate a reduction in the billing prices. Similarly, the parties may negotiate an increase in billing prices by any or all of the difference between the target prices and the ceiling price, upon the Contractor's submission of factual data showing that the final cost under this contract will be substantially greater than the target cost.

(3) Any adjustment of billing prices shall be reflected in a contract modification and shall not affect the determination of any price under paragraph (d) or (f) of this section. After the contract modification establishing the total final price is executed, the total amount paid or to be paid on all invoices or vouchers shall be adjusted to reflect the total final price, and any resulting additional payments, refunds, or credits shall be made promptly.

(i) Quarterly limitation on payments statement. This paragraph (i) shall apply until a firm fixed price or a total final price is established under subparagraph (d)(3) or (f)(2).

(1) Within 45 days after the end of each quarter of the Contractor's fiscal year in which a delivery is first made (or services are first performed) and accepted by the Government under this contract, and for each quarter thereafter, the Contractor shall submit to the contract administration office (with a copy to the contracting office and the cognizant contract auditor) a statement, cumulative from the beginning of the contract, showing--

(i) The total contract price of all supplies delivered (or services performed) and accepted by the Government and for which final prices have been established;

(ii) The total cost (estimated to the extent necessary) reasonably incurred for, and properly allocable solely to, the supplies delivered (or services performed) and accepted by the Government and for which final prices have not been established;

(iii) The portion of the total interim profit (used in establishing the initial contract price or agreed to for the purpose of this paragraph (i)) that is in direct proportion to the supplies delivered (or services performed) and accepted by the Government and for which final prices have not been established--increased or decreased in accordance with subparagraph (d)(4) of this section when the amount stated under subdivision (ii) of this section, differs from the aggregate firm target costs of the supplies or services; and

(iv) The total amount of all invoices or vouchers for supplies delivered (or services performed) and accepted by the Government (including amounts applied or to be applied to liquidate progress payments).

(2) Notwithstanding any provision of this contract authorizing greater payments, if on any quarterly statement the amount under subdivision (1)(iv) of this section exceeds the sum due the Contractor, as computed in accordance with subdivisions (1)(i), (ii), and (iii) of this section, the Contractor shall immediately refund or credit to the Government the amount of this excess. The Contractor may, when appropriate, reduce this refund or credit by the amount of any applicable tax credits due the Contractor under 26 U.S.C. 1481 and by the amount of previous refunds or credits effected under this clause. If any portion of the excess has been applied to the liquidation of progress payments, then that portion may, instead of being refunded, be added to the unliquidated progress payment account consistent with the Progress Payments clause. The Contractor shall provide complete details to support any claimed reductions in refunds.

(3) If the Contractor fails to submit the quarterly statement within 45 days after the end of each quarter and it is later determined that the Government has overpaid the Contractor, the Contractor shall repay the excess to the Government immediately. Unless repaid within 30 days after the end of the statement submittal period, the amount of the excess shall bear interest, computed from the date the quarterly statement was due to the date of repayment, at the rate established in accordance with the Interest clause.

(j) Subcontracts. No subcontract placed under this contract may provide for payment on a cost-plus-a-percentage-of-cost basis.

(k) Disagreements. If the Contractor and the Contracting Officer fail to agree upon (1) a total firm target cost and a final profit adjustment formula or (2) a total final price, within 60 days (or within such other period as the Contracting Officer may specify) after the date on which the data required in paragraphs (c) and (e) of this section are to be submitted, the Contracting Officer shall promptly issue a decision in accordance with the Disputes clause.

(l) Termination. If this contract is terminated before the total final price is established, prices of supplies or services subject to price revision shall be established in accordance with this clause for (1) completed supplies and services accepted by the Government and (2) those supplies or services not terminated under a partial termination. All other elements of the termination shall be resolved in accordance with other applicable clauses of this contract.

(m) Equitable adjustments under other clauses. If an equitable adjustment in the contract price is made under any other clause of this contract before the total final price is established, the adjustment shall be made in the total target cost and may be made in the maximum dollar limit on the total final price, the total target profit, or both. If the adjustment is made after the total final price is established, only the total final price shall be adjusted.

(n) Exclusion from target price and total final price. If any clause of this contract provides that the contract price does not or will not include an amount for a specific purpose, then neither any target price nor the total final price includes or will include any amount for that purpose.

(o) Separate reimbursement. If any clause of this contract expressly provides that the cost of performance of an obligation shall be at Government expense, that expense shall not be included in any target price or in the total final price, but shall be reimbursed separately.

(p) Taxes. As used in the Federal, State, and Local Taxes clause or in any other clause that provides for certain taxes or duties to be included in, or excluded from, the contract price, the term "contract price" includes the total target price or, if it has been established, the total final price. When any of these clauses requires that the contract price be increased or decreased as a result of changes in the obligation of the Contractor to pay or bear the burden of certain taxes or duties, the increase or decrease shall be made in the total target price or, if it has been established, in the total final price, so that it will not affect the Contractor's profit or loss on this contract.

(End of clause)



## 52.217-7 OPTION FOR INCREASED QUANTITY--SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line items, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within 10 years from the date of contract award. Options may be exercised in any order, and any individual option may be exercised multiple times. Exercise of an option is effective upon the delivery of the notice by the Government.

(End of clause)

## 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 10 years; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed **10 years**.

(End of clause)

## 52.222-2 PAYMENT FOR OVERTIME PREMIUMS (JUL 1990)

(a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed zero or the overtime premium is paid for work --

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall--

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

\* Insert either "zero" or the dollar amount agreed to during negotiations. The inserted figure does not apply to the exceptions in paragraph (a)(1) through (a)(4) of the clause.

(End of clause)

52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING  
(AUG 2011)

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

Driving—

(1) Means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.

(2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.

Text messaging means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.

(b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging while Driving, dated October 1, 2009.

(c) The Contractor is encouraged to--

(1) Adopt and enforce policies that ban text messaging while driving--

(i) Company-owned or -rented vehicles or Government-owned vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) Conduct initiatives in a manner commensurate with the size of the business, such as--

(i) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

(ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts that exceed the micro-purchase threshold.

(End of clause)

#### 52.232-16 PROGRESS PAYMENTS (APR 2012)

The Government will make progress payments to the Contractor when requested as work progresses, but not more frequently than monthly, in amounts of \$2,500 or more approved by the Contracting Officer, under the following conditions:

(a) Computation of amounts. (1) Unless the Contractor requests a smaller amount, the Government will compute each progress payment as 80 percent of the Contractor's total costs incurred under this contract whether or not actually paid, plus financing payments to subcontractors (see paragraph (j) of this clause), less the sum of all previous progress payments made by the Government under this contract. The Contracting Officer will consider cost of money that would be allowable under FAR 31.205-10 as an incurred cost for progress payment purposes.

(2) The amount of financing and other payments for supplies and services purchased directly for the contract are limited to the amounts that have been paid by cash, check, or other forms of payment, or that are determined due and will be paid to subcontractors--

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

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

(3) The Government will exclude accrued costs of Contractor contributions under employee pension plans 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 total costs for progress payments until paid).

(4) The Contractor shall not include the following in total costs for progress payment purposes in paragraph (a)(1) of this clause:

(i) Costs that are not reasonable, allocable to this contract, and consistent with sound and generally accepted accounting principles and practices.

(ii) Costs incurred by subcontractors or suppliers.

(iii) Costs ordinarily capitalized and subject to depreciation or amortization except for the properly depreciated or amortized portion of such costs.

(iv) Payments made or amounts payable to subcontractors or suppliers, except for --

(A) Completed work, including partial deliveries, to which the Contractor has acquired title; and

(B) Work under cost-reimbursement or time-and-material subcontracts to which the Contractor has acquired title.

(5) The amount of unliquidated progress payments may exceed neither (i) the progress payments made against incomplete work (including allowable unliquidated progress payments to subcontractors) nor

(ii) the value, for progress payment purposes, of the incomplete work. Incomplete work shall be considered to be the supplies and services required by this contract, for which delivery and invoicing by the Contractor and acceptance by the Government are incomplete.

(6) The total amount of progress payments shall not exceed 80 percent of the total contract price.

(7) If a progress payment or the unliquidated progress payments exceed the amounts permitted by subparagraphs (a)(4) or (a)(5) of this clause, the Contractor shall repay the amount of such excess to the Government on demand.

(8) Notwithstanding any other terms of the contract, the Contractor agrees not to request progress payments in dollar amounts of less than \$2,500. The Contracting Officer may make exceptions.

(9) The costs applicable to items delivered, invoiced, and accepted shall not include costs in excess of the contract price of the items.

(b) Liquidation. Except as provided in the Termination for Convenience of the Government clause, all progress payments shall be liquidated by deducting from any payment under this contract, other than advance or progress payments, the unliquidated progress payments, or 80 percent of the amount invoiced, whichever is less. The Contractor shall repay to the Government any amounts required by a retroactive price reduction, after computing liquidations and payments on past invoices at the reduced prices and adjusting the unliquidated progress payments accordingly. The Government reserves the right to unilaterally change from the ordinary liquidation rate to an alternate rate when deemed appropriate for proper contract financing.

(c) Reduction or suspension. The Contracting Officer may reduce or suspend progress payments, increase the rate of liquidation, or take a combination of these actions, after finding on substantial evidence any of the following conditions:

(1) The Contractor failed to comply with any material requirement of this contract (which includes paragraphs (f) and (g) of this clause).

(2) Performance of this contract is endangered by the Contractor's --

(i) Failure to make progress or

(ii) Unsatisfactory financial condition.

(3) Inventory allocated to this contract substantially exceeds reasonable requirements.

(4) The Contractor is delinquent in payment of the costs of performing this contract in the ordinary course of business.

(5) The fair value of the undelivered work is less than the amount of unliquidated progress payments for that work.

(6) The Contractor is realizing less profit than that reflected in the establishment of any alternate liquidation rate in paragraph (b) of this clause, and that rate is less than the progress payment rate stated in subparagraph (a)(1) of this clause.

(d) Title.

(1) Title to the property described in this paragraph (d) shall vest in the Government. Vestiture shall be immediately upon the date of this contract, for property acquired or produced before that date. Otherwise, vestiture shall occur when the property is or should have been allocable or properly chargeable to this contract.

(2) "Property," as used in this clause, includes all of the below-described items acquired or produced by the Contractor that are or should be allocable or properly chargeable to this contract under sound and generally accepted

accounting principles and practices.

(i) Parts, materials, inventories, and work in process;

(ii) Special tooling and special test equipment to which the Government is to acquire title;

(iii) Nondurable (i.e., noncapital) tools, jigs, dies, fixtures, molds, patterns, taps, gauges, test equipment, and other similar manufacturing aids, title to which would not be obtained as special tooling under paragraph (d) (2)(ii) of this clause; and

(iv) Drawings and technical data, to the extent the Contractor or subcontractors are required to deliver them to the Government by other clauses of this contract.

(3) Although title to property is in the Government under this clause, other applicable clauses of this contract; e.g., the termination clauses, shall determine the handling and disposition of the property.

(4) The Contractor may sell any scrap resulting from production under this contract without requesting the Contracting Officer's approval, but the proceeds shall be credited against the costs of performance.

(5) To acquire for its own use or dispose of property to which title is vested in the Government under this clause, the Contractor must obtain the Contracting Officer's advance approval of the action and the terms. The Contractor shall (i) exclude the allocable costs of the property from the costs of contract performance, and (ii) repay to the Government any amount of unliquidated progress payments allocable to the property. Repayment may be by cash or credit memorandum.

(6) When the Contractor completes all of the obligations under this contract, including liquidation of all progress payments, title shall vest in the Contractor for all property (or the proceeds thereof) not--

(i) Delivered to, and accepted by, the Government under this contract; or

(ii) Incorporated in supplies delivered to, and accepted by, the Government under this contract and to which title is vested in the Government under this clause.

(7) The terms of this contract concerning liability for Government-furnished property shall not apply to property to which the Government acquired title solely under this clause.

(e) Risk of loss. Before delivery to and acceptance by the Government, the Contractor shall bear the risk of loss for property, the title to which vests in the Government under this clause, except to the extent the Government expressly assumes the risk. The Contractor shall repay the Government an amount equal to the unliquidated progress payments that are based on costs allocable to property that is lost (see 45.101).

(f) Control of costs and property. The Contractor shall maintain an accounting system and controls adequate for the proper administration of this clause.

(g) Reports, forms, and access to records. (1) The Contractor shall promptly furnish reports, certificates, financial statements, and other pertinent information (including estimates to complete) reasonably requested by the Contracting Officer for the administration of this clause. Also, the Contractor shall give the Government reasonable opportunity to examine and verify the Contractor's books, records, and accounts.

(2) The Contractor shall furnish estimates to complete that have been developed or updated within six months of the date of the progress payment request. The estimates to complete shall represent the Contractor's best estimate of total costs to complete all remaining contract work required under the contract. The estimates shall include sufficient detail to permit Government verification.

(3) Each Contractor request for progress payment shall:

(i) Be submitted on Standard Form 1443, Contractor's Request for Progress Payment, or the electronic equivalent as required by agency regulations, in accordance with the form instructions and the contract terms; and

(ii) Include any additional supporting documentation requested by the Contracting Officer.

(h) Special terms regarding default. If this contract is terminated under the Default clause, (i) the Contractor shall, on demand, repay to the Government the amount of unliquidated progress payments and (ii) title shall vest in the Contractor, on full liquidation of progress payments, for all property for which the Government elects not to require delivery under the Default clause. The Government shall be liable for no payment except as provided by the Default clause.

(i) Reservations of rights.

(1) No payment or vesting of title under this clause shall --

(i) Excuse the Contractor from performance of obligations under this contract or

(ii) Constitute a waiver of any of the rights or remedies of the parties under the contract.

(2) The Government's rights and remedies under this clause

(i) Shall not be exclusive but rather shall be in addition to any other rights and remedies provided by law or this contract and

(ii) Shall not be affected by delayed, partial, or omitted exercise of any right, remedy, power, or privilege, nor shall such exercise or any single exercise preclude or impair any further exercise under this clause or the exercise of any other right, power, or privilege of the Government.

(j) Financing payments to subcontractors. The financing payments to subcontractors mentioned in paragraphs (a)(1) and (a)(2) of this clause shall be all financing payments to subcontractors or divisions, if the following conditions are met:

(1) The amounts included are limited to--

(i) The unliquidated remainder of financing payments made; plus

(ii) Any unpaid subcontractor requests for financing payments.

(2) The subcontract or interdivisional order is expected to involve a minimum of approximately 6 months between the beginning of work and the first delivery; or, if the subcontractor is a small business concern, 4 months.

(3) If the financing payments are in the form of progress payments, the terms of the subcontract or interdivisional order concerning progress payments--

(i) Are substantially similar to the terms of this clause for any subcontractor that is a large business concern, or this clause with its Alternate I for any subcontractor that is a small business concern;

(ii) Are at least as favorable to the Government as the terms of this clause;

(iii) Are not more favorable to the subcontractor or division than the terms of this clause are to the Contractor;

(iv) Are in conformance with the requirements of FAR 32.504(e); and

(v) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if--

(A) The Contractor defaults; or

(B) The subcontractor becomes bankrupt or insolvent.

(4) If the financing payments are in the form of performance-based payments, the terms of the subcontract or interdivisional order concerning payments--

(i) Are substantially similar to the Performance-Based Payments clause at FAR 52.232-32 and meet the criteria for, and definition of, performance-based payments in FAR Part 32;

(ii) Are in conformance with the requirements of FAR 32.504(f); and

(iii) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if--

(A) The Contractor defaults; or

(B) The subcontractor becomes bankrupt or insolvent.

(5) If the financing payments are in the form of commercial item financing payments, the terms of the subcontract or interdivisional order concerning payments--

(i) Are constructed in accordance with FAR 32.206(c) and included in a subcontract for a commercial item purchase that meets the definition and standards for acquisition of commercial items in FAR Parts 2 and 12;

(ii) Are in conformance with the requirements of FAR 32.504(g); and

(iii) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if--

(A) The Contractor defaults; or

(B) The subcontractor becomes bankrupt or insolvent.

(6) If financing is in the form of progress payments, the progress payment rate in the subcontract is the customary rate used by the contracting agency, depending on whether the subcontractor is or is not a small business concern.

(7) Concerning any proceeds received by the Government for property to which title has vested in the Government under the subcontract terms, the parties agree that the proceeds shall be applied to reducing any unliquidated financing payments by the Government to the Contractor under this contract.

(8) If no unliquidated financing payments to the Contractor remain, but there are unliquidated financing payments that the Contractor has made to any subcontractor, the Contractor shall be subrogated to all the rights the Government obtained through the terms required by this clause to be in any subcontract, as if all such rights had been assigned and transferred to the Contractor.

(9) To facilitate small business participation in subcontracting under this contract, the Contractor shall provide financing payments to small business concerns, in conformity with the standards for customary contract financing payments stated in Subpart 32.113. The Contractor shall not consider the need for such financing payments as a handicap or adverse factor in the award of subcontracts.

(k) Limitations on undefinitized contract actions. Notwithstanding any other progress payment provisions in this

contract, progress payments may not exceed 80 percent of costs incurred on work accomplished under undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes. This limitation shall apply to the costs incurred, as computed in accordance with paragraph (a) of this clause, and shall remain in effect until the contract action is definitized. Costs incurred which are subject to this limitation shall be segregated on Contractor progress payment requests and invoices from those costs eligible for higher progress payment rates. For purposes of progress payment liquidation, as described in paragraph (b) of this clause, progress payments for undefinitized contract actions shall be liquidated at 80 percent of the amount invoiced for work performed under the undefinitized contract action as long as the contract action remains undefinitized. The amount of unliquidated progress payments for undefinitized contract actions shall not exceed 80 percent of the maximum liability of the Government under the undefinitized contract action or such lower limit specified elsewhere in the contract. Separate limits may be specified for separate actions.

(l) Due date. The designated payment office will make progress payments on the **30th** day after the designated billing office receives a proper progress payment request. In the event that the Government requires an audit or other review of a specific progress 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. Progress payments are considered contract financing and are not subject to the interest penalty provisions of the Prompt Payment Act.

(m) Progress payments under indefinite--delivery contracts. The Contractor shall account for and submit progress payment requests under individual orders as if the order constituted a separate contract, unless otherwise specified in this contract.

(End of clause)

## 52.244-2 SUBCONTRACTS (OCT 2010)

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

Approved purchasing system means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

Consent to subcontract means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.

(c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that—

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds—



- (i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or
- (ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.
- (d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:
  - (e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:
    - (i) A description of the supplies or services to be subcontracted.
    - (ii) Identification of the type of subcontract to be used.
    - (iii) Identification of the proposed subcontractor.
    - (iv) The proposed subcontract price.
    - (v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.
    - (vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.
    - (vii) A negotiation memorandum reflecting—
      - (A) The principal elements of the subcontract price negotiations;
      - (B) The most significant considerations controlling establishment of initial or revised prices;
      - (C) The reason certified cost or pricing data were or were not required;
      - (D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining the price objective and in negotiating the final price;
      - (E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;
      - (F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and
      - (G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.
- (2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (c), (d), or (e) of this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination—

- (1) Of the acceptability of any subcontract terms or conditions;
- (2) Of the allowability of any cost under this contract; or
- (3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

(End of clause)

52.246-19 WARRANTY OF SYSTEMS AND EQUIPMENT UNDER PERFORMANCE SPECIFICATIONS OR DESIGN CRITERIA (MAY 2001) - ALTERNATE II and ALTERNATE III (APR 1984).

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

Acceptance, means the act of an authorized representative of the Government by which the Government assumes for itself, or as an agent of another, ownership of existing and identified supplies, or approves specific services rendered, as partial or complete performance of the contract.

Defect, means any condition or characteristic in any supplies or services furnished by the Contractor under the contract that is not in compliance with the requirements of the contract.

Supplies, means the end items furnished by the Contractor and related services required under this contract. Except when this contract includes the clause entitled Warranty of Data, supplies also means "data."

(b) Contractor's obligations. (1) The Contractor's warranties under this clause shall apply only to those defects discovered by either the Government or the Contractor **within thirty-six (36) months following the Government's acceptance of that individual end-item (AVCAD)**

(2) If the Contractor becomes aware at any time before acceptance by the Government (whether before or after tender to the Government) that a defect exists in any supplies or services, the Contractor shall (i) promptly correct the defect, or (ii) promptly notify the Contracting Officer, in writing, of the defect, using the same procedures prescribed in paragraph (b)(3) of this clause.

(3) If the Contracting Officer determines that a defect exists in any of the supplies or services accepted by the

Government under this contract, the Contracting Officer shall promptly notify the Contractor of the defect, in writing, within **90 days after discovery of the defect**. Upon timely notification of the existence of a defect, or if the Contractor independently discovers a defect in accepted supplies or services, the Contractor shall submit to the Contracting Officer, in writing, **within 30 days** a recommendation for corrective actions, together with supporting information in sufficient detail for the Contracting Officer to determine what corrective action, if any, shall be undertaken.

(4) The Contractor shall promptly comply with any timely written direction from the Contracting Officer to correct or partially correct a defect, at no increase in the contract price.

(5) The Contractor shall also prepare and furnish to the Contracting Officer data and reports applicable to any correction required under this clause (including revision and updating of all other affected data called for under this contract) at no increase in the contract price.

(6) In the event of timely notice of a decision not to correct or only to partially correct, the Contractor shall submit a technical and cost proposal within **14 day** to amend the contract to permit acceptance of the affected supplies or services in accordance with the revised requirement, and an equitable reduction in the contract price shall promptly be negotiated by the parties and be reflected in a supplemental agreement to this contract.

(7) Any supplies or parts thereof corrected or furnished in replacement and any services reperfomed shall also be subject to the conditions of this clause to the same extent as supplies or services initially accepted. The warranty, with respect to these supplies, parts, or services, shall be equal in duration to that set forth in paragraph (b)(1) of this clause, and shall run from the date of delivery of the corrected or replaced supplies.

(8) The Contractor shall not be responsible under this clause for the correction of defects in Government-furnished property, except for defects in installation, unless the Contractor performs, or is obligated to perform, any modifications or other work on such property. In that event, the Contractor shall be responsible for correction of defects that result from the modifications or other work.

(9) If the Government returns supplies to the Contractor for correction or replacement under this clause, the Contractor shall be liable for transportation charges up to an amount equal to the cost of transportation by the usual commercial method of shipment from the place of delivery specified in this contract (irrespective of the f.o.b. point or the point of acceptance) to the Contractor's plant and return to the place of delivery specified in this contract. The Contractor shall also bear the responsibility for the supplies while in transit.

(10) All implied warranties of merchantability and "fitness for a particular purpose" are excluded from any obligation under this contract.

(c) Remedies available to the Government. (1) The rights and remedies of the Government provided in this clause--

(i) Shall not be affected in any way by any terms or conditions of this contract concerning the conclusiveness of inspection and acceptance; and

(ii) Are in addition to, and do not limit, any rights afforded to the Government by any other clause of this contract.

(2) (2) Within **30 days** after receipt of the Contractor's recommendations for corrective action and adequate supporting information, the Contracting Officer, using sole discretion, shall give the Contractor written notice not to correct any defect, or to correct or partially correct any defect within a reasonable time at **the location of acceptance, or other mutually agreed location.**

(3) In no event shall the Government be responsible for any extension or delays in the scheduled deliveries or periods of performance under this contract as a result of the Contractor's obligations to correct defects, nor shall there be any adjustment of the delivery schedule or period of performance as a result of the correction of defects unless provided by a supplemental agreement with adequate consideration.

(4) This clause shall not be construed as obligating the Government to increase the contract price.

(5)(i) The Contracting Officer shall give the Contractor a written notice specifying any failure or refusal of the Contractor to--

(A) Present a detailed recommendation for corrective action as required by paragraph (b)(3) of this clause;

(B) Correct defects as directed under paragraph (b)(4) of this clause; or

(C) Prepare and furnish data and reports as required by paragraph (b)(5) of this clause.

(ii) The notice shall specify a period of time following receipt of the notice by the Contractor in which the Contractor must remedy the failure or refusal specified in the notice.

(6) If the Contractor does not comply with the Contracting Officer's written notice in paragraph (c)(5)(i) of this clause, the Contracting Officer may by contract or otherwise--

(i) Obtain detailed recommendations for corrective action and either--

(A) Correct the supplies or services; or

(B) Replace the supplies or services, and if the Contractor fails to furnish timely disposition instructions, the Contracting Officer may dispose of the nonconforming supplies for the Contractor's account in a reasonable manner, in which case the Government is entitled to reimbursement from the Contractor, or from the proceeds, for the reasonable expenses of care and disposition, as well as for excess costs incurred or to be incurred;

(ii) Obtain applicable data and reports; and

(iii) Charge the Contractor for the costs incurred by the Government.

(7) All costs incurred or estimated to be incurred by the Contractor in complying with this clause shall be considered when negotiating the total final price under the Incentive Price Revision clause of this contract. After establishment of the total final price, Contractor compliance with this clause shall be at no increase in the total final price. Any equitable adjustments made under paragraph (b)(6) of this clause shall be governed by the paragraph entitled "Equitable Adjustments Under Other Clauses" in the Incentive Price Revision clause of this contract.

(8) The Contractor shall be liable for the reasonable costs of disassembly and/or reassembly of larger items when it is necessary to remove the supplies to be inspected and/or returned for correction or replacement.

(End of clause)

#### 52.251-1 GOVERNMENT SUPPLY SOURCES (APR 2012)

The Contracting Officer may issue the Contractor an authorization to use Government supply sources in the performance of this contract. Title to all property acquired by the Contractor under such an authorization shall vest in the Government unless otherwise specified in the contract. The provisions of the clause at FAR 52.245-1, Government Property, apply to all property acquired under such authorization.

(End of clause)

## 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<https://www.acquisition.gov>

(End of provision)

## 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<https://www.acquisition.gov>

(End of clause)

## 252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A COUNTRY THAT IS A STATE SPONSOR OF TERRORISM (OCT 2015)

(a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of \$35,000 with a firm, or a subsidiary of a firm, that is identified in the Exclusions section of the System for Award Management System (SAM Exclusions) as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a country that is a state sponsor of terrorism.

(b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, in SAM Exclusions, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a country that is a state sponsor of terrorism. The notice must include the name of the proposed subcontractor and the compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion in SAM Exclusions.

(End of clause)

## 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](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, subline, or exhibit line items, the unit price identified in the contract at the time of delivery;

(2) For cost-type or undefinitized line, subline, 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](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](http://www.acq.osd.mil/dpap/pdi/uid/uii_types.html).

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

(c) Unique item identifier. (1) 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 No.	Item description
.....	.....

(ii) Items for which the Government's unit acquisition cost is less than \$5,000 that are identified in the Schedule or the following table:

Contract line, subline, or exhibit line item No.	Item description
.....	

(If items are 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 repairables and DoD serially managed nonrepairables as specified in Attachment Number ----.

(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 paragraphs (c)(1)(i), (ii), (iii), or

(iv) of this clause for which the contractor creates and marks a unique item identifier 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 identifier 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, 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, the Contractor shall report as part of, or associated with, 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 (fill in) ----, Unique Item Identifier Report for Embedded Items, Contract Data Requirements List, DD Form 1423.

(g) Subcontracts. If the Contractor acquires by subcontract any items 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.

(End of clause)

## 252.211-7006 PASSIVE RADIO FREQUENCY IDENTIFICATION (JUN 2016)

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

Advance shipment notice means an electronic notification used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as passive radio frequency identification (RFID) or item unique identification (IUID) information, order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment.

Bulk commodities means the following commodities, when shipped in rail tank cars, tanker trucks, trailers, other bulk wheeled conveyances, or pipelines:

- (1) Sand.
- (2) Gravel.
- (3) Bulk liquids (water, chemicals, or petroleum products).
- (4) Ready-mix concrete or similar construction materials.
- (5) Coal or combustibles such as firewood.
- (6) Agricultural products such as seeds, grains, or animal feed.

Case means either a MIL-STD-129 defined exterior container within a palletized unit load or a MIL-STD-129 defined individual shipping container.

Electronic Product Code™ (EPC<sup>[supreg]</sup>) means an identification scheme for universally identifying physical objects via RFID tags and other means. The standardized EPC™ data consists of an EPC™ (or EPC™ identifier) that uniquely identifies an individual object, as well as an optional filter value when judged to be necessary to enable effective and efficient reading of the EPC™ tags. In addition to this standardized data, certain classes of EPC™ tags will allow user-defined data. The EPC™ Tag Data Standards will define the length and position of this data, without defining its content.

EPCglobal<sup>[supreg]</sup> means a subscriber-driven organization comprised of industry leaders and organizations focused on creating global standards for the adoption of passive RFID technology.

Exterior container means a MIL-STD-129 defined container, bundle, or assembly that is sufficient by reason of material, design, and construction to protect unit packs and intermediate containers and their contents during shipment and storage. It can be a unit pack or a container with a combination of unit packs or intermediate containers. An exterior container may or may not be used as a shipping container.

Palletized unit load means a MIL-STD-129 defined quantity of items, packed or unpacked, arranged on a pallet in a specified manner and secured, strapped, or fastened on the pallet so that the whole palletized load is handled as a single unit. A palletized or skidded load is not considered to be a shipping container. A loaded 463L System pallet is not considered to be a palletized unit load. Refer to the Defense Transportation Regulation, DoD 4500.9-R, Part II, Chapter 203, for marking of 463L System pallets.

Passive RFID tag means a tag that reflects energy from the reader/interrogator or that receives and temporarily stores a small amount of energy from the reader/interrogator signal in order to generate the tag response. The only acceptable tags are EPC Class 1 passive RFID tags that meet the EPCglobal™ Class 1 Generation 2 standard.

Radio frequency identification (RFID) means an automatic identification and data capture technology comprising one or more reader/interrogators and one or more radio frequency transponders in which data transfer is achieved by means of suitably modulated inductive or radiating electromagnetic carriers.

Shipping container means a MIL-STD-129 defined exterior container that meets carrier regulations and is of sufficient strength, by reason of material, design, and construction, to be shipped safely without further packing (e.g., wooden boxes or crates, fiber and metal drums, and corrugated and solid fiberboard boxes).

(b)(1) Except as provided in paragraph (b)(2) of this clause, the Contractor shall affix passive RFID tags, at the case- and palletized- unit-load packaging levels, for shipments of items that--

(i) Are in any of the following classes of supply, as defined in DoD 4140.1-R, DoD Supply Chain Materiel Management Regulation, AP1.1.11:

(A) Subclass of Class I--Packaged operational rations.

(B) Class II--Clothing, individual equipment, tentage, organizational tool kits, hand tools, and administrative and housekeeping supplies and equipment.

(C) Class IIIP--Packaged petroleum, lubricants, oils, preservatives, chemicals, and additives.

(D) Class IV--Construction and barrier materials.

(E) Class VI--Personal demand items (non-military sales items).

(F) Subclass of Class VIII--Medical materials (excluding pharmaceuticals, biologicals, and reagents--suppliers should limit the mixing of excluded and non-excluded materials).

(G) Class IX--Repair parts and components including kits, assemblies and subassemblies, repairable and consumable items required for maintenance support of all equipment, excluding medical-peculiar repair parts; and

(ii) Are being shipped to one of the locations listed at [http://www.acq.osd.mil/log/sci/RFID\\_ship-to-locations.html](http://www.acq.osd.mil/log/sci/RFID_ship-to-locations.html) or to--

(A) A location outside the contiguous United States when the shipment has been assigned Transportation Priority 1, or to--

(B) The following location(s) deemed necessary by the requiring activity:

Contract line, subline, or exhibit line item number	Location name	City	State	DoDAAC

(2) The following are excluded from the requirements of paragraph (b)(1) of this clause:

(i) Shipments of bulk commodities.

(ii) Shipments to locations other than Defense Distribution Depots when the contract includes the clause at FAR 52.213-1, Fast Payment Procedures.

(c) The Contractor shall--

(1) Ensure that the data encoded on each passive RFID tag are globally unique (i.e., the tag ID is never repeated across two or more RFID tags) and conforms to the requirements in paragraph (d) of this clause;

(2) Use passive tags that are readable; and

(3) Ensure that the passive tag is affixed at the appropriate location on the specific level of packaging, in accordance with MIL-STD-129 (Section 4.9.2) tag placement specifications.

(d) Data syntax and standards. The Contractor shall encode an approved RFID tag using the instructions provided in the EPC\TM\ Tag Data Standards in effect at the time of contract award. The EPC\TM\ Tag Data Standards are available at <http://www.epcglobalinc.org/standards/>.

(1) If the Contractor is an EPCglobal\TM\ subscriber and possesses a unique EPC\TM\ company prefix, the Contractor may use any of the identifiers and encoding instructions described in the most recent EPC\TM\ Tag Data Standards document to encode tags.

(2) If the Contractor chooses to employ the DoD identifier, the Contractor shall use its previously assigned Commercial and overnment Entity (CAGE) code and shall encode the tags in accordance with the tag identifier details located at <http://www.acq.osd.mil/log/sci/ait.html>. If the Contractor uses a third-party packaging house to encode its tags, the CAGE code of the third-party packaging house is acceptable.

(3) Regardless of the selected encoding scheme, the Contractor with which the Department holds the contract is responsible for ensuring that the tag ID encoded on each passive RFID tag is globally unique, per the requirements in paragraph (c)(1) of this clause.

(e) Advance shipment notice. The Contractor shall use Wide Area WorkFlow (WAWF), as required by DFARS 252.232-7003, Electronic Submission of Payment Requests, to electronically submit advance shipment notice(s) with the RFID tag ID(s) (specified in paragraph (d) of this clause) in advance of the shipment in accordance with the procedures at <https://wawf.eb.mil/>.

(End of clause)

252.217-7026 IDENTIFICATION OF SOURCES OF SUPPLY. (NOV 1995)

(a) The Government is required under 10 U.S.C. 2384 to obtain certain information on the actual manufacturer or sources of supplies it acquires.

(b) The apparently successful Offeror agrees to complete and submit the following table before award:

TABLE

Line	National	Commercial	Source of supply	Actual
------	----------	------------	------------------	--------

Items Stock No. Item (Y or N) Company Address Part No. Mfg?

-----  
(1) (2) (3) (4) (5) (6)

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- (1) List each deliverable item of supply and item of technical data.
- (2) If there is no national stock number, list "none."
- (3) Use "Y" if the item is a commercial item; otherwise, use "N". If "Y" is listed, the Offeror need not complete the remaining columns in the table.
- (4) For items of supply, list all sources. For technical data, list the source.
- (5) For items of supply, list each source's part number for the item.
- (6) Use "Y" if the source of supply is the actual manufacturer; "N" if it is not; and "U" if unknown.

(End of clause)

252.227-7017 IDENTIFICATION AND ASSERTION OF USE, RELEASE, OR DISCLOSURE RESTRICTIONS. (JAN 2011)

- (a) The terms used in this provision are defined in following clause or clauses contained in this solicitation--
  - (1) If a successful offeror will be required to deliver technical data, the Rights in Technical Data--Noncommercial Items clause, or, if this solicitation contemplates a contract under the Small Business Innovation Research Program, the Rights in Noncommercial Technical Data and Computer Software--Small Business Innovation Research (SBIR) Program clause.
  - (2) If a successful offeror will not be required to deliver technical data, the Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation clause, or, if this solicitation contemplates a contract under the Small Business Innovation Research Program, the Rights in Noncommercial Technical Data and Computer Software--Small Business Innovation Research (SBIR) Program clause.
- (b) The identification and assertion requirements in this provision apply only to technical data, including computer software documents, or computer software to be delivered with other than unlimited rights. For contracts to be awarded under the Small Business Innovation Research Program, the notification requirements do not apply to technical data or computer software that will be generated under the resulting contract. Notification and identification is not required for restrictions based solely on copyright.
- (c) Offers submitted in response to this solicitation shall identify, to the extent known at the time an offer is submitted to the Government, the technical data or computer software that the Offeror, its subcontractors or suppliers, or potential subcontractors or suppliers, assert should be furnished to the Government with restrictions on use, release, or disclosure.

(d) The Offeror's assertions, including the assertions of its subcontractors or suppliers or potential subcontractors or suppliers shall be submitted as an attachment to its offer in the following format, dated and signed by an official authorized to contractually obligate the Offeror:

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

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 or Computer Software to be Furnished With Restrictions *	Basis for Assertion **	Asserted Rights Category ***	Name of Person Asserting Restrictions ****
(LIST) *****	(LIST)	(LIST)	(LIST)

\*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 items, 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.

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

Date \_\_\_\_\_

Printed Name and Title \_\_\_\_\_

Signature \_\_\_\_\_

(End of identification and assertion)

(e) An offeror's failure to submit, complete, or sign the notification and identification required by paragraph (d) of this provision with its offer may render the offer ineligible for award.

(f) If the Offeror is awarded a contract, the assertions identified in paragraph (d) of this provision shall be listed in an attachment to that contract. Upon request by the Contracting Officer, the Offeror shall provide sufficient information to enable the Contracting Officer to evaluate any listed assertion.

(End of provision)

## 252.235-7010 Acknowledgment of Support and Disclaimer. (MAY 1995)

(a) The Contractor shall include an acknowledgment of the Government's support in the publication of any material based on or developed under this contract, stated in the following terms: This material is based upon work supported by the **U.S. Army Contracting Command-Aberdeen Proving Ground** under Contract No. **To Be Identified At Time of Contract Award.**

(b) All material, except scientific articles or papers published in scientific journals, must, in addition to any notices or disclaimers by the Contractor, also contain the following disclaimer: Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the **U.S. Army Contracting Command-Aberdeen Proving Ground.**

(End of clause)

## 252.251-7000 ORDERING FROM GOVERNMENT SUPPLY SOURCES (AUG 2012)

(a) When placing orders under Federal Supply Schedules, Personal Property Rehabilitation Price Schedules, or Enterprise Software Agreements, the Contractor shall follow the terms of the applicable schedule or agreement and authorization. Include in each order:

(1) A copy of the authorization (unless a copy was previously furnished to the Federal Supply Schedule, Personal Property Rehabilitation Price Schedule, or Enterprise Software Agreement contractor).

(2) The following statement: Any price reductions negotiated as part of an Enterprise Software Agreement issued under a Federal Supply Schedule contract shall control. In the event of any other inconsistencies between an Enterprise Software Agreement, established as a Federal Supply Schedule blanket purchase agreement, and the Federal Supply Schedule contract, the latter shall govern.

(3) The completed address(es) to which the Contractor's mail, freight, and billing documents are to be directed.

(b) When placing orders under nonmandatory schedule contracts and requirements contracts, issued by the General Services Administration (GSA) Office of Information Resources Management, for automated data processing equipment, software and maintenance, communications equipment and supplies, and teleprocessing services, the Contractor shall follow the terms of the applicable contract and the procedures in paragraph (a) of this clause.

(c) When placing orders for Government stock on a reimbursable basis, the Contractor shall--

(1) Comply with the requirements of the Contracting Officer's authorization, using FEDSTRIP or MILSTRIP procedures, as appropriate;

(2) Use only the GSA Form 1948-A, Retail Services Shopping Plate, when ordering from GSA Self-Service Stores;

(3) Order only those items required in the performance of Government contracts; and

(4) Pay invoices from Government supply sources promptly. For purchases made from DoD supply sources, this means within 30 days of the date of a proper invoice (see also Defense Federal Acquisition Regulation Supplement (DFARS) 251.105). For purchases made from DoD supply sources, this means within 30 days of the date of a proper invoice. The Contractor shall annotate each invoice with the date of receipt. The Contractor's failure to pay may also result in the DoD supply source refusing to honor the requisition (see DFARS 251.102(f)) or in the Contracting Officer terminating the Contractor's authorization to use DoD supply sources. In the event the Contracting Officer



decides to terminate the authorization due to the Contractor's failure to pay in a timely manner, the Contracting Officer shall provide the Contractor with prompt written notice of the intent to terminate the authorization and the basis for such action. The Contractor shall have 10 days after receipt of the Government's notice in which to provide additional information as to why the authorization should not be terminated. The termination shall not provide the Contractor with an excusable delay for failure to perform or complete the contract in accordance with the terms of the contract, and the Contractor shall be solely responsible for any increased costs.

(d) When placing orders for Government stock on a non-reimbursable basis, the Contractor shall—

(1) Comply with the requirements of the Contracting Officer's authorization; and

(2) When using electronic transactions to submit requisitions on a non-reimbursable basis only, place orders by authorizing contract number using the Defense Logistics Management System (DLMS) Supplement to Federal Implementation Convention 511R, Requisition; and acknowledge receipts by authorizing contract number using the DLMS Supplement 527R, Receipt, Inquiry, Response and Material Receipt Acknowledgement.

(e) Only the Contractor may request authorization for subcontractor use of Government supply sources. The Contracting Officer will not grant authorizations for subcontractor use without approval of the Contractor.

(f) Government invoices shall be submitted to the Contractor's billing address, and Contractor payments shall be sent to the Government remittance address specified below:

Contractor's Billing Address [include point of contact and telephone number]:

Government Remittance Address (include point of contact and telephone number ) :

(End of clause)

## Section J - List of Documents, Exhibits and Other Attachments

ATTACHMENTS, 6, 7, AND 8

The attachments listed below are available by an email request to the Contracting Officer at [jonita.l.joyner.civ@mail.mil](mailto:jonita.l.joyner.civ@mail.mil).

Attachment 6: NGCD Program Protection Plan (PPP)

Attachment 7: Security Classification Guide for NGCD

Attachment 8: NGCD Systems Engineering Plan (SEP)

## Exhibit/Attachment Table of Contents

DOCUMENT TYPE	DESCRIPTION	PAGES	DATE
Exhibit A	AVCAD CDRLS	31	19-SEP-2017
Attachment 1	AVCAD Performance Specification	56	29-AUG-2017
Attachment 10	Small Business Participation Proposal (Sample Format)	4	01-AUG-2017
Attachment 11	DD Form 254	2	17-AUG-2017
Attachment 12	Past Performance Evaluation Letter and Questionnaire Form	5	01-AUG-2017
Attachment 2	Logistics Product Data Selection Worksheet	52	31-JUL-2017
Attachment 3	Table A- II TM 3-6665-441-10		01-AUG-2017
Attachment 4	Table A-IV TM 3-6665-441-23 and P		01-AUG-2017
Attachment 5	Table A-III TM 3-6665-441-4		01-AUG-2017
Attachment 9	Cost Template		12-SEP-2017

## Section K - Representations, Certifications and Other Statements of Offerors

REPRESENTATIONS

## REPRESENTATIONS

The contractor shall comply with FAR Subpart 4.12--Representations and Certifications.

The contractor shall complete and/or update electronic annual representations and certifications via the System for Award Management (SAM) accessed at <https://www.acquisition.gov> as part of the required registration (see FAR 4.1102).

In addition to completing the electronic representations and certifications, the contractor shall complete the additional clauses included herein in full text.

## CLAUSES INCORPORATED BY REFERENCE

52.204-19	Incorporation by Reference of Representations and Certifications.	DEC 2014
52.222-38	Compliance With Veterans' Employment Reporting Requirements	FEB 2016
52.225-25	Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran-- Representation and Certifications.	OCT 2015
252.203-7005	Representation Relating to Compensation of Former DoD Officials	NOV 2011

## CLAUSES INCORPORATED BY FULL TEXT

## 52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)

(a) The offeror certifies that --

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to --

(i) Those prices,

(ii) The intention to submit an offer, or

(iii) The methods of factors used to calculate the prices offered:

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory --

(1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision; or

(2) (i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision \_\_\_\_\_ (insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision.

(c) If the offeror deletes or modifies subparagraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of Provision)

#### 52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2017)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 541712.

(2) The small business size standard is 1,000.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b)(1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the provision at 52.204-7 is not included in this solicitation, and the offeror is currently registered in System for Award Management (SAM), and has completed the Representations and Certifications section of SAM electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

(  ) Paragraph (d) applies.

(  ) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c) (1) The following representations or certifications in SAM are applicable to this solicitation as indicated:

- (i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—
- (A) The acquisition is to be made under the simplified acquisition procedures in Part 13;
  - (B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or
  - (C) The solicitation is for utility services for which rates are set by law or regulation.
- (ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.
- (iii) 52.203-18, Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements--Representation. This provision applies to all solicitations.
- (iv) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.
- (v) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—
- (A) Are not set aside for small business concerns;
  - (B) Exceed the simplified acquisition threshold; and
  - (C) Are for contracts that will be performed in the United States or its outlying areas.
- (vi) 52.209-2; Prohibition on Contracting with Inverted Domestic Corporations--Representation.
- (vii) 52.209-5; Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.
- (viii) 52.209-11, Representation by Corporations Regarding delinquent Tax Liability or a Felony Conviction under any Federal Law. This provision applies to all solicitations.
- (ix) 52.214-14, Place of Performance--Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.
- (x) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.
- (xi) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.
- (A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.
  - (B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.
- (xii) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(xiii) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xiv) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xv) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xvi) 52.222-57, Representation Regarding Compliance with Labor Laws (Executive Order 13673). This provision applies to solicitations expected to exceed \$50 million which are issued from October 25, 2016 through April 24, 2017, and solicitations expected to exceed \$500,000, which are issued after April 24, 2017.

**Note to paragraph (c)(1)(xvi):** By a court order issued on October 24, 2016, 52.222-57 is enjoined indefinitely as of the date of the order. The enjoined paragraph will become effective immediately if the court terminates the injunction. At that time, DoD, GSA, and NASA will publish a document in the Federal Register advising the public of the termination of the injunction.

(xvii) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xviii) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA- designated items.

(xix) 52.223-22, Public Disclosure of Greenhouse Gas Emissions and Reduction Goals--Representation. This provision applies to solicitations that include the clause at 52.204-7.)

(xx) 52.225-2, Buy American Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xxi) 52.225-4, Buy American--Free Trade Agreements--Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at 52.225- 3.

(A) If the acquisition value is less than \$25,000, the basic provision applies.

(B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.

(C) If the acquisition value is \$50,000 or more but is less than \$77,533, the provision with its Alternate II applies.

(D) If the acquisition value is \$77,533 or more but is less than \$100,000, the provision with its Alternate III applies.

(xxii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xxiii) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan--Certification. This provision applies to all solicitations.

(xxiv) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran—Representation and Certification. This provision applies to all solicitations.

(xxv) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions.

(2) The following representations or certifications are applicable as indicated by the Contracting Officer:

[Contracting Officer check as appropriate.]

(i) 52.204-17, Ownership or Control of Offeror.

(ii) 52.204-20, Predecessor of Offeror.

(iii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

(iv) 52.222-48, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Certification.

(v) 52.222-52 Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services--Certification.

(vi) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Alternate I only).

(vii) 52.227-6, Royalty Information.

(A) Basic.

(B) Alternate I.

(viii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

(d) The offeror has completed the annual representations and certifications electronically via the SAM website accessed through <https://www.acquisition.gov>. After reviewing the SAM database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [offeror to insert changes, identifying change by clause number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change
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Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

(End of provision)

## 52.209-7 INFORMATION REGARDING RESPONSIBILITY MATTERS (JULY 2013)

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

Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative Proceedings, Civilian Board of Contract Appeals Proceedings, and Armed Services Board of Contract Appeals Proceedings). This includes administrative proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include agency actions such as contract audits, site visits, corrective plans, or inspection of deliverables.

Federal contracts and grants with total value greater than \$10,000,000 means--

- (1) The total value of all current, active contracts and grants, including all priced options; and
- (2) The total value of all current, active orders including all priced options under indefinite-delivery, indefinite-quantity, 8(a), or requirements contracts (including task and delivery and multiple-award Schedules).

Principal means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

(b) The offeror ( ) has ( ) does not have current active Federal contracts and grants with total value greater than \$10,000,000.

(c) If the offeror checked "has" in paragraph (b) of this provision, the offeror represents, by submission of this offer, that the information it has entered in the Federal Awardee Performance and Integrity Information System (FAPIIS) is current, accurate, and complete as of the date of submission of this offer with regard to the following information:

(1) Whether the offeror, and/or any of its principals, has or has not, within the last five years, in connection with the award to or performance by the offeror of a Federal contract or grant, been the subject of a proceeding, at the Federal or State level that resulted in any of the following dispositions:

- (i) In a criminal proceeding, a conviction.
- (ii) In a civil proceeding, a finding of fault and liability that results in the payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more.
- (iii) In an administrative proceeding, a finding of fault and liability that results in--

(A) The payment of a monetary fine or penalty of \$5,000 or more; or

(B) The payment of a reimbursement, restitution, or damages in excess of \$100,000.

(iv) In a criminal, civil, or administrative proceeding, a disposition of the matter by consent or compromise with an acknowledgment of fault by the Contractor if the proceeding could have led to any of the outcomes specified in paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this provision.

(2) If the offeror has been involved in the last five years in any of the occurrences listed in (c)(1) of this provision, whether the offeror has provided the requested information with regard to each occurrence.



(d) The offeror shall post the information in paragraphs (c)(1)(i) through (c)(1)(iv) of this provision in FAPIIS as required through maintaining an active registration in the System for Award Management database via <https://www.acquisition.gov> (see 52.204-7).

(End of provision)

#### 52.225-18 PLACE OF MANUFACTURE (MAR 2015)

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

Manufactured end product means any end product in product and service codes (PSCs) 1000-9999, except--

- (1) PSC 5510, Lumber and Related Basic Wood Materials;
- (2) Product or Service Group (PSG) 87, Agricultural Supplies;
- (3) PSG 88, Live Animals;
- (4) PSG 89, Subsistence;
- (5) PSC 9410, Crude Grades of Plant Materials;
- (6) PSC 9430, Miscellaneous Crude Animal Products, Inedible;
- (7) PSC 9440, Miscellaneous Crude Agricultural and Forestry Products;
- (8) PSC 9610, Ores;
- (9) PSC 9620, Minerals, Natural and Synthetic; and
- (10) PSC 9630, Additive Metal Materials.

Place of manufacture means the place where an end product is assembled out of components, or otherwise made or processed from raw materials into the finished product that is to be provided to the Government. If a product is disassembled and reassembled, the place of reassembly is not the place of manufacture.

(b) For statistical purposes only, the offeror shall indicate whether the place of manufacture of the end products it expects to provide in response to this solicitation is predominantly--

- (1) (  ) In the United States (Check this box if the total anticipated price of offered end products manufactured in the United States exceeds the total anticipated price of offered end products manufactured outside the United States); or
- (2) (  ) Outside the United States.

(End of provision)

#### 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<https://www.acquisition.gov>

(End of provision)

252.204-7007 ALTERNATE A, ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2015)

Substitute the following paragraphs (d) and (e) for paragraph (d) of the provision at FAR 52.204-8:

(d)(1) The following representations or certifications in the System for Award Management (SAM) database are applicable to this solicitation as indicated:

(i) 252.209-7003, Reserve Officer Training Corps and Military Recruiting on Campus--Representation. Applies to all solicitations with institutions of higher education.

(ii) 252.216-7008, Economic Price Adjustment--Wage Rates or Material Prices Controlled by a Foreign Government. Applies to solicitations for fixed-price supply and service contracts when the contract is to be performed wholly or in part in a foreign country, and a foreign government controls wage rates or material prices and may during contract performance impose a mandatory change in wages or prices of materials.

(iii) 252.222-7007, Representation Regarding Combating Trafficking in Persons, as prescribed in 222.1771. Applies to solicitations with a value expected to exceed the simplified acquisition threshold.

(iv) 252.225-7042, Authorization to Perform. Applies to all solicitations when performance will be wholly or in part in a foreign country.

(v) 252.225-7049, Prohibition on Acquisition of Commercial Satellite Services from Certain Foreign Entities--Representations. Applies to solicitations for the acquisition of commercial satellite services.

(vi) 252.225-7050, Disclosure of Ownership or Control by the Government of a Country that is a State Sponsor of Terrorism. Applies to all solicitations expected to result in contracts of \$150,000 or more.

(vii) 252.229-7012, Tax Exemptions (Italy)--Representation. Applies to solicitations when contract performance will be in Italy.

(viii) 252.229-7013, Tax Exemptions (Spain)--Representation. Applies to solicitations when contract performance will be in Spain.

(ix) 252.247-7022, Representation of Extent of Transportation by Sea. Applies to all solicitations except those for direct purchase of ocean transportation services or those with an anticipated value at or below the simplified acquisition threshold.

(2) The following representations or certifications in SAM are applicable to this solicitation as indicated by the Contracting Officer: [Contracting Officer check as appropriate.]

\_\_\_\_ (i) 252.209-7002, Disclosure of Ownership or Control by a Foreign Government.

\_\_\_ (ii) 252.225-7000, Buy American--Balance of Payments Program Certificate.

\_\_\_ (iii) 252.225-7020, Trade Agreements Certificate.

\_\_\_ Use with Alternate I.

\_\_\_ (iv) 252.225-7031, Secondary Arab Boycott of Israel.

\_\_\_ (v) 252.225-7035, Buy American--Free Trade Agreements--Balance of Payments Program Certificate.

\_\_\_ Use with Alternate I.

\_\_\_ Use with Alternate II.

\_\_\_ Use with Alternate III.

\_\_\_ Use with Alternate IV.

\_\_\_ Use with Alternate V.

(e) The offeror has completed the annual representations and certifications electronically via the SAM Web site at <https://www.acquisition.gov/>. After reviewing the SAM database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in FAR 52.204-8(c) and paragraph (d) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer, and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below \_\_\_ [offeror to insert changes, identifying change by provision number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR/DFARS Clause #	Title	Date	Change

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications located in the SAM database.

(End of provision)

## Section L - Instructions, Conditions and Notices to Bidders

SECTION L

**PROPOSAL SUBMISSION INSTRUCTIONS** : Offerors may only submit one proposal in response to this solicitation, and that proposal must be prepared in accordance with these instructions. Costs incurred for proposal preparation, to include pre-award site visits, will not be reimbursed by the Government.

L.1.1 In order for proposals to receive full consideration for award, the Offeror shall ensure that the information furnished in support of the proposal is factual, accurate, complete and defensible. Failure to provide the information requested by the solicitation may render the Offeror's proposal incomplete and ineligible for further consideration for award.

L.1.2 Questions regarding this solicitation shall be in writing and directed via e-mail to Mr. Jemel Hogan, [jemel.m.hogan.civ@mail.mil](mailto:jemel.m.hogan.civ@mail.mil) and Ms. Jonita Joyner, [jonita.l.joyner.civ@mail.mil](mailto:jonita.l.joyner.civ@mail.mil). All questions shall be submitted via the Excel file format provided. All correspondence shall reference the Solicitation Number (W911SR-17-R-0005). The cut-off for questions is **19 October 2017, 3:00 PM Eastern Standard Time (EST)**. The Government will answer all questions electronically so that all Offerors will see both the question and the answer. However, the identity of the person or company asking the question(s) will not be disclosed. No questions and answers for any prior Request for Information or Draft Request for Proposal are binding on this solicitation.

L.1.3 All proposal submissions are due on **07 November 2017, 3:00 PM EST**. It is the Offeror's responsibility to assure its proposal is received by the date and time specified above. In accordance with [FAR 15.208](#), if your proposal is not received at the initial point of entry to the Government (received through web based system) by the exact date and time specified above, it will be determined late, will not be evaluated, and will not be considered for Award. Proposal, as the term is used here, means ALL volumes and parts of the proposal.

L.1.3.1 The Government suggests that an Offeror submit its proposal prior to the closing date, allowing enough time to ensure the entire proposal is received on time to be considered for award. If all portions of the proposal are not received by the solicitation closing deadline, the proposal shall be rejected as late (see [FAR 52.215-1\(c\) \(3\)](#)).

L.1.4 Web-Based Submission: The Offeror's proposal shall be submitted electronically via the FedBizOpps.gov (FBO) Secure Document System (SDS) in the files set forth below. Files submitted through FBO SDS shall not contain classified data. The use of hyperlinks in proposals is prohibited. Requirements/Instructions for using the FBO SDS is located at [www.fbo.gov](http://www.fbo.gov).

L.1.4.1 The solicitation will be issued electronically, as well as any subsequent amendments. It will therefore be the sole responsibility of all interested parties to periodically access the FBO website described below in order to obtain any amendments, which may be issued. Failure of an Offeror to obtain any said amendments and to respond to them prior to the date and time set for receipt of proposals is at the sole risk of the Offeror, and may result in proposals, (or any portion thereof), being declared unacceptable and can result in the rejection of proposal submissions.

L.1.4.2 All proposal submissions shall strictly comply with instructions. Failure to fully comply with all instructions may result in rejection of a proposal submission as unacceptable.

L.1.4.3 Offerors must be registered in the System for Award Management (SAM) at [www.sam.gov](http://www.sam.gov) and have a SAM Marketing Partner Identification Number (MPIN) and CAGE Code. For further information regarding registration for SAM or registration/use of FBO, please visit the FBO Learning Center at [https://www.fsd.gov/fsd-gov/learning-center-system.do?sysparm\\_system=FBO](https://www.fsd.gov/fsd-gov/learning-center-system.do?sysparm_system=FBO) and the FBO Vendor Guide, particularly Chapter 4.

L.1.4.4 The solicitation shall be found by searching on FBO. Offerors may start the online offering process by using the "Notice Details" sub-tab. There will be a blue "click here" link to submit a response; if selected, the system will open a new tab called "Electronic Response." At this point, the Offeror shall upload all proposal documents as specified in the solicitation. If the response deadline has passed for that opportunity, the user will no longer be able to submit an electronic response.

L.1.4.5 Offerors should note that due to the structure of the FBO SDS, obsolete attachments cannot be removed from existing packages. As such, Offerors need to ensure that they are accessing the most current version of the attachments when submitting their proposal.

L.1.4.6 The Offeror will receive a confirmation of offer upon completion of the offer submission process. If problems are encountered using FBO SDS, the Offeror may contact the FBO Learning Center at [https://gsafsd.servicenow.com/fsd-gov/learning-center-system.do?sysparm\\_system=FBO](https://gsafsd.servicenow.com/fsd-gov/learning-center-system.do?sysparm_system=FBO).

L.1.4.7 The Offeror bears the responsibility to ensure timely transmission of their offer, that the offer is responsive to all requirements set forth in the solicitation, the availability of an open transmission line, and to take into consideration the length of time required to complete an upload transaction prior to the solicitation closing date/time stated in the solicitation. In no circumstances shall the tender of any offer or other required document that is filed beyond any filing deadline be considered. Late filing shall result in an offer/proposal being rejected in entirety.

L.1.4.8 A prospective Offeror shall have sole responsibility for ensuring that all electronic responses are submitted correctly, are properly identified, contain all the information requested by the Government, are responsive, and timely filed.

L.1.5 The Offeror shall submit a proposal electronically that demonstrates its ability to perform and meet the requirements in the attached PWS. Files submitted electronically shall not contain classified data. The use of hyperlinks in proposals is prohibited. Classified material must be provided as hardcopies or DVDs in accordance with National Industrial Security Program Operating Manual (NISPOM) and the following subsections. Additionally, the Offeror must either include the security guidance (ex. Security Classification Guide) used to classify the information or provide a point of contact in the organization that classified the information.

L.1.5.1 Each Offeror shall submit any classified hardcopies and DVDs in accordance with NISPOM to:

Outer Envelope:

ATTN: Document Control / NGCD 1 AVCAD Team  
Joint Program Executive Office for Chemical and Biological Defense  
5101 Hoadley Road  
Aberdeen Proving Ground, Maryland 21010-5424

Inner Envelope:

ATTN: Document Control / Carolyn Matz  
Joint Program Executive Office for Chemical and Biological Defense  
5101 Hoadley Road  
Aberdeen Proving Ground, Maryland 21010-5424

L.1.5.1.1 Offerors shall submit a visit request to the contracting officer containing the details of the individual(s) that requires access to the AVCAD classified solicitation documentation. A reading room will be provided. Classified note taking will not be permitted. All requests shall be submitted to the contracting officer, Jonita Joyner, via email at [jonita.l.joyner.civ@mail.mil](mailto:jonita.l.joyner.civ@mail.mil) and include the company name, address and cage code, as well as the name, address and social security number of the individual(s) requiring access to the classified documentation. The individual(s) will be vetted by the Security Office, and upon approval will be contacted to schedule a time and location to review the documentation.

L.1.5.1.2 The Offeror shall mark on the outside of any DVDs, and the cover page of any hardcopies with the volume number, volume subject, company name, and a proposal identification number as defined in L3.1 and Section L.4.0, Table L-1.

L.1.6 The Government will not agree to any terms and conditions that violate federal law or regulations including any terms and conditions contained in any third party software license agreement. Only signature of the Government

Procuring Contracting Officer (PCO) on the software license or maintenance agreement shall constitute acceptance of such license or agreement.

**L.1.7 Incorporation of Proposals.** The Government reserves the right to incorporate portions of the winning proposal(s) into the resultant contract(s).

## **L.2 Acquisition Source Selection Interactive Support Tool (ASSIST)**

**L.2.1** During the conduct of this acquisition, the ASSIST will be used by the Government to support the proposal evaluation. A separate tool, the ASSIST2Industry, will be used in conjunction with ASSIST to accomplish all exchanges with Offerors after receipt of proposals pursuant to FAR 15.306. ASSIST2Industry provides the ability for the Government to issue, and the Offerors to receive and respond to, all Evaluation Notices (ENs) in a secure online environment.

**L.2.2** In order to initiate the use of ASSIST2Industry, the Government requires the names, company titles, telephone numbers, and email addresses of two (2) individuals that the Offeror has designated as responsible for receiving and responding to Government ENs through ASSIST2Industry. The designation of two (2) individuals is for the purpose of insuring availability of one individual if the other individual is not available. The required information regarding these two (2) individuals must be submitted with the Offeror's proposal and included in the cover letter.

**L.2.3** After the solicitation's closing date, the Government will establish an account in ASSIST2Industry for each individual identified by the Offeror that has submitted a proposal in response to this solicitation. The two individuals named by the Offeror will be authorized access to that account. Two (2) separate system generated emails will be sent to each individual. One of the emails will contain the individual's ASSIST2Industry username. The other email will contain the individual's temporary password. Using the provided username and temporary password, each individual can then go to <https://ASSIST2Industry.army.mil> to access the account. NOTE: The first time a user logs in, the user will be required to change the temporary password before the user can proceed to use the site.

**L.2.4** Whenever the Government issues ENs to the Offeror through ASSIST2Industry, the Government's Contracting Officer will notify the Offeror through a medium independent of ASSIST2Industry ( e.g., e-mail) that the Offeror has ENs in ASSIST2Industry waiting for a response. There will be no ENs in ASSIST2Industry until such notice is issued by the Contracting Officer. Offerors can contact the ASSIST2Industry helpdesk at (609) 562-7050 or (609) 562-7031 for any technical assistance that may be needed.

**L.2.5** THE OFFERORS ARE CAUTIONED THAT THE SYSTEM GENERATED EMAILS REFERRED TO ABOVE ARE INTENDED FOR ADMINISTRATIVE PURPOSES ONLY. RECEIPT OF THESE EMAILS DOES NOT CONSTITUTE THE COMMENCEMENT OF ANY TYPE OF EXCHANGE WITH THE OFFEROR IN ACCORDANCE WITH FAR 15.306(A), (B), OR (D) (I.E., CLARIFICATIONS, COMMUNICATIONS, OR DISCUSSIONS). ALSO, RECEIPT OF THESE EMAILS DOES NOT SIGNIFY THAT A COMPETITIVE RANGE DETERMINATION IN ACCORDANCE WITH FAR 15.306(C) HAS BEEN MADE OR THAT THE OFFEROR'S PROPOSAL WILL BE INCLUDED IN THE COMPETITIVE RANGE WHEN THAT DETERMINATION IS MADE. ALL NOTIFICATIONS THAT ANY TYPE OF EXCHANGE WITH THE OFFEROR HAS COMMENCED AND THE OFFEROR HAS EVALUATION NOTICES (ENS) AVAILABLE TO RESPOND TO, OR ANY NOTIFICATION THAT THE OFFEROR'S PROPOSAL HAS BEEN INCLUDED IN OR EXCLUDED FROM THE COMPETITIVE RANGE, WILL BE SENT TO THE OFFEROR BY THE CONTRACTING OFFICER INDEPENDENTLY OF THE ASSIST2INDUSTRY.

## **L.3 PROPOSAL PREPARATION INSTRUCTIONS**

**L.3.1** Format: The Offeror shall submit Technical Approach, Support and Ownership, Test Reports, Producibility and Manufacturing, Cost/Price, Past Performance, Small Business Participation Plan, Administrative, and Uncosted Information in separate files as specified in Section L.4, Table L-1, replacing "xxxx" with the Offeror's

name and the date of the proposal. Example, *Acme COSTPROP 090112.xls* or similar. The Offeror shall ensure that all required documents are included in the proposal.

L.3.1.1 All information the Offeror wishes to have considered must be submitted with the initial proposal and shall be confined to the appropriate volume and within the specified page limitation. Offerors are cautioned that the Government will not consider any information that is not included in the appropriate volume as required. Pages exceeding the limitation will be removed from the proposal prior to evaluation and will not be considered.

L.3.1.2 Indices, to include table of acronyms, table of contents, and cross-reference matrices between the proposal and the solicitation, shall be included to ensure that all pertinent sections of the proposal are fully understood. The cross-reference matrix should identify the location of all major topics provided in each volume.

L.3.1.3 The title page for each volume shall include: volume number, volume subject, and company name.

L.3.1.4 Pages shall not exceed 8.5 inches in width and 11 inches in length; however, oversized pages, as appropriate, not exceeding 11 x 17 inches, depicting such items as charts, matrices, or schedules may be used and will count as a single page. The Offeror shall number all pages within each volume.

L.3.1.5 The Offeror's proposal shall not exceed the page limitations set forth in these instructions and must use 12 point font, Times New Roman, (tables, graphics, oversized pages or electronic spreadsheets may use 10 point font) with one-inch margins (top, bottom, left and right). The cover letter, cover page, proposal introductions, table of contents, table of acronyms, and cross-reference matrices do not count against page count limitations.

L.3.1.6 Offerors are expected to provide sufficient detail in a clear and concise manner to completely and logically address the evaluation factors and criteria. The Government does not desire excess verbiage, unnecessary and elaborate brochures, or lengthy, repetitious, disorganized presentations beyond that sufficient to present a complete and clear offer. Such presentations are not desired and may be construed as an indication of inefficiencies and lack of cost consciousness in proposal preparation. All Offerors are reminded that unsupported promises to comply with the contractual requirements will not be sufficient. Proposals must not merely parrot back the contractual requirements, but rather must provide convincing documentary evidence in support of any statements relating to the promised performance.

L.3.1.7 The Government presumes the Offeror's proposal represents its best efforts to respond to the solicitation. In its proposal, the Offeror shall explain any inconsistency, whether real or apparent, between proposed performance and price. The Government will not make assumptions regarding Offerors' proposals. Offerors shall expressly provide all proposal assumptions in detail that are used in preparing the proposal submitted in response to this solicitation.

L.3.1.8 The Offeror shall include cost information ONLY in Volume III: Cost/Price. Inclusion of cost data in other volumes will result in the removal of each page containing cost data and the entire page or pages will not be evaluated or considered.

L.3.1.9 Each volume (file) shall be a stand-alone document or workbook (for cost data) and clearly and completely provide the requested information. Each file shall be evaluated in accordance with the source selection evaluation criteria described in Section M of the solicitation.

**L.4.0 Proposal Content.** The Offeror shall provide their proposal, segregated by volume, as follows:

<b>Table L-1: Proposal Content</b>			
<b>Proposal Volume</b>	<b>Subject</b>	<b>File Name</b>	<b>Page Limitation</b>
<b>I</b>	<b>Technical Approach</b>	xxxxTECH_APPxxx.docx/pdf	Thirty-five (35) pages
<b>II</b>	<b>Support and Ownership</b>	xxxxSUP_OWNxxx.docx/pdf	Twenty (20) pages

<b>III</b>	<b>Test Reports</b>	xxxxTEST_REPxxx.docx/pdf	Unlimited
<b>IV</b>	<b>Producibility and Manufacturing</b>	xxxxPROD_MANFxxxx.docx/pdf	Fifteen (15) pages
<b>V</b>	<b>Cost/Price</b>	xxxxCOST_NARRxxxx.docx/pdf and xxxxCOST_PROPxxx.xls(x)	Unlimited
<b>VI</b>	<b>Past Performance</b>	xxxxPPxxxx.docx/pdf	Twenty (20) pages
<b>VII</b>	<b>Small Business Participation Plan</b>	xxxxSBxxxx.docx/pdf	Twenty (20) pages
<b>VIII</b>	<b>Administrative</b>	xxxxADMINxxxx.docx/pdf	Unlimited
<b>IX</b>	<b>Uncosted Information</b>	xxxxUNCOSTxxxx.docx/pdf	Unlimited

#### **L.4.1 TECHNICAL APPROACH (VOLUME I)**

L.4.1.1 The Offeror shall describe the system to be developed and the technical approach proposed to meet the AVCAD performance specification (PSPEC), along with the content described in the following subsections.

L.4.1.1.1 The Offeror's narrative discussion shall cover the applicable analytical technique, hardware, software and algorithm approach. A discussion of the inlet approach for the primary vapor and aerosol sampling approach shall also be included. The Offeror shall provide a technical description of the proposed system at the preliminary design stage showing modularity, size and weight, power, and interface controls (including communications). The technical description of the proposed system should include line replaceable units as applicable, dimensions, materials, special processes, software codes and source control components being proposed for modification and upgrade.

L.4.1.1.2 The Offeror shall describe its approach to meet the requirements of the PSPEC within the proposed cost. The Government is requesting the Offeror to limit the proposal to meeting the threshold requirements. An Offeror shall only propose exceeding the threshold requirements if doing so can be done without adding additional costs, or if doing so results in reduced costs to the system either in development, production, or sustainment (for example, Offerors have an opportunity to exceed a threshold requirement if there is positive effect on the Support and Ownership burden). The proposal shall include a summary of performance requirements that can be met for each hardware delivery.

L.4.1.1.3 The Offeror shall provide an Integrated Master Schedule (IMS) which includes the Offeror's proposed plan to implement the requirements of the PSPEC and PWS for the base contract and all options within the associated schedule constraints. The IMS shall include defined dates and time frames for all contract tasks, milestones, reviews, and deliverables. The Offeror may use a contract award date of 26 April 2018 for building the IMS. The Offeror may submit the IMS as a separate attachment that is not included in the page count.

L.4.1.1.4 A description of the level of maturity of the proposed EMD AVCAD Hardware discussed in Section C.7 of the PWS, supported by associated independent and Offeror test reports, shall be provided. The Offeror shall discuss the development approach for getting the technology to TRL eight (8) over the duration of the AVCAD EMD phase, including technological risks. The Offeror shall include discussion of the likelihood of the system transitioning from EMD to LRIP and meeting all system requirements.

L.4.1.1.5 The Offeror shall describe an alternative aerosol approach for sampling, collection and analysis of aerosol chemicals, as discussed in Section C.4 of the PWS. The Offeror shall compare and contrast the levels of maturity and technical complexity associated with the proposed primary and secondary aerosol approaches. The Offeror shall describe how the maturity and complexity of the alternative aerosol approach would impact the unit prices for LRIP and FRP if the alternative approach is used, by providing an expected percentage increase or decrease in prices. (Offeror's shall provide expected percentage impact, not actual price differences. Actual prices will not be provided to technical-volume evaluators).



L.4.1.1.6 The Offeror shall discuss the technical approach for addressing the requirements within section C.8.1 of the AVCAD PWS and Appendix B of the PSPEC.

L.4.1.1.7 The Offeror shall discuss existing performance limitations or shortcomings for effectiveness, survivability, or sustainability, and provide a detailed approach for engineering/software development and testing required to meet requirements, and the impact these events may have on cost and/or schedule which include any recommended schedule revisions resulting from limitations or shortcomings. The Offeror shall also consider additional tests, which are not currently addressed in the Government's requirements, to include the collection of additional spectral data that may be required during the EMD phase.

L.4.1.1.8 The Offeror shall describe the approach to address the technical and schedule risks associated with the requirements of this solicitation. The Offeror's discussion shall identify potential program risks and plans to develop and manage risk mitigation strategies.

L.4.1.1.9 The Offeror may submit a classified appendix to the Technical Approach in accordance with L.1.5. The classified appendix should provide supporting information for meeting the performance requirements provided in the Classified Annex to the PSPEC. The Offeror shall mark the DVDs, hardcopies, mail, reports, and pages in accordance with (IAW) DOD 5220.22-M (National Industrial Security Program).

L.4.1.1.10 The Offeror shall provide a Property Management Plan, in accordance with FAR 45.202(b), describing its approach to managing government property throughout the performance of the contract. The Offeror may elect to provide this plan via an attachment to Volume I that does not count toward the 35-page limit. This plan shall address each of the following ten outcomes (10) and provide a brief overview of how it is addressed within Offerors' written Property Management Procedures:

- a. Acquisition. How property acquisitions are documented, per FAR 52.245-1(f)(1)(i).
- b. Receipt. How property receipt is documented, recorded, and identified per FAR 52.245-1(f)(1)(ii).
- c. Records of Government Property. How property records are created and maintained, per FAR 52.245-1(f)(1)(iii).
- d. Physical Inventory. Methods to perform, record, and disclose physical inventory results, per FAR 52.245-1(f)(1)(iv).
- e. Subcontractor Control. Whether contractual terms and conditions are flowed down to subcontractors, per FAR 52.245-1(f)(1)(v)(A); how subcontracts are properly administered; and, when reviews of subcontractor Property Management Systems are performed, per FAR 52.245-1(f)(1)(v)(B).
- f. Reports. The process to create and provide property-related reports, per FAR 52.245-1(f)(1)(vi).
- g. Relief of Stewardship Responsibility and Liability. The process to recognize, investigate, and report losses of Government property, per FAR 52.245-1(f)(1)(vii).
- h. Utilization. How Government property is to be used, consumed, moved, and stored, per FAR 52.245-1(f)(1)(viii).
- i. Maintenance. How Government property is to be maintained, and when property requiring replacement and/or capital rehabilitation is to be reported to the Property Administrator, per FAR 52.245-1(f)(1)(ix).
- j. Property Closeout. How property closeout is performed and when it is reported to the Property Administrator, per FAR 52.245-1(f)(1)(x).

#### **L.4.2 SUPPORT AND OWNERSHIP (VOLUME II)**

L.4.2.1 The Offeror shall describe the proposed Integrated Product Support (IPS) solution and how it is best suited to minimize support and ownership burdens to the end user. The Offeror shall discuss an approach that will demonstrate that the AVCAD is reliable, producible and maintainable. The Offeror's discussion shall address reliability growth and discuss its approach to complying with the product support requirements and metrics to successfully achieve an operational capability.

L.4.2.2 The Offeror shall discuss the analysis planned to achieve the support requirements identified in the PSPEC.

L.4.2.3 The Offeror shall discuss significant operations and support cost drivers for implementation of the proposed IPS Solution.

L.4.2.4 The Offeror shall discuss the developmental approach to minimizing the amount of complexity of organizational level maintenance and mean time to repair through the use of line replaceable units, modular open systems design, limiting consumables and limiting calibration requirements. The Offeror shall discuss the projected maintenance levels required.

L.4.2.5 The Offeror shall discuss their plan for technical manual development. The plan shall include the methodology and source information used by the contractor to develop content for the technical manual and the schedule. The Offeror shall include their plan for ensuring that each technical manual submitted to the Government includes safe, adequate and validated work packages, tasks, and procedures for the operation, maintenance, troubleshooting, preventive maintenance, repair, replacement parts, and data to support the systems requirements for reliability, availability and maintainability.

L.4.2.6 Modular Open System Approach (MOSA). The Offeror shall describe its strategy to ensure a modular design that allows for future reconfiguration and addition of new capabilities without large-scale redesign of the system. The discussion shall include open interface standards, technologies, products or architectures that mitigate technology obsolescence and reduces life cycle ownership costs.

L.4.2.7 The Offeror shall identify all preventive maintenance checks and services (PMCS) and calibration that may be required during the course of testing. The Offeror shall include a System Support Package List (SSPL) that supports all tests identified in the PWS.

L.4.2.8 The Offeror shall discuss its approach for the development, documentation, and configuration management of technical data to include the AVCAD drawings, interface documentation, software specifications, software source code, and production documentation.

L.4.2.9 The Offeror shall propose the extent to which the rights in technical data (TD), computer software (CS) and computer software documentation (CSD) offered to the Government ensure unimpeded, innovative, and cost effective production, operation, maintenance, and upgrade of the AVCAD system throughout its life cycle; allow for open and competitive procurement of AVCAD enhancements; and permits the transfer of the AVCAD non-proprietary object code and source code to other contractors for use on other systems or platforms. The Offeror shall also propose the TD, CSD, and CS reuse and/or portability for use on other systems or platforms. The Data Rights and Licenses offered shall be provided as an attachment to the support and ownership volume, but shall not count against the page count provided in Table L-1.

L.4.2.9.1 The Offeror shall describe its plan for making design and interface information available as soon as possible after it is defined or established. The Offeror shall establish and maintain a process that will provide “early and often” design disclosure directly to the Government or to third-party contractors via Government-established access.

L.4.2.9.2 Rights in Noncommercial TD, Noncommercial CS, and Noncommercial CSD. The Offeror shall attach to its offer a list identifying all noncommercial TD, CS, and CSD that it asserts should be delivered with other than unlimited rights. Specific instructions and requirements concerning this list are set forth in the DFARS 252.227-7017 “Identification and Assertion of Use, Release, or Disclosure Restrictions” (January 2011). Offerors may be required to submit detailed information supporting each assertion at any time prior to contract award. If the Offeror is awarded a contract, the List shall be attached to the contract (hereinafter referred to as the 7017 List). This attachment shall not count against the page count provided in Table L-1.

L.4.2.9.3 The Offeror shall attach to its offer a statement, entitled “Supplemental Information— Noncommercial Technical Data, Noncommercial Computer Software, Noncommercial Computer Software Documentation” (the statement) that, for each item of noncommercial TD, CS, or CSD that the Offeror asserts should be delivered with specifically negotiated license rights or other non-standard rights (as discussed at DFARS 252.227-7013 “Rights in

Technical Data –Noncommercial Items” (February 2014) and/or DFARS 252.227-7014 “Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation” (February 2014)), sets forth a complete description of all such proposed non-standard restrictions on the Government’s ability to use, modify, release, perform, display, or disclose such TD, CS, or CSD. This information may be provided by referencing any proposed non-standard license agreement that is attached to the statement. The Offeror shall submit the statement as an attachment to its offer, dated and signed by an official authorized to contractually obligate the Offeror. This attachment shall not count against the page count provided in Table L-1. If no information is to be included in the statement, the Offeror need not submit the statement. If the Offeror is awarded a contract, any statement provided will be attached to the contract.

L.4.2.9.4 Rights in Commercial TD, Commercial CS, and Commercial CSD. The Offeror shall attach to its offer a list, entitled “Commercial TD, Commercial CS, and Commercial CSD-Government Use Restrictions” (the Commercial Restrictions List), that provides the following information regarding all commercial TD, CS, and CSD that the Offeror (including its sub-Offerors or suppliers, or potential sub-Offerors or suppliers, at any tier) intends to deliver with other than unlimited rights:

(1) Identification of the technical data or software; (2) basis for asserting restrictions, such as licensed products including open source software; and (3) name of the entity asserting restrictions. For any item designated as Non-Developmental Item (NDI), the Offeror is requested to provide details of the Agency and level therein that paid for development and the contract number(s) and dates wherein payments were received. For each entry in the list citing an asserted rights category other than the standard license rights applicable to commercial TD as set forth in the DFARS 252.227-7015 “Technical Data – Commercial Items” (February 2014) clause, the Offeror shall provide a complete description of the asserted rights, e.g., a specially negotiated license, open source software license, or any license customarily offered to the public; this information may be provided by referencing any proposed nonstandard or commercial license agreement that is attached to the list, but in all cases, the non-standard or commercial license will be attached for Government review. The Offeror shall submit the Commercial Restrictions List as an attachment to its offer, dated and signed by an official authorized to contractually obligate the Offeror. If there is no information to be included in the Commercial Restrictions List, the Offeror shall submit the list and enter “None” as the body of the list. This attachment shall not count against the page count provided in Table L-1. If the Offeror is awarded a contract, the Commercial Restrictions List shall be attached to the contract.

#### **L.4.3 TEST REPORTS (VOLUME III)**

L.4.3.1 The Offeror shall provide a summary of available independent and Offeror test reports to provide supporting evidence of the proposed technology’s feasibility in meeting the AVCAD requirements. The test reports discussed shall be included in full as appendices. The summarized discussion of test reports shall include, at a minimum, the test scope, the location of the test, who conducted the test, the test environment, test targets, and a summary of the test results. The Offeror must provide a code sheet that relates any coded chemicals to the common chemical name (Ex. VX, GD, Sarin).

L.4.3.2 The Offeror may submit DVDs and hardcopies of the summary of classified test reports, the full classified test reports themselves, and classified code sheets in accordance with L.1.5.

#### **L.4.4 PRODUCIBILITY AND MANUFACTURING (VOLUME IV)**

L.4.4.1 The Offeror shall discuss manufacturing capability to produce the LRIP, and FRP quantities at a sustained rate.

L.4.4.2 The Offeror shall discuss their approach to Producibility engineering and design as it relates to achieving the lowest possible production unit cost. The Offeror shall discuss the transition from EMD to LRIP.

L.4.4.3 The Offeror shall describe their Quality Assurance Program (QAP). The QAP shall address all products and services to include the design, development, production, installation, and servicing of products, and other services required. These products and services include, but are not limited to, Hardware Configuration Item (HWCI), software, and data items.

### **L.4.5 COST/PRICE (VOLUME V)**

Required Files: The Offeror shall submit the following two parts, Cost Narrative (L.4.5.1) and Cost Proposal (L.4.5.2), in the Cost/Price Volume as follows:

L.4.5.1 Required File, Cost Narrative [xxxCOST\_NARRxxx.doc(x)/pdf, replacing “xxxx” with the Offeror’s name and the date of the proposal]: The primary purpose of this document is to provide factual documentation that supports the accuracy of proposed costs for cost reimbursable CLINs in the Excel Cost Proposal. Requirements to support proposed costs are only applicable to cost reimbursable CLINs. Offerors are discouraged from duplicating tables shown in the Excel Cost Proposal workbook in the Cost Narrative, as evaluators will have access to both files. Cost Narratives shall contain the following:

L.4.5.1.1 Table of Contents: Identifies the location of required Cost Narrative sections.

L.4.5.1.2 Identifying Information: The name and address of the Offeror; solicitation number; name, email address, and phone number of the point of contact and alternate; and a list containing either the Data Universal Numbering System (DUNS) number or the Commercial and Government Entity (CAGE) code for the prime contractor and each subcontractor.

L.4.5.1.3 Cost Accounting Business System: State: 1) If the Offeror has a DCAA approved Cost Accounting Business System; 2) If the submitted proposal is consistent with established estimating and accounting principles and procedures and FAR Part 31 (Contract Cost Principles and Procedures), explaining any identified inconsistencies; and 3) If the Offeror lacks a DCAA approved Cost Accounting Business System, the Offeror shall identify their timeline to obtain approval for this business system subject to receipt of award. If the approval of the Offeror’s Cost Accounting Business system has been revoked, or if any aspect of this proposal is inconsistent with its disclosed practices or applicable CAS, then the Offeror shall so state in the Cost Narrative.

L.4.5.1.4 Earned Value Management Business System: The Offeror shall state if it has an Earned Value Management System that has been determined by the cognizant Federal agency to be in compliance with the guidelines in ANSI/EIA-748 and DFARS 234.201.

L.4.5.1.5 Direct Labor: Proposed labor categories shall be specific to a job function (e.g. “Chemist”, “Electrical Engineer”, “Budget Analyst”; not “Scientist”, “Engineer”, “Analyst”). For each labor category provide 1) typical education and years of experience, 2) a brief (one sentence will suffice) description of job duties, 3) percentage of labor anticipated to be provided by current employees (as opposed to individuals to be hired), and 4) how proposed labor rates were estimated (e.g. category average of current employees, pay rate of current employee, letter of intent, labor statistics such as <http://data.bls.gov/oes/>, etc.). See the following as an example:

Software Applications Developer, Mid (4 year degree, 4+ years of experience): Develop, create, and modify general computer applications software or specialized utility programs.

Employee Makeup: 80% Current Workforce.

Basis of Estimate: Labor category average using internal payroll data

L.4.5.1.6 Indirect Expense Rates: **Provisional Billing Rates and Forward Pricing Rate Proposals will not be accepted as a basis for proposed indirect rates.** Proposed indirect expense rates shall be supported by one of the methods listed following this paragraph. If proposed indirect rates are significantly different than would be supported by one of the required methods, Offerors shall explain why proposed rates are different and provide data to support how the different rates were calculated.

- a) A copy of a Forward Pricing Rate Agreement;
- b) A copy of a Forward Pricing Rate Recommendation;
- c) A copy of a DCAA audit or DCMA review of indirect rates incurred during a period within the past two years based on the solicitation due date;
- d) Claimed/actual indirect expense pool, allocation base, and rate data for the past two fiscal years; or
- e) An agreement to cap reimbursable indirect expense rates at proposed amounts IAW FAR 42.707 (such a cap would only apply to CPIF CLINs).

L.4.5.1.7 Fixed Price and T&M Subcontracts: Provide a signed quote for each subcontract that supports how the Offeror arrived at the subcontractor's proposed price and quantities of uncosted elements (e.g. labor hours, material quantities, etc.) presented in the Excel Cost Proposal.

L.4.5.1.8 Cost Reimbursable Subcontracts: Provide a signed quote for each subcontract that supports how the Offeror arrived at the subcontractor's proposed price and quantities of uncosted elements (e.g. labor hours, material quantities, etc.) presented in the Excel Cost Proposal. A Cost Narrative and Cost Proposal (specific to only cost reimbursable CLINs) shall be provided to the Government for subcontracts greater than \$1,000,000 for cost reimbursable CLINs with the same level of detail as is required of the Prime Offeror (may be provided by either the Prime or Subcontractor).

L.4.5.1.9 Equipment, Materials, and ODCs: All equipment, materials, and ODCs that contribute more than \$50,000 (when quantities are multiplied by unit costs, inclusive of all CPIF CLINs in aggregate) in proposed costs shall be supported by vendor/supplier quotes, catalog pricing, or historical pricing documentation.

L.4.5.1.10 Travel: Proposed travel costs do not need to be addressed in the Cost Narrative. Offerors are reminded to propose travel costs that conform to FAR 31.205-46 (Travel Costs), meaning that costs that exceed allowances provided for by the Federal Travel Regulations and Joint Travel Regulation may be deemed unreasonable.

L.4.5.1.11 CLIN 0005 (Accounting for Contract Services). As part of its proposal, the Offeror shall provide a total price (if any) incurred to comply with the Contractor Manpower Reporting Application (CMRA) requirement. The Government prefers this CLIN be not-separately priced; however, if the Offeror decides to separately price CLIN 0005 it shall be priced as a firm-fixed contract type. If the Offeror separately prices CLIN 0005, the CLIN will be the CLIN under which the contractor shall bill for the costs associated with the CMRA requirement.

L.4.5.1.12 CLIN 0006 (Contract Data Requirements List (CDRLs) shall be "Not Separately Priced (NSP)".

**L.4.5.2 Required File** [xxxxCOST\_PROPxxxx.xls or .xlsx, replacing "xxxx" with the Offeror's name and the date of the proposal]: Offerors shall utilize the Attachment 9 Cost Template. This workbook shall contain the following tabs:

L.4.5.2.1 Summary Tabs: These tabs shall aggregate all proposed prices (inclusive of cost, and fee or profit) for each priced CLIN, arriving at an overall proposed price in the "Summary" tab. Note that some rows are color coded, indicating that references to other tabs shall be used.

L.4.5.2.2 CPIF Breakout Tabs:

L.4.5.2.2.1 CPIF Tab Instructions: These tabs shall breakout the proposed CPIF for each CLIN by cost element (direct labor, applicable indirect expenses, materials, travel, fee, etc.). Note that while formats in these tabs are provided, Offerors have flexibility to make any changes as needed to accurately aggregate all proposed costs and fees, while showing a concise breakout of proposed costs. Offerors may use weighted average rates as needed to

account for performance under multiple accounting periods and, in the case of Direct Labor, multiple individuals being proposed under the same labor category.

L.4.5.2.2.2 CPIF Assumptions:

- a) Technical Support: For Technical Support CLINs, Offerors shall assume .25 FTEs per production year.
- b) Testing Location: Offerors shall assume that all testing identified in C.7.1.2, C.10.1.2, and C.10.2.3.1 will occur at DPG, UT.
- c) Training Courses: Offerors shall assume that courses under C.5.8.3 will have twenty (20) participants and a duration of four (4) hours.

L.4.5.2.3 CPIF Travel Tabs: Offerors shall breakout all travel proposed under CPIF CLINs.

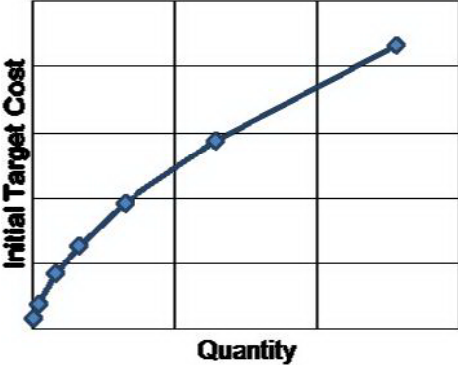

L.4.5.2.4 CPIF Subcontractors: Each subcontractor proposed to perform under CPIF CLINs shall have its price broken out on its own tab with a level of detail appropriate for the contract type and dollar value:

L.4.5.2.4.1 Fixed Price, T&M, or Under \$1,000,000: The Offeror shall provide uncosted elements (e.g., hours by category, trips, materials, equipment, ODC quantities, etc.) and fully loaded rates that the subcontractor is proposing for each applicable CLIN.

L.4.5.2.4.2 Cost Reimbursable and Over \$1,000,000: Provide the same level of detail required of the prime Offeror, with a breakout by cost element for each applicable CLIN. If the prime Offeror is unable to provide this level of detail due to the subcontractor deeming this level of detail to be proprietary, then the Offeror shall at minimum provide uncosted elements and fully loaded rates that the subcontractor is proposing AND the subcontractor shall provide the required level of detail directly to the Government by the date and time that proposals must be delivered.

L.4.5.2.5 AVCAD Full Rate Production (FRP):

L.4.5.2.5.1 Initial Target Cost: EITHER input the cost of 3,200 Units and the *Cost Improvement Slope* (this fills in target costs at noted production points (e.g. 1, 50, 200, etc.) using the “Unit” cost improvement curve method, OR manually (type over formulas in cells D14:D21) input the total initial target cost at each production point. Note that “Schedule B” pricing is derived from strait-lining initial target costs between two points [example if 1 unit is \$11 and 50 units is \$60, then the initial target cost would be  $\$10 + (\$1 * \text{Units})$  for this range]. The following table illustrates how this method differs from the more common “range pricing” method.

<p><b>AVCAD FRP</b> Marginal Pricing Method</p>	<p><b>COMMON METHOD</b> Range Pricing Method</p>
<p><i>Total Cost =</i> <i>Fixed Cost + Variable Cost × Quantity</i></p> <p>e.g. \$1,500,000 + \$2,812 * Quantity</p>	<p><i>Total Cost =</i> <i>Variable Cost × Quantity</i></p> <p>e.g. \$6,094 * Quantity</p>
<p><b>Marginal Pricing: General Shape</b></p> 	<p><b>Range Pricing: General Shape</b></p> 

L.4.5.2.5.2 Escalation Percentage: Total initial target costs are uniformly escalated by the percentage entered at every production point each year (cell E10).

L.4.5.2.5.3 Initial Target Profit Percentage: This percentage will be used to calculate the initial target profit based on the initial target cost of any given order quantity and year (cell K14).

L.4.5.2.6 Consumables and Spares: Offerors shall list all anticipated consumables and spare parts that will be needed to maintain fully functional AVCADs, an estimate of each part’s Mean Time Between Failure (MTBF) (measured in hours actively in use), range pricing for FY 2018 at listed quantity ranges (e.g. 1-100, 101-500, etc.), escalation that will be applied during subsequent years, and the initial target profit percentage. If the MTBF of a part is more appropriately measured by the passage of time (e.g. 3 months) for a given part, then Offerors shall convert the passage of time into hours by assuming that each AVCAD will be used 500 hours per year (e.g.:  $500 * MTBF_{years}$  or  $500 * MTBF_{months}/12$ ).

L.4.5.2.7 AVCAD Warranty: Offerors shall establish Firm Fixed Prices to Warranty AVCADs by applying a percentage to the initial target cost of units to be purchased via Full Rate Production CLINs. Warranty prices (in dollars) will not fluctuate based on successive target negotiations of Full Rate Production.

L.4.5.2.8 Integration Kits FRP: Offerors shall enter the initial target cost at each quantity range (1-100, 101-500, and 501-1000) for each kit during FRP year 1, an escalation rate, and an FPI(S) profit percentage (used to calculate initial target profit dollars).

L.4.5.3 Important Notes:

L.4.5.3.1 Incentive Structure: Offerors are not being asked to propose a unique incentive structure. Any contract resulting from an Offeror’s proposal in response to this solicitation will use the following incentive structures:

L.4.5.3.1.1 CPIF CLINs: Minimum Fee = Proposed Target Fee – 5 percentage points; Maximum Fee = Target Fee + 5 percentage points; Under Target Share Ratio = 60% Government: 40% Contractor; Over Target Ratio = 60% Government: 40% Contractor.

L.4.5.3.1.2 FPI(S) CLINs: Ceiling Price = 130% of Initial Target Cost; Under Target Share Ratio = 85% Government : 15% Contractor; Over Target Share Ratio = 85% Government : 15% Contractor. A ceiling and floor for the firm target profit will not be incorporated into FPI(S) CLINs.

L.4.5.3.2 Converting FPI(S) to FPIF CLINs: FPI(S) options may be unilaterally exercised and converted to FPIF CLINs by the Government as follows:

Successive Target Cost: Yet to be determined. Will be established IAW with the contract and possible negotiations.

Successive Target Profit: Initial Target Profit + 15% \* (Initial Target Cost – Successive Target Cost); however, this may not exceed the ceiling price minus the successive target cost.

Overrun Share: 85% Gov't : 15% Contractor

Underrun Share: ≤ 85% Gov't : ≥ 15% Contractor, determined by the Contracting Officer

Ceiling Price: 130% of the Initial Target Cost

#### **L.4.6 PAST PERFORMANCE (VOLUME VI)**

L.4.6.1 The information contained in this volume will be used to evaluate whether the Offeror's present/past performance is recent and relevant to the solicitation requirements and to determine how well the Offeror performed on the contracts.

L.4.6.2 This volume shall be organized into the following sections:

L.4.6.2.1 Section 1 – Contract Descriptions. This section shall include the following information:

L.4.6.2.1.1 The Offeror shall submit with its proposal contract descriptions representing its recent and relevant performance under Government and/or commercial contracts. The past performance information may be from predecessor companies, key personnel who have relevant experience, or subcontractors that will perform major or critical aspects of the effort. "Relevant" means performance that demonstrates the Offeror has developed, designed, and manufactured a chemical, biological, or explosives detection systems. "Recent" means any contract under which any development, design or manufacturing has taken place within the last three (3) years of the issuance of this solicitation.

L.4.6.2.1.2 For large multi-function firms, all past performance information provided shall be specific to the offering segment of the firm (e.g., division, group, unit, etc.) that is submitting the proposal.

L.4.6.2.1.3 The prime contractor shall submit no more than three (3) contract references and no more than one (1) contract reference from up to two (2) major subcontractors on active or completed Government or private-sector contracts or task orders completed or at least 90 percent physically completed by the Offeror as a prime contractor or major subcontractor within the past three (3) years. A major subcontractor is defined as one who will be providing critical services or who is responsible for efforts totaling at least 25% of the labor support cost. The following information shall be included for each contract reference:



L.4.6.2.1.3.1 The contractor place of performance, CAGE Code, and DUNS Number. If the work was performed as a subcontractor, also provide the name of the prime contractor and Point of Contact (POC) within the prime contractor organization (name, current address, e-mail address, and telephone and fax numbers).

L.4.6.2.1.3.2 Government contracting activity and current address; Procuring Contracting Officer's name, e-mail address, and telephone and fax numbers.

L.4.6.2.1.3.3 Government technical representative or Contracting Officer's Representative and current email address and telephone and fax numbers.

L.4.6.2.1.3.4 Offeror's POC name, phone number, and email address, for the POC responsible for completing the Past Performance Questionnaire (L.4.6.2.3 Section 3 – Past Performance Questionnaire).

L.4.6.2.1.3.5 Government contract administration activity and the Administrative Contracting Officer's name, current e-mail address, and telephone and fax numbers.

L.4.6.2.1.3.6 Contract or subcontract number. In the case of Indefinite Delivery type contracts, GSA contracts, and Blanket Purchase Agreements, include Delivery Order Numbers.

L.4.6.2.1.3.7 Contract Type (e.g., Fixed-Price (FP), Cost Reimbursement (CR), Time & Materials (T&M), etc.). In the case of Indefinite Delivery contracts, indicate specific type (i.e., Requirements, Definite Quantity, and Indefinite Quantity) and secondary contract type (e.g., FP, CR, T&M, etc.).

L.4.6.2.1.3.8 Award price/cost.

L.4.6.2.1.3.9 Final or projected final, price/cost.

L.4.6.2.1.3.10 Original delivery schedule, including dates of start and completion of work.

L.4.6.2.1.3.11 CPARS report available: YES or NO.

L.4.6.2.2 Section 2 – Performance. The Offeror shall provide a specific narrative explanation of each contract listed in Section 1, Contract Description, describing the following:

L.4.6.2.2.1 A detailed narrative for each contract cited and the similarities and relevance of that work to the work required by this solicitation, objectives achieved, and cost growths or schedule delays encountered. Offerors shall provide copies of Quality Deficiency Reports and Corrective Actions submitted by the Defense Contract Management Agency (DCMA) office within the past three (3) years. For Government contracts that did not nor do not meet original requirements with regard to either cost, schedule or technical performance the Offeror shall provide a brief explanation of the reason(s) for such factor(s) and any corrective actions taken to avoid recurrence. The Offeror shall not exceed two (2) pages for each contract cited.

L.4.6.2.2.2 The Offeror shall also provide the aforementioned information for all contracts terminated in whole or in part, for any reason during the past three (3) years, to include those currently in the process of such termination as well as those that are not for work similar to the proposed effort. The Offeror shall also provide the aforementioned information for any proposed major subcontractor.

L.4.6.2.2.3 The Offeror shall submit recent information on its performance over the past three (3) years which demonstrates compliance with FAR 52.219-8, Utilization of Small Business Concerns, and FAR 52.219-9, Small Business Subcontracting Plan, as applicable. Information relating to compliance with FAR 52.219-8 shall include a description and available documentation of the methods employed to promote small business utilization and the internal methods used to monitor such utilization. For compliance with FAR 52.219-9, the Offeror shall include documentation for achieving goals established under Subcontracting Plans of prior contracts for the past three (3) years. If an Offeror has not been subject to the requirements of FAR Part 19, including never holding a contract

incorporating FAR 52.219-8 or 52.219-9, the Offeror’s proposal shall include a statement to that effect and a rationale as to why.

L.4.6.2.2.4 For large multi-function firms, all past performance information provided shall be specific to the offering segment of the firm with the same DUNS number and CAGE code as the business unit which is proposed to be performing the effort.

L.4.6.2.2.5 The Offeror shall specifically describe the major work that its subcontractors will perform.

L.4.6.2.2.6 An Offeror with no past performance experience shall provide an explanation that they have no recent or relevant experience.

L.4.6.2.2.7 Offerors shall include in their proposal the written consent of their proposed major subcontractors to allow the Government to discuss the subcontractor’s past performance evaluation with the Offeror during negotiations.

L.4.6.2.2.8 The Government may utilize past performance information from other sources than those identified by the Offeror, (i.e. Contractor Performance Assessment Reporting System (CPARS)).

L.4.6.2.3 Section 3 – Past Performance Questionnaire.

L.4.6.2.3.1 For all contracts identified in L.4.6.2.1 Section 1 Contract Descriptions, Offeror shall distribute Attachment 12, Past Performance Questionnaire. The Offeror shall complete Part I of the Past Performance Questionnaire and e-mail the questionnaire to both the Government contracting activity and technical representative responsible for the past/current contract. The Government contracting activity and technical representative for the past/current contract shall be instructed to electronically complete Part II of the questionnaire and e-mail the entire questionnaire no later than the proposal due date to the following Contracting office email addresses: Jemel Hogan, Contract Specialist at [jemel.m.hogan.civ@mail.mil](mailto:jemel.m.hogan.civ@mail.mil) or Jonita Joyner, Contracting Officer at [jonita.l.joyner.civ@mail.mil](mailto:jonita.l.joyner.civ@mail.mil).

L.4.6.2.3.2 The Government may utilize past performance information from other sources than those identified by the Offeror [i.e., Contractor Performance Assessment Reporting System (CPARS)].

**L.4.7 SMALL BUSINESS PARTICIPATION PLAN (VOLUME VII)**

L.4.7.1 The Small Business (SB) Participation Plan Volume is comprised of two distinct elements: the Small Business Participation Plan (Factor) and Small Business Subcontracting Plan (Not a Factor). The Offeror shall describe the approach to maximizing opportunities for small businesses in the effort, both in terms of the percentage of overall contract value (SB Participation Plan) and in terms of the percentage of the subcontracted portion’s value (SB Subcontracting Plan). The Small Business Participation Plan cover page for Small Business Utilization shall summarize the Offeror’s SB Participation goals for the total, base, and EACH option requirements in separate columns, and summarize the Offeror’s SB Subcontracting percentage values for the total, base, and ALL options requirements in separate columns (e.g. option 1, option 2, option 3 etc....)

SB Participation Plan

	Total	Base	Option 1	Option 2	Option 3
SB	_____ %	_____ %	_____ %	_____ %	_____ %
SDB	_____ %	_____ %	_____ %	_____ %	_____ %
WOSB	_____ %	_____ %	_____ %	_____ %	_____ %
HUBZone SB	_____ %	_____ %	_____ %	_____ %	_____ %

VOSB	_____ %	_____ %	_____ %	_____ %	_____ %
SDVOSB	_____ %	_____ %	_____ %	_____ %	_____ %
Total Contract Value \$ _____			Total Subcontracts \$ _____		

SB Subcontracting Plan

	Total	Base	Option 1	Option 2	Option 3
SB	_____ %	_____ %	_____ %	_____ %	_____ %
SDB	_____ %	_____ %	_____ %	_____ %	_____ %
WOSB	_____ %	_____ %	_____ %	_____ %	_____ %
HUBZone SB	_____ %	_____ %	_____ %	_____ %	_____ %
VOSB	_____ %	_____ %	_____ %	_____ %	_____ %
SDVOSB	_____ %	_____ %	_____ %	_____ %	_____ %
Total Contract Value \$ _____			Total Subcontracts \$ _____		

There will be a column for each option.

L.4.7.2 The Offeror shall identify the appropriate CAGE and NAICS code for each proposed subcontractor for each planned work element. The Offeror shall provide an up-to-date capture of the SAM profile for each subcontractor, which demonstrates the size status in that subcontractor’s NAICS code. If the subcontractor is not noted in SAM for the identified NAICS code, then the Offeror shall require the subcontractor to revise their SAM profile prior to the solicitation close.

L.4.7.3 Small Business Participation Plan Factor (required from both Large Businesses and Small Businesses). The Small Business Participation Plan Factor evaluates the Offeror’s approach to maximizing opportunities for small businesses in terms of the percentage of overall contract dollar value. This plan is required from all Offerors, regardless of the Offeror’s size status. The Offeror’s SB Participation Plan percentages are to be presented in terms of total dollars of work for each SB category, divided by the total contract value. All Offerors shall use the Small Business Participation Proposal Sample Format provided as Attachment 10 in developing its response to this Factor.

L.4.7.3.1 The Offeror shall identify the extent and nature of participation of Small Businesses (SB), Small Disadvantaged Businesses (SDBs), Woman-Owned Small Businesses (WOSBs), HUBZone Small Businesses

(HUBZone SBs), Veteran Owned Small Businesses (VOSBs), Service Disabled Veteran Owned Small Businesses (SDVOSBs), in the performance of the proposed contract. The Offeror's own participation as a SB, SDB, WOSB, HUBZone SB, VOSB, or SDVOSB shall be identified. Specifically, the Small Business Participation Plan shall address the following:

L.4.7.3.1.1 The extent of the commitment of the selected SB firms, including whether or not the selected SB firms are supported by enforceable commitments.

L.4.7.3.1.2 The complexity and variety of the work that each SB firm is to perform is clearly identified.

L.4.7.3.1.3 The extent of participation of SB firms in terms of the value of the total acquisition is clearly identified.

L.4.7.3.2 SB Participation Plan Goals. The Government's Participation Plan goals for this acquisition are as follows:

Small Business – 10%

Small Disadvantaged Business – 2%

Women-Owned Small Business – 2%

HUBZone Small Business – 1%

Veteran Owned Small Businesses – 1%

Service-Disabled Veteran-Owned Small Business – 1%

L.4.7.3.2.1 Historically Black College or University (HBCU) / Minority Institution (MI) Participation. The Government has not established a goal for HBCU/MI participation. HBCU/MI participation is encouraged, but not required. If an Offeror chooses to include HBCU/MI participation, it shall identify this participation in accordance with the methods described L.4.7.

L.4.7.3.2.2 For each category in which the Offeror's SB Participation Plan contains goals below those described at L.4.7.3.2, the Offeror shall provide a detailed explanation as to why.

L.4.7.4 Small Business Subcontracting Plan (Required for Large Businesses Only)

L.4.7.4.1 Offerors shall submit a Small Business Subcontracting Plan in accordance with the clauses below and shall include the content of FAR 52.219-9 (DEVIATION 2013-O0014) Small Business Subcontracting Plan, FAR 19.704, and DFARS 252.219-7003 Small Business Subcontracting Plan (DoD Contracts). If applicable to the Offeror, the Offeror shall submit in accordance with DFARS 252.219-7004 Small Business Subcontracting Plan (Test Program). The requirements for submission of a Small Business Subcontracting Plan do NOT apply to small businesses.

L.4.7.4.2 The Offeror shall describe the approach to maximizing opportunities for small businesses in the effort, both in terms of the percentage of overall contract dollar value (SB Participation Plan) and in terms of the percentage of the total subcontracted dollar value (SB Subcontracting Plan).

L.4.7.4.3 The information in the SB Subcontracting Plan shall properly correlate with that of the Offeror's SB Participation Plan.

L.4.7.4.4 SB Subcontracting Plan Goals. In accordance with DFARS 219.705-4(d), the proposed Small Business Subcontracting Plan shall address the commitment to meet a Small Disadvantaged Business goal of 5%.

#### **L.4.8 ADMINSTRATIVE (VOLUME VIII)**

L.4.8.1 General Instructions. The Offeror shall include the following information in Volume VI.

L.4.8.1.1 The solicitation number: W911SR-17-R-0005;

L.4.8.1.2 The date of submission;

L.4.8.1.3 The name and address of the Offeror;

L.4.8.1.4 The name, email address, and telephone number of point of contact and alternate, and the names, company titles, telephone numbers, and email addresses of two (2) individuals that the Offeror has designated as responsible for receiving and responding to Government Evaluation Notices (ENs) through the Acquisition Source Selection Interactive Support Tool (ASSIST).

L.4.8.1.5 A list containing either the DUNS number or the CAGE code for the prime contractor and each subcontractor.

L.4.8.1.6 Name and address of contract administration office and point of contact to include name, email address and telephone number (if known).

L.4.8.1.7 Name and address of cognizant DCAA Office and point of contact to include name, email address and telephone number (if known).

L.4.8.1.8 A proposal that is consistent with established estimating and accounting principles and procedures and FAR Part 31, Cost Principles and if not an explanation. (Yes/No – explanation).

L.4.8.1.9 Type of contract action (that is, new contract).

L.4.8.1.10 Proposal and price validity period (minimum is one hundred and eighty (180) days).

L.4.8.1.11 Whether the Offeror will require the use of Government property in the performance of the contract, and if so, what property.

L.4.8.1.12 A statement that the Offeror grants the Contracting Officer and authorized representative(s) the right to examine, at any time before award, any records, and other data, regardless of the type and form, or whether such supporting information is specifically referenced or included in the proposal as the basis for pricing, that will permit an adequate evaluation of the proposed price.

L.4.8.1.13 Name, title, and signature of authorized representative(s).

L.4.8.1.14 One (1) signed and completed copy of Standard Form 33 and continuation sheets (if applicable) to include acknowledgement of all amendments to the solicitation and a completed Section B.

L.4.8.1.15 One (1) completed copy of Section K, Representations, Certifications and Other Statements of Offerors.

L.4.8.1.16 DUNS number and validity of Online Representations and Certifications Applications (ORCA) Certification.

L.4.8.1.17 Facility Clearance - The Offeror shall state whether or not they possess a Facility Clearance.

L.4.8.1.18 One (1) copy of written consent relating to L.4.8.2 Use of Non-Government Advisors.

L.4.8.1.19 Efforts proposed as subcontracting shall include a signed teaming agreement or a signed letter of intent to enter into a teaming agreement and pertinent terms for each proposed subcontractor effort describing contract type, key personnel and any statement of work required. Letters of intent, teaming agreements, key personnel and scope of work for each proposed subcontractor shall be appropriately referenced in Volumes I, II and IV, and included in their entirety in Volume VIII.

L.4.8.1.20 Cyber Incident Reporting - As part of the Department of Defense and U.S. Army's initiatives to protect Covered Defense Information and implement improved Cyber Incident Reporting, the Offeror shall provide a response as to whether or not the Offeror has already been awarded a contract containing DFARS clause 252.204-7012. The DFARS clause will be incorporated into a contract resulting from this solicitation, the intent is to leverage compliance assessment results across contracts.

#### **L.4.8.2 NON-GOVERNMENT ADVISORS**

L.4.8.2.1 Offerors are advised that technical information and data submitted to the Government in response to this solicitation will be released to non-Government personnel for review and analysis. The participation of these non-Government personnel will be limited to offering an opinion, which may be used as a guide by the Government evaluators. The exclusive responsibility for source selection will reside solely with the Government. Proprietary information submitted in response to this solicitation will be protected from unauthorized disclosure as required by Subsection 27 of the Office of Procurement Policy Act as amended (41 USC 423) hereinafter referred to as the "Act" and as implemented in FAR Part 3.104. These individuals will be authorized access only to those portions of the proposal data and discussions that are necessary to enable them to perform their respective duties. Such firms are expressly prohibited from competing on the subject acquisition.

L.4.8.2.1.1 The non-government support will be provided by the following firm. The support provided by the firm will be limited to the volumes specified below.

The MITRE Corporation (MITRE); Technical Approach, Support and Ownership, Test Reports, Producibility and Manufacturing, and Uncosted Volumes.

L.4.8.2.1.2 Offerors shall include written consent as outlined in L.4.8.2.2 for the release of information to Non-Government Advisors as outlined herein in the cover letter of their proposal or provide written objection to disclosure. If the Offeror objects to disclosure of a portion of the proposal, the consent in L.4.8.2.2 should be provided for the remainder of the proposal.

L.4.8.2.1.3 Any objection to disclosure:

L.4.8.2.1.3.1 Shall be provided in writing to the contracting officer within ten (10) days of solicitation issuance; and

L.4.8.2.1.3.2 Shall include a detailed statement of the basis for the objection. The detailed statement shall identify the specific portions of the proposal the Offeror objects to disclosure to non-Government personnel; or

L.4.8.2.2 (Insert Company Name) understands technical data submitted to the Government in response to this solicitation may be released to non- Government personnel as described in the introduction paragraph of this provision. (Insert company name), consents to release of any (unless portion objection is provided as referenced in (L.4.8.2.1.2) above) proprietary, confidential, or privileged commercial or financial data provided by the firm(s) named below in response to this solicitation, to non- Government personnel for review and analysis.

#### **L.4.8.3 CONFIDENTIAL INFORMATION**

L.4.8.3.1 Restriction of Disclosure/Proprietary Information. If the Offeror wishes to restrict the disclosure or use of its proposal, the legend permitted by FAR 52.215-1(e) shall be used.

#### **L.4.9 UNCOSTED INFORMATION (VOLUME XI)**

L.4.9.1 Uncosted Information: For purposes of this solicitation, Uncosted Information includes all resources that the Offeror and any of its subcontractors intend to contribute to accomplish its technical approach to meet Government requirements. Examples of what comprises Uncosted Information shall include labor, materials, trip details (to/from destinations, people, and duration).

L.4.9.2 Purpose: Technical Evaluators are firewalled from Offerors' proposed costs during evaluations, so this workbook is a means to present what is being proposed for consideration by Technical Evaluators. As such, Offerors shall ensure that Uncosted Information provided is comprehensive and is void of all cost information. The Government will use information presented in this workbook to determine if proposed uncosted elements are realistic for the Offeror's technical approach, with results incorporated in the Cost Realism Analysis.

L.4.9.3 General Format: Offerors shall breakout Uncosted Information for each period of performance to the third level PWS requirement, with each element (e.g. labor (categories/hours), materials such as spare/repair parts and equipment, travel, and other direct expenses) on a separate tab.

L.4.9.4 Labor Category Definitions: Offerors shall include a tab that lists the following for each labor category/individual:

L.4.9.4.1 A Descriptive Labor Category: Only labor categories specific to job functions shall be presented (e.g., "Sr. Chemist", "Jr. Environmental Scientist", and "Mid-Level Physicist" are all sufficiently descriptive; whereas, "Scientist" is not specific to the job function).

L.4.9.4.2 Indicate if the individual identified by the labor category is part of the Offeror's current workforce or would be a new hire.

L.4.9.4.3 Job Function: Provide a short description of job duties and/or competencies.

L.4.9.4.4 Typical Experience Level. Identify a typical level of education and experience for this category (e.g., 4 year degree in engineering and 5 years of experience). Note, that while some individuals can reach an experience level quicker than others and some individuals stay at an experience level longer than others, typical experience levels identified shall represent the Offeror's best estimate of the experience and education of an average individual within the category.

L.4.9.4.5 Cohesion with Other Required Files: To ensure tractability between required files, Offerors shall ensure that uncosted elements are identically named between documents (e.g. "Mechanical Engineering Technician II" would be identified as such on all other required files).

#### CLAUSES INCORPORATED BY REFERENCE

52.204-6	Unique Entity Identifier	OCT 2016
52.204-7	System for Award Management	OCT 2016
52.204-16	Commercial and Government Entity Code Reporting	JUL 2016
52.204-18	Commercial and Government Entity Code Maintenance	JUL 2016
52.215-1 Alt I	Instructions to Offerors--Competitive Acquisition (Jan 2017) -Alternate I	-OCT 1997
52.215-22	Limitations on Pass-Through Charges--Identification of Subcontract Effort	OCT 2009

#### CLAUSES INCORPORATED BY FULL TEXT

52.211-2 AVAILABILITY OF SPECIFICATIONS, STANDARDS, AND DATA ITEM DESCRIPTIONS LISTED IN THE ACQUISITION STREAMLINING AND STANDARDIZATION INFORMATION SYSTEM (ASSIST) (APR 2014)

(a) Most unclassified Defense specifications and standards may be downloaded from the following ASSIST websites:

(1) ASSIST (<https://assist.dla.mil/online/start/>);

(2) Quick Search (<http://quicksearch.dla.mil/>);

(3) ASSISTdocs.com (<http://assistdocs.com>).

(b) Documents not available from ASSIST may be ordered from the Department of Defense Single Stock Point (DoDSSP) by--

(1) Using the ASSIST Shopping Wizard (<https://assist.dla.mil/wizard/index.cfm>);

(2) Phoning the DoDSSP Customer Service Desk (215) 697-2179, Mon-Fri, 0730 to 1600 EST; or

(3) Ordering from DoDSSP, Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2667/2179, Facsimile (215) 697-1462.

(End of provision)



## Section M - Evaluation Factors for Award

### SECTION M

#### **Section M – Evaluation Factors for Award**

#### **M.1 EVALUATION PROCESS**

M.1.1 All proposals received pursuant to the solicitation will be fully evaluated in a careful and impartial manner. All factors against which proposals will be evaluated are described in this section. The proposal will be evaluated to determine the extent to which the proposed approach is practical and the end results achievable. The proposal will be evaluated to determine whether the Offeror's methods and approach provide the Government with a high level of confidence of successful completion.

##### M.1.2 Basis for Award

The Government will award to the Offeror(s) whose proposal(s) represents the best value to the Government, by applying the tradeoff process described in FAR 15.101-1. Accordingly, the Government may award a resulting contract to other than the Offeror with the lowest Evaluation Price, or to other than the Offeror with the highest evaluated technical rating. The Government intends to award approximately (2) contracts. However, the Government reserves the right to award one contract. If the Government elects award more than one contract, the individual contracts may be for the same technology solution, or for different technology variants and/or solutions in order to support differing mission sets and constraints of various DoD activities. The basis for award of a contract will be the results of the proposal evaluations of all of the factors set forth herein giving due consideration to the relative order of importance indicated herein. To receive consideration for award, a rating of no less than "Acceptable" must be achieved for all non-cost factors. An adjectival rating of "unacceptable" for any non-cost factor will cause the entire proposal to be evaluated as "unacceptable" and will exclude an Offeror from consideration for contract award. No award will be made to an Offeror who is required to submit a Small Business Subcontracting Plan IAW FAR 52.219-9 and the plan is determined to be unacceptable.

##### M.1.3 Competitive Range

The Procuring Contracting Officer (PCO) will make the determination as to which proposals should be in the "Competitive Range" and submit it to the Source Selection Authority (SSA) for review and approval.

##### M.1.4 Discussions and Final Offers

In accordance with FAR 52.215-1 (Alt I), the Government intends to award with discussions.

##### M.1.5 Final Evaluation of Proposals

During discussions, the PCO may request or allow proposal revisions to clarify and document understandings reached during negotiations. At the conclusion of discussions, each Offeror still in the competitive range will be given an opportunity to submit a final proposal revision. The PCO is required to establish a common cut-off date only for receipt of final proposal revisions. Requests for final proposal revisions will advise Offerors that the final proposal revisions shall be in writing and that the Government intends to make award without obtaining further revisions.

## M.2 EVALUATION FACTORS

M.2.1 Offerors will be evaluated based on the Evaluation Factors specified in Table M-1 below.

<b>Table M-1: Evaluation Factors and Supporting Information</b>		
<b>Number</b>	<b>Evaluation Factors/Supporting Information</b>	<b>Rating Method</b>
1	Technical Approach (Factor)	Adjectival and Risk Ratings along with Narrative Evaluation.
2	Support and Ownership (Factor)	Adjectival and Risk Ratings along with Narrative Evaluation.
3	Test Reports (Supporting Information)	None. Will not receive Adjectival or Risk Rating. Supports evaluation of Technical Approach and Support and Ownership Factors.
4	Producibility & Manufacturing (Factor)	Adjectival and Risk Rating along with Narrative Evaluation.
5	Cost/Price (Factor)	Evaluated in accordance with M.2.2.5
6	Past Performance (Factor)	Relevancy and Performance Confidence Ratings
7	Small Business Participation Plan (Factor)	Will receive an acceptable or unacceptable rating.
8	Administrative (Supporting Information)	None. Will not receive Adjectival or Risk Rating.
9	Uncosted Information (Supporting Information)	Narrative supporting cost realism evaluation.

M.2.2 All factors against which proposals will be evaluated are described below. Other content of the proposal that will not receive an adjectival or risk rating, but will be used to assist in the evaluation of a factor, are also discussed. All proposals will be evaluated by a team of individuals on the extent to which the Offeror's proposal meets the solicitation requirements.

M.2.2.1 Technical Approach Factor (Volume I): The Technical Approach Factor will receive an adjectival rating and risk rating along with a narrative evaluation.

M.2.2.2 Support and Ownership Factor (Volume II): The Support and Ownership Subfactor will receive an adjectival rating and risk rating along with a narrative evaluation.

M.2.2.3 Test Reports (Volume III): The Government will use both Government and Offeror test reports to assist in the evaluation of the Technical Approach and Support and Ownership Factors' risks, and therefore will not receive an adjectival or risk rating. The reports will be used to substantiate the claims made in Volumes I and II and support the risk ratings assigned to the Technical Approach and Support and Ownership Factors.

M.2.2.4 Producibility and Manufacturing Factor (Volume IV): The Producibility and Manufacturing Factor will be evaluated for strengths, weaknesses, significant weaknesses, and deficiencies and will receive an adjectival rating and risk rating along with a narrative evaluation.

M.2.2.5 Cost/Price Factor (Volume V): The Cost/Price Factor will **not** receive an adjectival rating. The Government will evaluate Offerors' proposals for fairness and reasonableness. CPIF CLINs will be evaluated for realism. Price analysis technique(s), such as those listed under FAR 15.404-1(b), will be used to: 1) Ensure that the final agreed to price is fair and reasonable; and 2) Determine if the prices are unbalanced. The evaluation price will be the "Proposed Price" in the submitted Excel Cost Proposal's Summary tab, inclusive of evaluation quantities and weightings provided in the Cost Template, as well as any probable cost adjustments based on the Cost Realism Analysis of CPIF CLINs.

M.2.2.6 Past Performance Factor (Volume VI): There are two (2) aspects to the past performance evaluation. The Government will first evaluate whether the Offeror's present/past performance is recent, and relevant or not relevant to this effort. The Government will assign a "Past Performance Relevance Rating" as described in Section M.5.1.5 below. For the second aspect of the past performance evaluation, the Government will assess how well the Offeror performed on the contracts through the Performance Confidence Assessment Report.

M.2.2.7 Small Business Participation Plan Factor (Volume VII): The Government will evaluate the Offeror's utilization of small business through the evaluation of the Small Business Participation Plan. The SB Participation Plan Factor will receive an acceptable or unacceptable rating.

M.2.2.8 Administrative (Volume VIII). This volume contains administrative information and will not receive an adjectival or risk rating.

M.2.2.9 Uncosted Information (Volume IX). The Government will use Uncosted Information as part of a narrative supporting the cost realism evaluation. This volume will not receive an adjectival or risk rating.

### M.3 EVALUATION APPROACH.

M.3.1 The Government will conduct this source selection in accordance with FAR Subpart 15.3, Source Selection. Award(s) will be made to the Offeror(s) whose proposal(s) represents the best value to the Government by applying the tradeoff process described in FAR 15.101-1.

M.3.2 Relative Order Of Importance of Factors:

M.3.2.1 Table M-2 lists all Non-Cost Evaluation Factors in descending order of importance.

<b>Table M-2: Non-Cost Evaluation Factors Order of Importance</b>	
<b>Volume</b>	<b>Factor</b>
I	Technical Approach
II	Support and Ownership
IV	Producibility and Manufacturing
VI	Past Performance
VII	Small Business Participation Plan

M.3.2.2 All of the non-cost Factors in Table M-2, when combined, are significantly more important than Cost/Price, in accordance with FAR 15.304(e)(1). The Government is willing to pay more if an increase in the technical merit of the proposal justifies and is in the best interest of the Government. However, the Cost/Price Factor may become more significant in contributing to the source selection decision if competing proposals are technically comparable.

#### M.4 RATING SYSTEM

M.4.1 An explanation of the overall integrated rating system is as follows:

M.4.2 Technical Adjectival Rating for Non-Cost Factors. The technical adjectival rating evaluates the quality of the Offeror's technical solution for meeting the Government's requirements. Table M-3 defines the technical adjectival ratings. These ratings will be applied in the evaluation of the following factors: Technical Approach, Support and Ownership, and Producibility and Manufacturing.

**Table M-3: Technical Adjectival Ratings Definitions**

<b>Rating</b>	<b>Description</b>
<b>Outstanding</b>	Proposal indicates an exceptional approach and understanding of the requirements and contains multiple strengths.
<b>Good</b>	Proposal indicates a thorough approach and contains at least one strength.
<b>Acceptable</b>	Proposal indicates an adequate approach and understanding of the requirements.

<b>Marginal</b>	Proposal does not demonstrate an adequate approach and understanding of the requirements.
<b>Unacceptable</b>	Proposal does not meet requirements of the solicitation and thus contains one or more deficiencies and is un-awardable.

M.4.3 Risk Rating. Risk ratings will assess the degree to which the Offeror's proposed approach for meeting the requirements of the solicitation may cause disruption of schedule, increased costs, degradation of performance, the need for increased Government oversight, or the likelihood of unsuccessful contract performance. Risks shall be rated using the ratings definitions listed in Table M-4. These ratings will be applied in the evaluation of the following factors: Technical Approach, Support and Ownership, and Producibility and Manufacturing.

**Table M-4: Risk Ratings Definitions**

<b>Rating</b>	<b>Description</b>
<b>Low</b>	Proposal may contain weakness(es) which have little potential to cause disruption of schedule, increased cost or degradation of performance. Normal contractor effort and normal Government monitoring will likely be able to overcome any difficulties.
<b>Moderate</b>	Proposal contains a significant weakness or combination of weaknesses which may potentially cause disruption of schedule, increased cost or degradation of performance. Special contractor emphasis and close Government monitoring will likely be able to overcome difficulties.
<b>High</b>	Proposal contains a significant weakness or combination of weaknesses which is likely to cause significant disruption of schedule, increased cost or degradation of performance. Is unlikely to overcome any difficulties, even with special contractor emphasis and close Government monitoring.
<b>Unacceptable</b>	Proposal contains a material failure or a combination of significant weaknesses that increases the risk of unsuccessful performance to an unacceptable level.

M.4.4 Rating Term Definitions. Table M-5 provides the definitions for strength, weakness, significant weakness and deficiency. These definitions will be applied when evaluating the factors that use Technical Adjectival and Risk Ratings (Technical Approach, Support and Ownership, and Producibility and Manufacturing).

**Table M-5: Rating Term Definitions**

<b>Finding</b>	<b>Definition</b>
<b>Strength</b>	An aspect of an Offeror's proposal that has merit or exceeds specified performance or capability requirements in a way that will be advantageous to the Government during contract performance
<b>Weakness</b>	A flaw in the proposal that increases the risk of unsuccessful contract performance

<b>Significant Weakness</b>	A flaw in the proposal that appreciably increases the risk of unsuccessful contract performance
<b>Deficiency</b>	A material failure of a proposal to meet a Government requirement or a combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level

M.4.5 Past Performance Relevancy Ratings. In conducting a past performance relevancy assessment, each Offeror shall be assigned one of the ratings in Table M-6.

**Table M-6: Past Performance Relevancy Ratings**

<b>Rating</b>	<b>Description</b>
<b>Very Relevant</b>	Present/past performance effort involved essentially the same scope and magnitude of effort and complexities this solicitation requires.
<b>Relevant</b>	Present/past performance effort involved similar scope and magnitude of effort and complexities this solicitation requires.
<b>Somewhat Relevant</b>	Present/past performance effort involved some of the scope and magnitude of effort and complexities this solicitation requires.
<b>Not Relevant</b>	Present/past performance effort involved little or none of the scope and magnitude of effort and complexities this solicitation requires.

M.4.5.1 Performance Confidence Assessment. In conducting a performance confidence assessment, each Offeror shall be assigned one of the ratings in Table M-7.

**Table M-7: Performance Confidence Assessment Ratings**

<b>Rating</b>	<b>Description</b>
<b>Substantial Confidence</b>	Based on the Offeror's recent/relevant performance record, the Government has a high expectation that the Offeror will successfully perform the required effort.
<b>Satisfactory Confidence</b>	Based on the Offeror's recent/relevant performance record, the Government has a reasonable expectation that the Offeror will successfully perform the required effort.
<b>Neutral Confidence</b>	No recent/relevant performance record is available or the Offeror's performance record is so sparse that no meaningful confidence assessment rating can be reasonably assigned. The Offeror may not be evaluated favorably or unfavorably on the factor of past performance.
<b>Limited Confidence</b>	Based on the Offeror's recent/relevant performance record, the Government has a low expectation that the Offeror will successfully perform the required effort.

<b>No Confidence</b>	Based on the Offeror's recent/relevant performance record, the Government has no expectation that the Offeror will be able to successfully perform the required effort.
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M.4.6 Small Business Participation Plan Ratings. Table M-8 provides the ratings that will be utilized in the evaluation of the Small Business Participation Plan Factor.

Table M-8: Small Business Participation Plan Ratings

<b>Rating</b>	<b>Description</b>
<b>Acceptable</b>	Proposal indicates an adequate approach and understanding of the small business objectives.
<b>Unacceptable</b>	Proposal does not meet small business objectives.

**M.4.7 COST/PRICE FACTOR.** The Cost/Price Factor will not receive an adjectival rating. Offerors' proposals will be evaluated for fairness and reasonableness. CPIF CLINs will be evaluated for realism. The evaluation price will be the "Proposed Price" in the submitted Excel Cost Proposal's Summary tab, inclusive of evaluation quantities and weightings provided in the Cost Template, as well as any probable cost adjustments based on the Cost Realism Analysis of CPIF CLINs.

## **M.5 EVALUATION CRITERIA**

M.5.1. The previous stated evaluation factors (Technical Approach, Support and Ownership, Producibility and Manufacturing, Cost/Price, Past Performance and Small Business Participation Plan) are further discussed in terms of evaluation criteria establishing those aspects of a proposal that will be evaluated qualitatively to arrive at an integrated assessment of the proposal meeting the Government's needs as stated in the solicitation. The ratings for each factor will be in accordance with the definitions set forth in the DoD Source Selection Procedures and restated in M.4.

**M.5.1.1 Technical Approach Factor.** The Offeror's proposal is expected to address each of the following evaluation criteria for this factor. The Offeror is encouraged to review the definitions provided in section M.4 to ensure an understanding of how the ratings will be applied. Strengths, weaknesses, significant weaknesses and deficiencies will be assigned to this factor based on how the Offeror addresses the following paragraphs: M.5.1.1.1; M.5.1.1.2; M.5.1.1.3; M.5.1.1.4; M.5.1.1.5; M.5.1.1.6; M.5.1.1.7; M.5.1.1.8 and M.5.1.1.9.

M.5.1.1.1 The Government will evaluate the Offeror's discussion of the applicable analytical technique, hardware, software and algorithm approach, and primary vapor and aerosol inlet approach. The Government will evaluate the technical description of the proposed system at the preliminary design stage showing modularity, size and weight, power, and interface controls (including communications).

M.5.1.1.2 The Government will evaluate the Offeror's technical approach to meet the Key Performance Parameters (KPPs) of the AVCAD Performance Specification (PSPEC) for each hardware delivery. The Government will rely on the provided independent and Offeror test reports as well as the Offeror's proposal for substantiation of the discussion. The Government will evaluate the Offeror's approach to meeting or exceeding the threshold requirements of the AVCAD PSPEC for each hardware delivery. Exceeding threshold requirements is desired if there is no change or a reduction in unit or sustainment costs.

M.5.1.1.3 The Government will evaluate the Offeror's Integrated Master Schedule (IMS) and assess the Offeror's proposed plan of action for executing the base contract and all options. The Government will evaluate the IMS in terms of defined dates and time frames for all contract tasks, milestones, reviews, and deliverables.

M.5.1.1.4 The Government will evaluate the Offeror's system maturity discussion. The proposed EMD AVCAD Hardware discussed in Section C.7 should currently meet or exceed Technology Readiness Level (TRL) six (6) as defined in the AVCAD PSPEC. The Government will evaluate the level of maturity of the proposed technology, supported by provided independent and Offeror test reports. The Government will evaluate the degree to which the Offeror's development approach discussion supports maturing the technology to TRL eight (8) over the duration of the AVCAD Engineering Manufacturing Development (EMD) Phase including technological risks. As part of this evaluation, the Government will evaluate the likelihood of the system transitioning from EMD to LRIP and meeting all system requirements.

M.5.1.1.5 The Government will evaluate the technical approach and expected percentage difference in LRIP and FRP unit prices associated with the proposed primary and secondary techniques for sampling, collection and analysis of aerosol chemicals as discussed in Section C.4 of the PWS. The expected percentage difference (increase or decrease) between the price of the primary and secondary aerosol approaches may impact an Offeror's technical risk rating and the Government's assessment of the feasibility of the secondary approach.

M.5.1.1.6 The Government will evaluate the Offeror's narrative discussion addressing requirements within section C.8.1 of the AVCAD PWS and Appendix B of the AVCAD PSPEC.

M.5.1.1.7 The Government will evaluate the Offeror's discussion of performance or hardware limitations impacting effectiveness, survivability, or sustainability. The Government will evaluate the Offeror's approach for engineering/software development and testing required to meet requirements. The Government will evaluate any proposed changes to the schedule, including any additional chamber testing required.

M.5.1.1.8 The Government will evaluate the Offeror's assessment of the technical and schedule risks associated with the requirements of the PWS and the AVCAD PSPEC. The Government will evaluate the Offeror's discussion of how it will identify potential program risks and develop and manage the risk mitigation strategies.

M.5.1.1.9 The Government will rely on the classified appendix to the Technical Approach, if provided, to substantiate discussion relative to the Classified Annex to the AVCAD PSPEC.



M.5.1.1.10 The Government will assess the Property Management Plan per FAR 45.202(b). Accordingly, the Government will assess the level of risk associated with the likelihood the Offeror will successfully manage Government property during the required effort. Government property includes contractor-acquired property, per FAR 52.245-1(a).

**M.5.1.2 Support and Ownership Factor.** The Offeror's proposal is expected to address the following evaluation criteria for this factor. The Offeror is encouraged to review the definitions provided in section M.4 to ensure an understanding of how the ratings will be applied. Strengths, weaknesses, significant weaknesses and deficiencies will be assigned to this factor based on how the Offeror addresses the following paragraphs: M.5.1.2.1; M.5.1.2.2; M.5.1.2.3; M.5.1.2.4; M.5.1.2.5; M.5.1.2.6; M.5.1.2.7; M.5.1.2.8 and M.5.1.2.9.

M.5.1.2.1 The Government will evaluate the Offeror's description of how the proposed Integrated Product Support (IPS) solution is best suited to minimize support and ownership burdens to the end user. The Government will evaluate the Offeror's discussion of their approach to demonstrating that the AVCAD is reliable, producible and maintainable. The Government will evaluate the Offeror's discussion of their reliability growth effort and their approach in assisting the Government in compliance with the product support requirements and metrics to successfully achieve an operational capability.

M.5.1.2.2 The Government will evaluate the Offeror's discussion of all the analysis planned to achieve the support requirements identified in the AVCAD PSPEC.

M.5.1.2.3 The Government will evaluate the Offeror's discussion of significant operations and support cost drivers for implementation of the proposed IPS Solution.

M.5.1.2.4 The Government will evaluate the Offeror's discussion of their developmental approach to minimizing the complexity of organizational level maintenance and minimizing the mean time to repair through the use of line replaceable units, modular open systems design, limiting consumables and limiting calibration requirements. The Government will evaluate the Offeror's discussion of the projected maintenance levels required.

M.5.1.2.5 The Government will evaluate the Offeror's discussion of their plan for technical manual development to include configuration management of technical manual XML content, instruction, logistics product data, and methodology applied to support updates. The Government will evaluate the Offeror's discussion of their methodology and source information used to develop content for the technical manual. The Government will evaluate the Offeror's discussion of their plan for ensuring that each technical manual submitted to the Government includes safe, adequate and validated content.

M.5.1.2.6 The Government will evaluate the Offeror's strategy for ensuring a modular design that allows for future reconfiguration and addition of new capabilities without large-scale redesign, mitigating technology obsolescence and reduces life cycle ownership costs.

M.5.1.2.7 The Government will evaluate the Offeror's identification of all Preventive Maintenance Checks and Services (PMCS) and calibration that may be required during the course of testing (for example, replacement of consumable items due to exposure to CW agents or long operational service life testing). The Government will evaluate the Offeror's system support package list (SSPL) that supports all tests identified in the PWS.

M.5.1.2.8 The Government will evaluate the Offeror's approach for the development, documentation, and configuration management of technical data to include the AVCAD drawings, interface documentation, software specifications, software source code, and production documentation.

M.5.1.2.9 The Government will evaluate the extent to which the rights in technical data (TD), computer software (CS) and computer software documentation (CSD) provided to the Government ensure unimpeded, innovative, and cost effective production, operation, maintenance (to include procurement of spare/repair parts), and upgrade of the AVCAD system throughout its life cycle; allow for open and competitive procurement of AVCAD enhancements; and permit the transfer of the AVCAD non-proprietary object code and source code to other contractors for use on other systems or platforms.

**M.5.1.3 Producibility and Manufacturing Factor.** The Offeror's proposal is expected to address the following evaluation criteria for this factor. The Government's evaluation of the Offeror's proposal and the assigned adjectival rating for this factor will be primarily based upon how well the Offeror addresses the evaluation criteria discussed below. The Offeror is encouraged to review the rating definitions provided in section M.4 to ensure an understanding of how the ratings will be applied. Strengths, weaknesses, significant weaknesses and deficiencies and contribution toward the Producibility and Manufacturing Factor adjectival ratings will be based on how the Offeror addresses the subparagraphs M.5.1.3.1; M.5.1.3.2; and M.5.1.3.3.

M.5.1.3.1 The Government will evaluate the Offeror's manufacturing capability to produce the AVCAD system in a sustained manner beginning with LRIP and continuing through FRP.

M.5.1.3.2 The Government will evaluate the Offeror's discussion of their approach to Producibility engineering and design as it relates to achieving the lowest possible production unit cost.

M.5.1.3.3 The Government will evaluate the proposed Quality Assurance Program (QAP) to ensure it addresses all products and services to include the design, development, production, installation, and servicing of products, and other services required. These products and services include, but are not limited to, Hardware Configuration Item (HWCI), software, and data items.

#### **M.5.1.4 Cost/Price Factor**

M.5.1.4.1 Fairness and Reasonableness: Price analysis technique(s), such as those listed under FAR 15.404-1(b), will be used to: 1) Ensure that the final agreed to price is fair and reasonable;

and 2) Determine if the prices are unbalanced. In the event that only one (1) cost proposal is received in response to the solicitation, a Cost Analysis will also be conducted.

M.5.1.4.2 Cost Realism Analysis: Cost Realism Analysis will be performed on Offerors' proposals to determine their respective probable costs of performance for cost reimbursable efforts (CPIF CLINs). Probable costs may differ from proposed costs based on any adjustments made for evaluation purposes only to an Offeror's proposed costs or fees when appropriate, to reflect any additions or reductions to realistic levels based on the Government's best estimate of the cost of any contract that is most likely to result from the Offeror's proposal. If the Government is unable to arrive at a reliable probable cost as a result of material omissions in the Cost Volume, then an "undetermined" probable cost will be assigned and the Offeror may be advised that they will not be considered for award. While omissions in Offerors' Cost Volumes may be corrected through discussions, the Government reserves the right to make award, even with one or more Offerors having been assigned an "undetermined" probable cost.

M.5.1.4.3 Evaluation Price: The Evaluation Price, used for source selection purposes, will be the "Proposed Price" in the submitted Excel Cost Proposal's Summary tab, inclusive of evaluation quantities and weightings provided in the Cost Template, as well as any probably cost adjustments based on the Cost Realism Analysis of CPIF CLINs. An evaluation of options will not obligate the Government to exercise the option(s).

#### **M.5.1.5 Past Performance Factor**

M.5.1.5.1 There are three aspects to the past performance evaluation: recency, relevancy, and quality. The burden of providing thorough and complete past performance information rests with the Offeror.

M.5.1.5.2 The Offeror's past performance will be evaluated to determine how recent the effort accomplished by the Offeror is to the solicitation requirements. "Recent" means any contract under which any performance, delivery, or corrective action has taken place within the last three (3) years of the issuance of this solicitation.

M.5.1.5.3 The Offeror's past performance will be evaluated to determine how relevant the effort accomplished by the Offeror is to the solicitation requirements. In regards to relevancy, the Government will review those aspects of an Offeror's contract history that will provide the greatest ability to measure whether the Offeror will satisfy the solicitation requirements. Aspects of relevancy that will be reviewed are similarity of service/support to the solicitation requirements; complexity, dollar value, contract type, and degree of subcontracting/teaming.

M.5.1.5.4 The Offeror's past performance will be evaluated to determine how well the Offeror performed on recent and relevant efforts. This assessment is known as the Past Performance Confidence Assessment. The Government will make this assessment based on whether the Offeror:

M.5.1.5.4.1 Provided a quality product or service in terms of technical performance for compliance with previous contract requirements, accuracy of reports, and technical excellence to include Quality awards/certificates.

M.5.1.5.4.2 Performed timely in terms of meeting milestones, reliability, responsiveness to technical guidance, deliverables completed on-time, adherence to contract schedules including contract administration.

M.5.1.5.4.3 Controlled cost in terms of performing within or below budget, use of cost efficiencies, relationship of negotiated to actual costs, submission of reasonably priced change proposals, and providing current, accurate, and complete billing timely.

M.5.1.5.4.4 Conducted business relations in terms of providing effective management; demonstrating a cooperative and proactive behavior with the PCO, Contract Specialist, and the PCO Representative; being responsive to inquiries, resolving problems, and satisfying the customer.

M.5.1.5.4.5 In accordance with DFARS 215.305(a)(2), the Past Performance Evaluation will include the evaluation of the Offeror's record of efforts to comply with 52.219-8 "Utilization of Small Business Concerns" and 52.219-9 "Small Business Subcontracting Plan."

M.5.1.5.4.6 Sources of Past Performance Information for evaluation are as follows:

- 1) Relevant and recent past performance information provided by the Offeror;
- 2) Past performance information obtained from other sources available to the Government, to include, but not limited to: the Past Performance information Retrieval System (PPIRS), Federal Awardee Performance and Integrity Information System (FAPIS), Contractor Performance Assessment Reporting System (CPARS), Electronic Subcontract Reporting Systems (eSRS), or other databases;
- 3) Interviews with Program Managers, Contracting Officers, Fee Determining Officials;
- 4) The Defense Contract Management Agency (DCMA); and,
- 5) Responses to Past Performance Questionnaires.

M.5.1.5.4.7 The Government may determine that a Substantial Confidence or Satisfactory Confidence past performance rating is worth more than a Neutral Confidence past performance rating in a best value tradeoff.

#### **M.5.1.6 Small Business Participation Plan Factor.**

M.5.1.6.1 The Government will evaluate the Small Business Participation Plan Factor on the basis of:

M.5.1.6.1.1 The extent to which SB firms are specifically identified (by company name, NAICS, and CAGE code) in proposals.

M.5.1.6.1.2 The extent of commitment to use SB firms, including documentation of enforceable commitments.

M.5.1.6.1.3 Identification of the complexity and variety of the work that each SB firm is to perform.

M.5.1.6.1.4 The extent of participation of SB firms in terms of the value of the total acquisition.

M.5.1.6.1.5 The extent to which the offeror meets or exceeds the SB Participation Plan Goals identified in L.4.7.3.2. Note however that failing to meet the SB Participation Plan Goal for any individual small business category may not necessarily result in an overall Unacceptable rating for the Small Business Participation Plan Factor depending on: (i) the offeror's detailed explanation of why it will fail to meet a specific goal, as required by L.4.7.3.2.2, and (ii) the extent to which the offeror will exceed the listed goals for other categories.

M.5.1.6.2 Small Business Subcontracting Plan (Large Business Only). Separate from Small Business Participation Plan, other than U.S. Small Business offerors must also submit a Small Business Subcontracting Plan meeting the requirements of FAR 52.219-9 and DFARS 252.219-7003 (or DFARS 252.219-7004 if the offeror has a comprehensive subcontracting plan). While the Small Business Subcontracting Plan is not an evaluation factor for this solicitation, other than U.S. Small Businesses must submit an acceptable Small Business Subcontracting Plan to be eligible for award. Small Business Subcontracting Plans shall reflect and be consistent with the commitment percentages offered for the Small Business Participation Plan factor and failure of the plans to correlate properly may make the proposal unawardable.

M.5.1.7 Responsibility: The Procuring Contracting Officer will determine if Offerors are responsible in accordance with FAR Subpart 9.1. Proposals received from Offerors determined to be not responsible pursuant to FAR Subpart 9.1 shall not be considered for award. This contract includes DFARS 252.209-7008 and 252.209-7009 and the Contracting Officer may not award a contract until the Contracting Officer determines the offeror has a satisfactory Organizational Conflict of Interest Mitigation Plan, and any identified conflict of interest is resolved to the Government's satisfaction in accordance with FAR 9.5. The OCI mitigation plan is not an evaluated criteria for the source selection decision, but may be reviewed as part of the Government's responsibility determination prior to award.

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52.217-5 EVALUATION OF OPTIONS (JUL 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(End of provision)

52.217-8 OPTION TO EXTEND SERVICES (NOV 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within sixty (60) days.

(End of clause)