

SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, AND 30				1. REQUISITION NUMBER M PR8KAPGJ0093		PAGE 1 OF 174									
2. CONTRACT NO. W91CRB-09-D-0030		3. AWARD/EFFECTIVE DATE 14-May-2009		4. ORDER NUMBER		5. SOLICITATION NUMBER W91CRB-08-R-0061		6. SOLICITATION ISSUE DATE 03-Jul-2008							
7. FOR SOLICITATION INFORMATION CALL:		a. NAME TYRONEM. KNIGHT				b. TELEPHONE NUMBER (No Collect Calls) 410-278-2465		8. OFFER DUE DATE/LOCAL TIME 12:00 PM 04 Aug 2008							
9. ISSUED BY US ARMY RDECOM ACQ CTR - W91CRB 4118 SUSQUEHANNA AVENUE ABERDEEN PROVING GROUND MD 21005-3013 TEL: FAX:			CODE W91CRB		10. THIS ACQUISITION IS <input checked="" type="checkbox"/> UNRESTRICTED <input type="checkbox"/> SET ASIDE: % FOR <input type="checkbox"/> SB <input type="checkbox"/> HUBZONE SB <input type="checkbox"/> 8(A) <input type="checkbox"/> SVC-DISABLED VET-OWNED SB <input type="checkbox"/> EMERGING SB SIZE STD: NAICS:			11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE		12. DISCOUNT TERMS					
						<input checked="" type="checkbox"/> 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)									
						13b. RATING DO-A7									
						14. METHOD OF SOLICITATION <input type="checkbox"/> RFQ <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP									
15. DELIVER TO SEE SCHEDULE				CODE				16. ADMINISTERED BY SEE ITEM 9				CODE		SCD: C	
17a. CONTRACTOR/OFFEROR NORTHROP GRUMMAN GUIDANCE AND ELECTRONIC 2787 S ORANGE BLOSSOM TRAIL APOPKA FL 32703-2010 TEL. 321-354-3718				CODE 34860		18a. PAYMENT WILL BE MADE BY DFAS COLUMBUS - HQ0303 DFAS-ROCK ISLAND/JAIQBAC ATTN: ROCK ISLAND PO BOX 182316 COLUMBUS OH 43218-2316				CODE HQ0303					
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER				18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a. UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM											
19. ITEM NO.		20. SCHEDULE OF SUPPLIES/ SERVICES				21. QUANTITY		22. UNIT	23. UNIT PRICE		24. AMOUNT				
		SEE SCHEDULE													
25. ACCOUNTING AND APPROPRIATION DATA See Schedule								26. TOTAL AWARD AMOUNT (For Govt. Use Only) \$393,993,517.00							
<input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1. 52.212-4. FAR 52.212-3. 52.212-5 ARE ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED															
<input type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED															
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES <input type="checkbox"/> TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.						29. AWARD OF CONTRACT: REFERENCE <input type="checkbox"/> OFFER DATED . YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:									
30a. SIGNATURE OF OFFEROR/CONTRACTOR						31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER) <i>Susan A. Greider</i>				31c. DATE SIGNED 14-May-2009					
30b. NAME AND TITLE OF SIGNER (TYPE OR PRINT)				30c. DATE SIGNED		31b. NAME OF CONTRACTING OFFICER (TYPE OR PRINT) SUSAN A. GREIDER / CONTRACTING OFFICER TEL: 410-278-0872 EMAIL: Susan.Greider@us.army.mil									

**SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS
(CONTINUED)**

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/ SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
<p>SEE SCHEDULE</p>					

32a. QUANTITY IN COLUMN 21 HAS BEEN
 RECEIVED INSPECTED ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: _____

32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	32c. DATE	32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
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32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE
	32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE

33. SHIP NUMBER	34. VOUCHER NUMBER	35. AMOUNT VERIFIED CORRECT FOR	36. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	37. CHECK NUMBER
<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL				

38. S/R ACCOUNT NUMBER	39. S/R VOUCHER NUMBER	40. PAID BY
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41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT	42a. RECEIVED BY (<i>Print</i>)		
41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER	41c. DATE	42b. RECEIVED AT (<i>Location</i>)	
		42c. DATE REC'D (<i>YY/MM/DD</i>)	42d. TOTAL CONTAINERS

SECTION A

1. TYPE OF CONTRACT

The basic contract is issued on an Indefinite Quantity/Indefinite Delivery basis, in accordance with FAR 16.504.

2. CONTRACT MINIMUM AND MAXIMUM LIMITATIONS

- a. The government is obligated to place with the contractor a delivery order for a minimum of ^{(b) (4)} Laser Target Locator Modules (LTLM).
- b. The government may place additional delivery orders with the contractor for a not-to-exceed maximum of ^{(b) (4)} systems
- c. The government reserves the right to award only the minimum.
- d. All orders placed within a 45 day window shall be priced to realize the quantity price break of the total quantity ordered within the 45 day period.

SECTION B – SUPPLIES OR SERVICES AND PRICE / COST

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
110101		UNDEFINED	Dollars, U.S.	UNDEFINED	\$0.00
	MINIMUM GUARANTEE FFP (b) (4) LTLM @ ESTIMATED	(b) (4)			
	FOB: Destination PURCHASE REQUEST NUMBER: MIPR8KAPGJ0093				

MAX NET AMT	\$0.00
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ACRN AB
CIN: MIPR8KAPGJ00930002

(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1101		(b) (4)	Each	(b) (4)	(b) (4)
	Laser Target Locator Modules (LTLM) FFP PY1 LTLM (Includes Warranty Cost): FOB: Destination				

MAX NET AMT	(b) (4)
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ACRN AA
CIN: 00000000000000000000000000000000

\$0.00

STEPLADDER PRICING

STEPLADDER NAME	ITEM NO	FROM QUANTITY	TO QUANTITY	UNIT PRICE
LTLM	1101	(b) (4)	(b) (4)	(b) (4)
		(b) (4)	(b) (4)	(b) (4)
		(b) (4)	(b) (4)	(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1106	Physical Config. Audit Plan & Report FFP LTLM Physical Configuration Audit Plan & Report PY1	(b) (4)	Lot	(b) (4)	(b) (4)
	FOB: Destination				

MAX
NET AMT

(b) (4)

ACRN AA
CIN: 00000000000000000000000000000000

\$0.00

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1107	LTLM Contractor Logistics Support (CLS) FFP PY1 This CLS is for 1 year of support and begins with signing of DD250 for first deliveries under CLIN 1101 FOB: Destination	(b) (4)	Lot	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ACRN AA
CIN: 00000000000000000000000000000000

\$0.00

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108	Spares FFP LTLM Spare Parts FOB: Destination	UNDEFINED		UNDEFINED	\$0.00
					<hr/>
				MAX NET AMT	\$0.00
ACRN AA CIN: 00000000000000000000000000000000					\$0.00

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AA	Front Door FFP Front Door - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
				MAX NET AMT	(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AB	Battery Door FFP Battery Door - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AC	Switch Knob FFP Switch Knob - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AD	Connector Cap FFP Connector Cap - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AE	Eye Cup FFP Eye Cup - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AF	(b) (4) Cable FFP	(b) (4)	Each	(b) (4)	(b) (4)
	(b) (4) Cable - FOB: Destination	(b) (4)			
					<hr/>
				MAX NET AMT	(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AG	Communications Cable FFP	(b) (4)	Each	(b) (4)	(b) (4)
	Communications Cable - FOB: Destination	(b) (4)			
					<hr/>
				MAX NET AMT	(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AH	Power Cable FFP Power Cable - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					MAX NET AMT
					(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AJ	Remote Fire Cable FFP Remote Fire Cable - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					MAX NET AMT
					(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AK	Soft Case FFP Soft Case - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AL	Battery FFP Battery - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AM	Manual FFP Manual - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AN	Neck Strap FFP Neck Strap - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
2101	PY 2 LTLM CLS Support FFP Production Year 2: Contract Logistics Support. This CLS is for 1 year of support and begins with signing of DD250 for first deliveries under CLIN 2100 FOB: Destination	(b) (4)	Lot	(b) (4)	(b) (4)
				MAX NET AMT	(b) (4)
	ACRN AA CIN: 00000000000000000000000000000000				\$0.00

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
2102	SPARES FFP LTLM Spare Parts FOB: Destination	UNDEFINED		UNDEFINED	(b) (4)
				MAX NET AMT	(b) (4)
	ACRN AA CIN: 00000000000000000000000000000000				(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3101	PY3 CLS FFP Production Year 3 CONTRACTOR LOGISTIC SUPPORT. This CLS is for 1 year of support and begins with signing of DD250 for first deliveries under CLIN 3100 FOB: Destination	(b) (4)	Lot	(b) (4)	(b) (4)
				MAX NET AMT	(b) (4)
	ACRN AA CIN: 00000000000000000000000000000000				\$0.00

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102	SPARES FFP FOB: Destination	UNDEFINED		UNDEFINED	(b) (4)
				MAX NET AMT	(b) (4)
	ACRN AA CIN: 00000000000000000000000000000000				(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AA	Front Door FFP Front Door - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AB	Battery Door FFP Battery Door - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AC	Switch Knob FFP Switch Knob - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AD	Connector Cap FFP Connector Cap - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AE	Eye Cup FFP Eye Cup - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AF	(b) (4) Cable FFP (b) (4) Cable - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AG	Communications Cable FFP	(b) (4)	Each	(b) (4)	(b) (4)
	Communications Cable - FOB: Destination	(b) (4)			
				MAX NET AMT	(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AH	Power Cable FFP	(b) (4)	Each	(b) (4)	(b) (4)
	Power Cable - FOB: Destination	(b) (4)			
				MAX NET AMT	(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AJ	Remote Fire Cable FFP Remote Fire Cable - FOB: Destination	(b) (4) (b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AK	Soft Case FFP Soft Case - FOB: Destination	(b) (4) (b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AL	Battery FFP Battery - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
3102AM	Manual FFP Manual - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4101	Contractor Logistics Support (CLS) FFP Production Year 4 Contractor Logistics Support. This CLS is for 1 year of support and begins with signing of DD250 for first deliveries under CLIN 4100 FOB: Destination	(b) (4)	Lot	(b) (4)	(b) (4)
				MAX NET AMT	(b) (4)
	ACRN AA CIN: 00000000000000000000000000000000				\$0.00

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102	SPARES FFP LTLM Spare Parts FOB: Destination	UNDEFINED		UNDEFINED	(b) (4)
				MAX NET AMT	(b) (4)
	ACRN AA CIN: 00000000000000000000000000000000				(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AA	Front Door FFP Front Door - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AB	Battery Door FFP Battery Door - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AC	Switch Knob FFP Switch Knob - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AD	Connector Cap FFP Connector Cap - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AE	Eye Cup FFP Eye Cup - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AF	(b) (4) Cable FFP (b) (4) Cable - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AG	Communications Cable FFP Communications Cable - FOB: Destination	(b) (4) (b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AH	Power Cable FFP Power Cable - FOB: Destination	(b) (4) (b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AJ	Remote Fire Cable FFP Remote Fire Cable - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AK	Soft Case FFP Soft Case - Part Number FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AL	Battery FFP Battery - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
4102AM	Manual FFP Manual - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5101	Contractor Logistics Support FFP Production Year 5 Contractor Logistics Support. This CLS is for 1 year of support and begins with signing of DD250 for first deliveries under CLIN 5100 FOB: Destination	(b) (4)	Lot	(b) (4)	(b) (4)
				MAX NET AMT	(b) (4)
	ACRN AA CIN: 00000000000000000000000000000000				\$0.00

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102	SPARES FFP FOB: Destination	UNDEFINED		UNDEFINED	(b) (4)
				MAX NET AMT	(b) (4)
	ACRN AA CIN: 00000000000000000000000000000000				(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AA	Front Door FFP Front Door - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AB	Battery Door FFP Battery Door - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AC	Switch Knob FFP Switch Knob - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AD	Connector Cap FFP Connector Cap - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AE	Eye Cup FFP Eye Cup - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AF	(b) (4) Cable FFP (b) (4) Cable - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AG	Communications Cable FFP	(b) (4)	Each	(b) (4)	(b) (4)
	Communications Cable - FOB: Destination	(b) (4)			
				MAX NET AMT	(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AH	Power Cable FFP	(b) (4)	Each	(b) (4)	(b) (4)
	Power Cable - FOB: Destination	(b) (4)			
				MAX NET AMT	(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AJ	Remote Fire Cable FFP Remote Fire Cable - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AK	Soft Case FFP Soft Case - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AL	Battery FFP Battery - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AM	Manual FFP Manual - FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
					<hr/>
					MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
5102AN	Neck Strap FFP Neck Strap - (b) (4) FOB: Destination	(b) (4)	Each	(b) (4)	(b) (4)
MAX NET AMT					<hr/> (b) (4)

Estimated Labor Hours for Pre-Planned Program Improvements

PY 1				
Position Titles	Labor Rates	Estimated Productive Hours	Total Price	
Mangers				
Program Manager Senior (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Program Manager Mid-Level (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Program Manager Junior	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Consultants and Subcontractors				
Electrical Engineer Senior (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Electrical Engineer Mid-Level (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Electrical Engineer Junior (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Senior (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Mid-Level (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Junior	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Software Engineer Senior (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Software Engineer Mid-Level	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Software Engineer Junior	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
System Engineer Senior (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
System Engineer Mid-Level (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
System Engineer Junior	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Test Engineer Senior (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Test Engineer Mid-Level	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Test Engineer Junior	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Senior (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Mid-Level	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Junior	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Logistician Senior (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Logistician Mid-Level	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Logistician Junior	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Technician Senior (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Technician Mid-Level	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Technician Junior	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Senior (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Mid-Level (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Junior (b) (4) (b) (4)	(b) (4) (b) (4) (b) (4)	(b) (4)	(b) (4)	(b) (4)
		(b) (4)	(b) (4)	(b) (4)

PY 2			
Position Titles	Labor Rates	Estimated Productive Hours	Total Price
Mangers			
Program Manager Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Program Manager Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Program Manager Junior	(b) (4)	(b) (4)	(b) (4)
Consultants and Subcontractors			
Electrical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Electrical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Electrical Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Software Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Software Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Software Engineer Junior	(b) (4)	(b) (4)	(b) (4)
System Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
System Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
System Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Test Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Test Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Test Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Logistician Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Logistician Mid-Level	(b) (4)	(b) (4)	(b) (4)
Logistician Junior	(b) (4)	(b) (4)	(b) (4)
Technician Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Technician Mid-Level	(b) (4)	(b) (4)	(b) (4)
Technician Junior	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Junior (b) (4)	(b) (4)	(b) (4)	(b) (4)
		(b) (4)	(b) (4)

PY 3			
Position Titles	Labor Rates	Estimated Productive Hours	Total Price
Mangers			
Program Manager Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Program Manager Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Program Manager Junior	(b) (4)	(b) (4)	(b) (4)
Consultants and Subcontractors			
Electrical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Electrical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Electrical Engineer Junior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Software Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Software Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Software Engineer Junior	(b) (4)	(b) (4)	(b) (4)
System Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
System Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
System Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Test Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Test Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Test Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Logistician Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Logistician Mid-Level	(b) (4)	(b) (4)	(b) (4)
Logistician Junior	(b) (4)	(b) (4)	(b) (4)
Technician Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Technician Mid-Level	(b) (4)	(b) (4)	(b) (4)
Technician Junior	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Junior (b) (4)	(b) (4)	(b) (4)	(b) (4)
		(b) (4)	(b) (4)

PY 4			
Position Titles	Labor Rates	Estimated Productive Hours	Total Price
Mangers			
Program Manager Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Program Manager Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Program Manager Junior	(b) (4)	(b) (4)	(b) (4)
Consultants and Subcontractors			
Electrical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Electrical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Electrical Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Software Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Software Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Software Engineer Junior	(b) (4)	(b) (4)	(b) (4)
System Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
System Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
System Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Test Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Test Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Test Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Junior	\$ (b) (4)	(b) (4)	(b) (4)
Logistician Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Logistician Mid-Level	(b) (4)	(b) (4)	(b) (4)
Logistician Junior	(b) (4)	(b) (4)	(b) (4)
Technician Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Technician Mid-Level	(b) (4)	(b) (4)	(b) (4)
Technician Junior	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Junior (b) (4)	(b) (4)	(b) (4)	(b) (4)
		(b) (4)	(b) (4)

PY 5			
Position Titles	Labor Rates	Estimated Productive Hours	Total Price
Mangers			
Program Manager Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Program Manager Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Program Manager Junior	(b) (4)	(b) (4)	(b) (4)
Consultants and Subcontractors			
Electrical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Electrical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Electrical Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Mechanical Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Software Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Software Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Software Engineer Junior	(b) (4)	(b) (4)	(b) (4)
System Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
System Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
System Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Test Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Test Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Test Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Mid-Level	(b) (4)	(b) (4)	(b) (4)
Manufacturing/Production Support Engineer Junior	(b) (4)	(b) (4)	(b) (4)
Logistician Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Logistician Mid-Level	(b) (4)	(b) (4)	(b) (4)
Logistician Junior	(b) (4)	(b) (4)	(b) (4)
Technician Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Technician Mid-Level	(b) (4)	(b) (4)	(b) (4)
Technician Junior	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Senior (b) (4)	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Mid-Level (b) (4)	(b) (4)	(b) (4)	(b) (4)
Optical Engineer Junior (b) (4)	(b) (4)	(b) (4)	(b) (4)
		(b) (4)	(b) (4)

SECTION C

– DESCRIPTION / SPECS / WORK STATEMENT

STATEMENT OF WORK FOR THE LASER TARGET LOCATOR MODULE (LTLM)

PRODUCTION AND MAINTENANCE SUPPORT CONTRACT

1.0 SCOPE. This Statement of Work (SOW) delineates the work required by the contractor to execute the production of the Laser Target Locator Module (LTLM), associated spare parts, and provide contractor depot maintenance support for the deliverable end items. This SOW describes the tasks and efforts the Contractor shall perform in order to execute the Full Rate Production (FRP) and Contractor Maintenance Support effort (CMSE). This SOW includes the requirements for manufacturing, testing, documenting, and delivering the LTLM system and spare and repair parts. The Contractor shall ensure that the LTLM systems and components delivered conform to the LTLM Performance Specification. The Contractor is encouraged to use commercial/industrial processes and practices that will reduce production and maintenance support costs while meeting the requirements of this contract. The Contractor is responsible for meeting the requirements set forth in this SOW.

2.0 APPLICABLE DOCUMENTS. The following documents form a part of this SOW to the extent specified herein.

2.1 Government Documents

MIL-PRF-TBD	LTLM Production Performance Specification, dated 18 March 2008
MIL-PRF-49506	Performance Specification for Logistics Management Information
MIL-STD-40051B	Preparation of Digital Technical Information for Multi-Output Presentation of Technical Manuals, dated 31 January 2003
MIL-STD-38784(1)	Standard Practice for Manuals, Technical: General Style and Format Requirements, dated 1 December 2000

MIL-PRF-GB-GRAM-300 Performance Specification for the NAVSTAR Ground-Based GPS Receiver Applications Module (GB-GRAM) Specification, dated 18 December, 2002

ICD-GPS-153C	GPS User Equipment Interface Control Document for the GPS Standard Serial Interface Protocol of DoD Standard GPS UE Radio Receivers, date 10 December, 2002
MIL-STD-129P	Department of Defense Standard Practice, Military Marking for Shipment and Storage, dated 10 February 2004

2.2 Non-Government Documents

ISO 9001:2000	Quality Management Systems-Requirements
ANSI/ISO/ASQ Q10012-2003	Measurement Management Systems – Requirements for Measurement Processes and Measuring Equipment
ASTM D 3951-98	Standard Practice for Commercial Packaging

2.3 Data Item Descriptions

DI-ADMN-81373	Presentation Material
DI-CMAN-80639	Engineering Change Proposals (ECP)
DI-CMAN-80640C	Requests for Deviation (RFD)
DI-DRPR-80651	Drawings and Associated Lists
DI-MISC-80711A	Scientific and Technical Report
DI-RELI-81315	Failure Analysis and Corrective Action Report (FACAR)

3.0 REQUIREMENTS. The Contractor shall fabricate, test, and deliver LTLMs and identified spare and/or repair parts in accordance with this SOW and the delivery schedule. The Contractor shall ensure that the delivered LTLM components comply with all of the requirements of the LTLM Production Performance Specification (MIL-PRF-TBD). The Contractor also shall provide maintenance and repair support for the LTLM system in accordance with the Contractor Maintenance Support Effort (CSME) delineated in paragraph 3.6 of this SOW.

3.1 PROGRAM MANAGEMENT

3.1.1 Integrated Product Team (IPT)

3.1.1.1 Integrated Product Team (IPT) Overview. The Government and Contractor will incorporate an IPT discipline into the Production and Contractor Maintenance Support Effort (CMSE) phases of the LTLM program.

3.1.1.2 Integrated Product Team (IPT) Membership. The IPT shall consist of Government and Contractor personnel associated with the LTLM program and related efforts. Members shall include knowledgeable and experienced personnel from the various functional areas, e.g., engineering, quality assurance, configuration management, and integrated logistic support. The contractor shall provide the Government with a primary point of contact for the LTLM program.

3.1.2 Program Reviews

3.1.2.1 Post Award IPT Review (PA-IPT). Not later than 30 days after issuance of first delivery order the Contractor shall host a Post Award Review at the Contractor facility. The Government will conduct the Post Award Review. The purpose of the review is to ensure mutual understanding of the contract requirements and proposed work, review general approach, schedule and level of effort, and to provide any necessary clarifications. Action items shall be mutually developed and assigned to the appropriate party (Government or Contractor) and shall be reflected in the meeting minutes. The Post-Award minutes shall be mutually prepared and distributed at the conclusion of the meeting.

3.1.2.2 Working Level IPT Reviews (W-IPT). The Contractor shall conduct IPT Reviews at the Contractor facility as required by the Government. IPT reviews shall provide a working level forum to identify, discuss, and resolve programmatic and technical issues. The Government and Contractor shall mutually provide a list of topics for discussion not less than 5 working days prior to the IPT Review. Action items shall be mutually developed and assigned to the appropriate party (Government or Contractor) and shall be reflected in the IPT Review minutes. The IPT Review minutes shall be mutually prepared, presented, and distributed at the conclusion of the meeting.

3.1.2.3 Production Readiness IPT Review (PRR-IPT). The contractor shall conduct a Production Readiness IPT Review. The purpose of the PRR is to assure the Government that the LTLM design is finalized and that the contractor has the personnel, material, and facility resources to produce the LTLM at the specified quantities. The PRR shall be held at the Contractor's facility. The Contractor shall prepare and submit the PRR presentation material in accordance with (IAW) Data Item Description DI-ADMN-81373.

3.1.2.4 Test Readiness IPT Reviews (TR-IPT). The contractor shall conduct a Test Readiness IPT Review. The purpose of the TR-IPT is to assure the Government that the contractor has the personnel, material, and facility resources to test the LTLM at the specified quantities. The Contractor shall prepare and submit the TR-IPT presentation material IAW Data Item Description DI-ADMN-81373.

3.1.2.5 Project Schedule. The Contractor shall prepare and submit a Project Schedule. The Project Schedule submitted with the proposal shall serve as the baseline at the start of the effort. The purpose of the Project Schedule is to provide a common schedule by which the Government and Contractor can effectively manage the program. The schedule shall correlate to the WBS and CSSR. It shall indicate major tasks, major sub-tasks, milestones, program reviews, test dates, deliverables, and other mutually agreed upon items. The Project Schedule shall be

submitted electronically in Microsoft Project, or other mutually agreed upon format. Updates shall be provided at IPT reviews and/or as required.

3.1.3 Data Item Submissions. Data items under this SOW as listed in paragraph 2.3 above and invoked by subsequent paragraphs herein, shall be submitted to the Government via electronic media (on-line access, e-mail, compact disc, etc.). The format shall be Microsoft Word for text documents, Microsoft Excel for spreadsheets, Microsoft Power Point for graphics presentations, Microsoft Project for schedules, and Pro/ Engineer for Drawings, unless otherwise specified in subsequent sections of this SOW. Use of Adobe format is permitted when required to facilitate delivery, however is not preferred. Exceptions to this requirement will be approved by the Government on a case-by-case basis.

3.2 SOFTWARE MANAGEMENT

3.2.1 General Requirements for Software Development and Support. The Contractor shall modify/develop software, conduct software testing, and update software documentation as required to meet the requirements of this SOW. The Contractor shall ensure that the LTLM system with any new or modified software complies with all requirements of the LTLM Performance Specifications. The Contractor shall provide change engineering and implementation support as required. The following general tasks (not listed in order of priority) are required in order to provide software engineering support for LTLM.

3.2.2 Software Development Methods. The Contractor shall use systematic, documented methods and procedures for all software development and modification activities. These procedures will be made available for IPT review.

3.2.3 Software Safety Assurance. The Contractor shall maintain and update a Software Management Plan (SMP) by identifying as safety-critical those Critical Software Configuration Items (CSCI) or portions thereof whose failure could lead to a hazardous system state (one that could result in unintended death, injury, loss of property, or environmental harm). The Contractor shall update the safety assurance strategy, including both tests and analyses, to assure that the requirements, design, implementation, and operating procedures for the identified software minimize or eliminate the potential for hazardous conditions.

3.2.4 Security Assurance. The Contractor shall establish a security assurance strategy in the SMP to minimize or eliminate the potential for breaches of system security due to software changes. As part of the required software products, the Contractor shall provide evidence that the security assurance strategy has been implemented.

3.2.5 Software Development Library. The Contractor shall develop, maintain and control an LTLM Software Development Library (SDL) to facilitate the orderly update and support of LTLM software.

3.2.6 Software Quality Assurance. The Contractor shall maintain a Software Quality Assurance (SQA) program for LTLM software. The Contractor shall implement and maintain software quality procedures as defined in the LTLM Software Management Plan to include resources required, schedules, tasks to be performed, and the Contractor's software quality organization

and interfaces. The software quality procedures shall describe how the Contractor's overall software quality program shall be applied.

3.2.7 Software Testing

3.2.7.1 Software Test Environment. The Contractor shall maintain a software test environment to perform module level testing, unit level and integration testing, and formal qualification testing. The Contractor shall ensure that each element of the environment performs its intended functions.

3.2.7.2 Software Module Testing. The Contractor shall perform software implementation and module testing on any new or modified software for the LTLM. The Contractor shall use well-defined, written procedures and standards as outlined in the LTLM SMP, Formal Software Qualification Test Plan, and the Formal Software Qualification Test Procedure. Test plans and procedures shall be updated as required to reflect software modifications. A Software Test Report shall record test results and analysis and shall be made available for IPT review.

3.2.7.3 Software Integration Testing. The Contractor shall perform unit and integration testing on new or modified software. The testing shall be in accordance with the module and integration test cases and procedures. The Contractor shall make all necessary revisions to the software, perform all necessary retesting, and update the software development files and other software products as needed, based on the results of integration testing. The Contractor shall analyze the results of integration testing and shall record the test and analysis results in appropriate software development files or test report. The contractor shall conduct regression testing to verify that modified code does not break existing tested functionality, and works within the requirements of the system.

3.2.7.4 Computer Software Configuration Item (CSCI) Qualification Testing. The Contractor shall perform CSCI Qualification Testing of each CSCI which has been modified. The testing shall be in accordance with the CSCI qualification test cases and procedures. The Contractor shall update plans for conducting CSCI Qualification Testing as required. This planning shall include all applicable items in the existing Formal Software Qualification Test Plan and the Formal Software Qualification Test Procedures. The Contractor shall update, and record the test preparations, test cases, and test procedures to be used for CSCI Qualification Testing and the traceability between the test cases and the CSCI requirements, as required.

3.2.7.5 Analyzing and Recording CSCI Qualification Test Results. The Contractor shall analyze and record the results of CSCI Qualification Testing. The results shall include all applicable items in the Software Test Report.

3.2.8. Hardware Configuration Item (HWCI) Integration and Testing. The Contractor shall conduct CSCI/HWCI integration and testing as required. The testing shall be in accordance with the CSCI/HWCI integration test cases and procedures. The Contractor shall update test cases (in terms of inputs, expected results, and evaluation criteria), test procedures, and test data for conducting CSCI/HWCI integration and testing, as required. The test cases shall cover all aspects of the system-wide and system architectural design. The Contractor shall record software-related information in appropriate software development files.

3.2.9 Software Configuration Management (SCM). The Contractor shall maintain a configuration management program for LTLM software in accordance with the existing Software Management Plan (SMP).

3.2.10 Documentation. The Contractor shall maintain/update LTLM software documentation. The software documentation shall be maintained at the Contractor's facility and made available for Government review upon request. This documentation may be in the Contractor's format and shall include, at a minimum, the following:

- Software Management Plan
- Formal Software Qualification Test Plan
- Formal Software Qualification Test Procedures

3.3 PRODUCTION

3.3.1 Production Systems. The Contractor shall provide LTLM systems, components, and spare parts that meet the requirements in the LTLM Production Performance Specification dated 18 March 2008.

3.3.2 Production Management. The contractor shall track the status of LTLM production management with critical suppliers, inventory control, resources and schedule problem identification, implementation, and material Line Of Balance (LOB). This information shall be made available for review by the Government upon request.

3.4 QUALITY ASSURANCE

3.4.1 Quality System. The Contractor shall establish, maintain, and operate a quality that is system acceptable to the Government in accordance with ISO 9001:2000 or an equivalent quality system. Quality and reliability shall be addressed at each contractually required review, to include Statistical Process Control (SPC) and other metrics that are being used to control critical processes at the Contractor's and major suppliers plants. The Government reserves the right to audit products and processes, as well as the quality system, at any stage of contract performance. The contractor shall maintain a calibration system in accordance with ANSI/ISO/ASQ Q10012-2003 or equivalent to ensure that all test/inspection, measurement, and diagnostic equipment to include all accessories and ancillary equipment are properly calibrated and identified by appropriate labeling.

3.4.2 Use of Contractor's Inspection Equipment. The Contractor's gauges, measuring, and testing devices shall be made available for use by the Government when required to determine conformance with contract requirements. If requested by the Government, the Contractor's personnel shall be made available for operation of such devices and for verification of their accuracy and condition.

3.4.3 Quality Validation Plan (QVP). The Contractor shall ensure the quality of delivered systems as outlined in the QVP. The QVP shall be submitted at time of proposal, negotiated with the Government, and shall be incorporated into the contract at award. It will provide the approach for assuring all delivered and repaired LTLM systems and LRUs meet specification requirements. After contract award, the QVP shall be changed or updated only as agreed to by the Integrated Product Team.

3.4.4 Production First Article Test (PFAT), Conformance Inspections (CI), and Acceptance Tests (AT). The Contractor shall conduct PFAT, CI, and Acceptance Tests (AT) per the QVP, to demonstrate continued conformance to all specification requirements. PFAT CI and AT testing shall include a reliability test, in which the contractor shall verify with 80 percent confidence that the product meets the specified reliability. The Contractor shall provide production samples to be used during PFAT and CI. In the event of a failure during an PFAT or CI sampling inspection, all potentially affected production items shall be withheld from acceptance, and a Failure Analysis and Corrective Action Report (FACAR) shall be prepared and submitted in accordance with paragraph 3.4.5. If the contractor makes any changes to the materials or processes utilized to manufacture the LTLM, or there is a significant break in production, requalification may be required as determined and agreed upon by the IPT. The Government reserves the right to perform, witness or verify any of the inspections set forth herein where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements. The Government may conduct both DT and OT testing on the LTLM as part of the initial PFAT, CI, and AT qualification process to ensure that the contract requirements are satisfied both technically as well as in an operational environment. PFAT shall not be approved until successful completion of DT and OT testing. The Contractor shall be responsible for correcting any deficiencies found during Government testing and Contracting Testing in all affected Contractor product.

3.4.4.1 Test Procedures. The Contractor shall prepare and submit to the Integrated Product Team test procedures for concurrence at least 30 days prior to the beginning of the scheduled tests in compliance with the Quality Validation Plan. Any modifications to the agreed to procedures shall be concurred with in writing by the Integrated Product Team chairpersons prior to being implemented. Concurrence on the test procedures shall occur prior to commencement of the testing.

3.4.4.2 Test Reporting. While IPT or CI is ongoing, the Contractor shall provide, in electronic format, the Integrated Product Team with a weekly overview of the most recent activities. During times when no testing has been accomplished, only updates, as necessary, shall be provided. Upon completion of IPT and CI, the Contractor shall provide the Government with an overview of the results through electronic media for Integrated Product Team concurrence.

3.4.4.3 Post-Test Refurbish/Recondition Test Articles. At the completion of PFAT, CI, DT, or OT testing, the Contractor shall refurbish or recondition the components under test, as required, to a deliverable condition. This will include, but is not limited to, paint touch-up, cleaning, and repair or replacement of damaged parts as needed. The cost for this shall be included in the PFAT and CI test cost.

3.4.5 Failure Analysis and Corrective Action Report (FACAR). For each failure that occurs during PFAT or CI testing, the Contractor shall notify the Government within 48 hours, and prepare and submit to the IPT a Failure Analysis and Corrective Action Report within 15 working days of failure occurrence. The Contractor shall prepare and submit each FACAR input in contractor format based on the data requirements in Data Item Description DI-RELI-81315, Failure Analysis and Corrective Action Report. The FACAR shall include a summary of the analysis and identify root cause and the corrective action for all materiel affected; the remainder of the content shall be as agreed on by the IPT. The FACAR shall not be considered closed until the IPT has concurred on the report. Failures occurring during Government conducted testing are also subject to this requirement.

3.4.6 Environmental Stress Screening (ESS). All LTLMs shall be subjected to Environmental Stress Screening, with appropriate failure free verification criteria, to identify and remove defects due to infant mortality, workmanship defects, and other non-conforming anomalies. Random vibration followed by thermal cycling shall be employed as a minimum. Causes of ESS failures shall be tracked, investigated, and closed in accordance with the Contractor's internal procedures for the purpose of continuously improving the screening and the manufacturing processes. All performance measurements made before, during, and after ESS shall be made available to the Government for on-site review at any time; overall results shall be briefed at program reviews after initiation of production. Modification of the ESS profile may be allowed with IPT concurrence.

3.5 Logistics Management. This section outlines the Government's SIP/MANPRINT requirement for the LTLM program. These requirements include, but are not limited to technical manuals, system training, provisioning data, spares and repair parts delivery

3.5.1 Supportability Integrated Product Team (SIPT).

3.5.1.1 SIPT Overview. The Government and the contractor will incorporate an IPT discipline into management of this contract. The goal of the SIPT is to employ a disciplined approach to ensure the LTLM meets the performance specification and delivery schedule. The SIPT approach will integrate functions, i.e. Maintenance Engineering, Program Management, Quality Assurance, ILS, Safety, and Training into a unified supportability and sustainment process working group.

3.5.1.2 SIPT Membership. The SIPT shall consist of Government and contractor personnel associated with the LTLM Program. Members shall include knowledgeable and experienced personnel from the various functional areas, i.e. Maintenance Engineering, Training, Technical Writing, Supply, etc. The contractor shall provide the Government with a single POC for the LTLM Program.

3.5.1.3 SIPT Reviews. SIPT Reviews shall be conducted on an as required basis and will be chaired jointly by the Government and contractor at the contractor's facility. SIPT reviews shall

provide a working level forum to identify, discuss, and resolve logistics issues and/or concerns. The Government and contractor shall mutually provide a list of topics for discussion not less than five working days prior to the SIPT Review. Action items from the reviews shall be assigned to the appropriate organizational element (Government and/or contractor) and shall be reflected in the SIPT Review minutes. The SIPT Review minutes shall be mutually prepared by Government and contractor personnel and distributed to the other SIPT members.

3.5.2 Maintenance Concept. The maintenance concept for LTLM is in accordance with the Army's two levels which are 1) Field (Unit/Organizational/Direct Support (DS)), and 2) Sustainment (General Support (GS) and/or Original Equipment Manufacturer (OEM)). The Government intends to field these items in Brigade sets, including spares (10%). When a LTLM is non- mission capable (NMC) beyond the repair level of the operator/unit, a spare system will be issued from the Forward Support Battalion (FSB) to the operator/unit. The NMC system will be returned in accordance with established procedures. The NMC system will be shipped to the OEM for testing and repair. Consideration shall be given to the disposition NMC systems once at the OEM repair facility as follows:

	Contractor Action	
	Under Warranty	Not Under Warranty
Repairable System	Repair system and return.	Develop Cost Estimate and Contact Government.
Non-Repairable System	Provide replacement.	Destroy after contacting Warranty Review Board.

3.5.3 Technical Manuals. The Technical Manual (TM) and quick reference cards developed by the Contractor in coordination with the SIPT during the LRIP phase of the program shall be the baseline documents. If the Contractor develops engineering changes to the system, which are subsequently approved and implemented, changes to the TM and quick reference cards, as required, shall be submitted to the SIPT to reflect the engineering changes. The contractor shall develop and deliver all graphics, artwork (including Repair Parts and Special Tools List artwork), and operating and maintenance procedures for any modifications to the system which affect the TM. If changes are significant, the SIPT may schedule and conduct a TM Validation at the contractor's facility. The contractor shall provide the TM updates as digital files in editable page-oriented format (MS Word).

3.5.4 Updates to the PPL. The Contractor shall provide updates to the Provisioning Parts List (PPL), with accompanying Engineering Data for Provisioning, for all configuration changes that affect the PPL.

3.5.5 System Spare and Repair Parts. The Contractor shall deliver spare and repair parts in the quantities as ordered and funded by the Government. All spare and repair parts delivered under this SOW shall meet the performance and specification requirements of the LTLM system and shall conform to all other requirements of this basic SOW. All spare and repair parts delivered on this contract shall be packaged in accordance with Standard Commercial Practice ASTM D

3951-98. The Contractor shall comply with all applicable labeling, marking and documentation requirements specified by MIL-STD-129P, Standard Practice for Military Marking.

3.5.5.1 Authorized Stockage List (ASL) Kit. The Contractor shall deliver ASL kits in the quantities as ordered and funded by the Government. The contents of the ASL kit shall be defined by the contractor and approved by the government meeting the requirements in paragraph 3.5.5 and packaged as a kit. The quantity of ASL kits will be based on the rate of 10% of total systems delivered. For example: A delivery of 100 LTLM systems would be accompanied by 5 ASL kits. This does not include complete spare LTLM systems but, does include all parts which can be replaced by operators and/or unit level maintenance.

3.5.6 LTLM Configuration Control. The Contractor shall maintain a structured approach to controlling the configuration integrity of the LTLM systems, provisioned Hardware Configuration Items (HCI) and maintain interchangeability of HCIs throughout the contract life. Software Configuration Management shall be as defined within paragraph 3.2.9.

3.5.6.1 System Baselines. Configuration integrity of the LTLM system will be maintained through Government and Contractor management of the applicable LTLM system baselines. The LTLM Performance Specification (**MIL-PRF-TBD**) will continue to be maintained by the Government as the Functional Baseline (FBL) for the LTLM program. The Allocated Baseline (ABL) for the LTLM system will also be maintained by the Government and will consist of all drawings and related documentation delivered during LRIP phase of the program and subsequently accepted by the Government. All Government-procured parts and assemblies for the LTLM system will be represented within the ABL, and all future hardware deliveries will be in accordance with the FBL and ABL. The Product Baseline (PBL) shall consist of all detail design, build and test documentation defined for each CI by the Contractor. PBL management shall be in accordance with the Contractor's Configuration Management (CM) Program as described in paragraph 3.5.6.2. The Contractor shall permit Government access to the PBL data upon request.

3.5.6.2 Contractor's Configuration Management (CM) Program. The Contractor shall maintain a documented CM Program for the life of this contract. The objectives of the Contractor's CM Program shall be to adequately define and control, as a minimum: CM Organization, Roles, Responsibilities, Resources; Configuration Identification Procedures; Configuration Control and Change Management Procedures; Configuration Status Accounting Procedures; Configuration Verification, Auditing and Assessment Procedures; Product Build Configuration Tracking Procedures; Data (including digital data) Management Procedures; CM Program Deliverables; and Subcontractor/Vendor CM Flow down Procedures. The Contractor shall provide the Government access to all available CM procedural documentation and copies of all build configuration reports upon request.

3.5.6.3 Configuration Control. Any change to the FBL, ABL or PBL shall result in a common configuration for Government operational use and maintenance activities that provides interchangeability and interoperability to the replaceable part level. Any change or requested variance to the FBL or accepted ABL shall be made via Engineering Changes Proposal (ECP) or

Requests for Deviation (RFD) and submitted to the IPT for joint Contractor and Government Approval. The ECP or RFD data shall be in IPT approved Contractor format in accordance with Data Item Description DI-CMAN-80639C, Engineering Change Proposals (ECPs), or Data Item Description DI-CMAN-80640C, Requests for Deviation (RFDs).

All ECPs and RFDs, shall be submitted electronically to the Government for review and disposition prior to implementation. Contractor defined ECP and RFD numbering and submittal methods are acceptable with Government concurrence. All new documentation proposed for inclusion within the accepted ABL shall be submitted in accordance with paragraphs 3.5.6.4. and 3.5.6.5. for consistency with the Government master baselines. The Contractor shall provide documentation, equipment, facilities and personnel as deemed necessary by the Government to support and verify all Contractor-requested variances or configuration changes.

3.5.6.4 Product Drawings. All drawing changes, new drawings, or associated lists proposed by ECP or RFD in accordance with paragraph 3.5.6.3 shall be submitted in accordance with IPT approved Contractor data format per Data Item Description DI-CMAN-80651, Drawings and Associated Lists, as required to support changes requested to Government master baselines.

The drawings shall provide sufficient information to enable the procurement of an interchangeable item that duplicates the interface and performance characteristics of the original product, without additional design engineering effort. Each product drawing shall include:

- a. Configuration and interface dimensional data applicable to the envelope, mounting and interconnection of the related items.
- b. Complete interface engineering requirements (e.g., mechanical, electrical, electronic, communications, optical), which affect the physical or functional characteristics of the CI or co-functioning items.
- c. The selected functional characteristics designated for production acceptance testing and related requirements.
- d. All allocated configuration documentation pertaining to the item, so that if the item were to be re-procured, the performance requirements for the item would also be included.

3.5.6.4.2 Engineering Drawings. The contractor shall prepare and submit new drawings down to the spare part level for each system. The contractor shall prepare and submit product drawings and associated lists as Interface Control Drawings (ICDs) at the spare part/assembly level that assure form, fit, and function interchangeability. The data shall be per IPT approved Contractor data format, using the requirements of Data Item Description DI-CMAN-80651, Drawings and Associated Lists. The intent is to support spare parts procurement in line with the accepted maintenance concept. Dimensioning and tolerancing shall be in accordance with the ANSI Y14.5M-1994 or equivalent. Product drawings are not required below the spare parts level. The Government does not require the contractor to provide a build-to-print Technical Data Package for any item to be procured. The interface control drawings shall include:

- Configuration and interface dimensional data applicable to the envelope, mounting and interconnection of the related items.

- Complete interface engineering requirements (mechanical, electrical, electronic, optical, human, etc.) which affect the physical or functional characteristics of the cofunctioning items.
- Any items referred to in paragraphs 3.5.6 through 3.5.8.
- Any other characteristics which cannot be changed without affecting system interfaces down to the spareable level.

3.5.6.4.3 Assembly Drawings. Assembly drawings shall be prepared for each instance in which two or more parts are connected by means which permit disassembly without destruction of any parts. Assembly Drawings will be referenced by corresponding Parts List and Connection or Wiring Diagrams, as described below. The following data shall be provided:

- Sufficient views to demonstrate the relationship of each part comprising the assembly.
- Part or other identifying number for each part.
- Quantity of each part required for one assembly.
- All required assembly operations, including clearance data, required adjustments, hand or machine fitting, etc. Assembly interchangeability control dimensions and tolerances shall also be included.
- Cross references to Parts List, Next Assembly, Wiring Schematic Diagrams and Test Procedures.

3.5.6.4.4 Parts List. Parts lists identify all subordinate assemblies and parts that apply to the corresponding assembly drawing. Such assemblies and parts will be referenced by name and quantity required to assemble a single assembly, unit, module, etc. All replaceable parts needed for operation of the assembly under consideration, such as fuses, pilot lamps, etc., will be included. Items listed on a subordinate assembly parts list shall not be repeated or referenced on the Parts List for the next-higher assembly.

3.5.6.4.5 A separate or integral Parts List shall be prepared for each assembly that requires a call-out of parts. The contractor will determine if separate or integral Parts Lists are used. However, the entire drawing package will use a consistent Parts List format, i.e., all separate or all integral.

3.5.6.4.6 When Parts Lists are integral with the assembly drawings, the list shall contain, as a minimum, the following columns:

- Find Number.
- Quantity Required.

- Code Identification.
- Part or Identifying Number.
- Nomenclature or Item Description.
- Specification.
- Notes.

3.5.6.4.7 Drawings of approved alternate designs or alternate parts shall not be listed in Parts Lists. These alternate drawings shall be referenced as an alternate on the approved design drawing.

3.5.6.5 Schematic Drawings. An electrical or electronic (level 1 or better) schematic drawing shall be prepared for each unit, module, and assembly. Schematics shall show electrical connections to each part and assembly, without regard to their physical location. Include schematics as part of IPT approved Contractor data format, per Data Item Description DI-CMAN-80651, Drawings and Associated Lists

3.5.6.6 Dimensions, Tolerances, and Electrical Characteristics. Actual dimensions and tolerances required for manufacture shall be provided. All dimensions that determine interchangeability of parts, modules, assemblies, and units shall use positional and other tolerancing in accordance with ANSI Y14.5. Electrical characteristics and performance parameters of parts, modules, assemblies, and units shall be expressed as numerical values with tolerances specifying upper and lower (or maximum and minimum) limits.

3.5.6.7 Materials. The materials used to manufacture all parts and all required treatments shall be described completely on the applicable drawing(s), or referenced by a specification or standard for the material. When specification or standards do not exist, the description shall include common trade name, chemical composition and name and address of the manufacturer or licensor. Alternate materials approved design may be specified on the drawings in addition to the original material.

3.5.6.8 Finishes. Protective coatings, paintings, and other finishes, including prior treatment, shall be referenced by the finish designations described in MIL-F-14072. When protective finishes are used that are not included in MIL-F-14072, the finish shall be completely defined on the drawing, or referenced by other specifications or standards.

3.5.6.9 Physical Configuration Audit (PCA). The contractor shall be prepared to support a physical configuration audit (PCA) conducted by the Government upon notification. This audit would be conducted on all hardware and software developed for this contract and any hardware or software that is to be modified as a result of this contract. In the event that the IPT finds evidence that the drawings do not adequately represent the equipment design and details of construction, acceptance of the equipment on order may be stopped until corrective action, acceptable to the IPT, has been accomplished.

3.5.6.10 Drawing/Three Dimensional Computer-Aided Design (3-D CAD) Model Submissions. The Contractor shall prepare and submit all models and drawings, as defined in paragraph

3.5.6.4. The Contractor shall generate and submit the 3-D CAD models and drawings for mechanical parts and assemblies in a parametric Pro/ENGINEER format. Electrical/electronic part and assembly drawings shall be submitted in a format compatible with Pro/ENGINEER.

3.5.6.11 Value Engineering Change Proposals (VECPs). The Contractor shall submit VECPs in accordance with the Value Engineering clause of this contract.

3.5.7 MANPRINT. The Contractor shall continue the MANPRINT effort through the Full Rate Production phase of the program. This effort shall be directed towards all hardware and software changes incorporated into the production configuration and how these changes affect the other MANPRINT elements: Safety, Training, Soldier Survivability, Personnel.

3.5.8 Human Factors Engineering (HFE). The Contractor shall continue HFE efforts through the Full Rate Production phase of the program. HFE principles shall be applied to all hardware and software changes incorporated into the production configuration.

3.6 CONTRACTOR MAINTENANCE SUPPORT EFFORT (CMSE)

3.6.1 Sustainment Support. Sustainment Support for the Laser Target Locator Module (LTLM) system shall be on a time and material basis, providing depot-level maintenance and replacement item supply support.

The Contractor shall identify and provide all assumptions/ limitations of the proposed support concept, including: warranty, hardware, software, repair/replacement, turn around times, status reporting, transportation, personnel skills, and test equipment. The Contractor shall ensure that maintenance personnel are properly trained to repair the LTLM components and shall update this training, as required, to reflect any hardware and software changes incorporated into the system. This time and material CMSE is intended for the duration of this contract.

3.6.2 Warranty. The contractor shall provide, at a minimum, a one-year performance warranty for sustainment maintenance, which begins after the LTLM has been accepted by the Government. Acceptance by the Government is indicated when a DD Form 250 has been signed by the Government or a designated representative. Repair or replacement of failed LTLM systems is done at the discretion of the Contractor.

3.6.3 CMSE Sustainment Support Requirements. The contractor depot support effort shall include the following effort, but not duplicate other requirements of this contract:

- a. Receipt of items at the Contractor's facility
- b. Incoming inspections, documentation, and reporting
- c. Control and reporting of item damage
- d. Accountability (GFE & repairables)
- e. Repair, test and acceptance
- f. Disposition of non-repairable items

- g. Component parts configuration control
- h. Quality control
- i. Corrosion control
- j. Acceptance testing
- k. Asset storage
- l. Recommended modifications and/or configuration control upgrades
- m. Packaging and shipping
- n. Use of "Reusable Containers" and/or special packaging instructions
- o. Repair turn around times
- p. Maintenance expenditure limits
- q. Parts sources

3.6.4 Repair Turn-Around Time. All work performed by the Contractor shall be accomplished in accordance with the latest instructions, technical data requirements, approved engineering data, and quality control standards contained in this statement of work. The Contractor will, as a goal, meet a 60 calendar day repair turn around time (TAT) to maintain at least the minimum level of the Government-owned stock pool called out in 3.6.5. The TAT shall be measured from the date the unserviceable asset is received until the date it is fully repaired and returned to the Government-owned, contractor-managed stock pool. The contractor shall submit to the Government an estimate of repair for the unserviceable asset within five days of receipt. If the Contractor determines that the TAT to repair any unserviceable item will exceed 60 calendar days, the Contractor will notify the Government Project Leader no less than five (5) days prior to the deadline with an expected date of completion. If a situation occurs that further affects the TAT and/or cost, the Contractor shall notify the Government Project Leader within 24 hours of having made the new assessment.

3.6.5 Repair Parts. The Contractor shall propose an initial lay-in of repair parts for depot-level maintenance. The content and cost of this initial lay-in will be negotiated with the Government prior to contract award. Once the initial repair parts lay-in is in place, parts acquisition for depot-level maintenance will be the sole responsibility of the Contractor and sold to the Government when used for repairs. The Contractor will be responsible to fabricate or procure sufficient spare and repair parts to support the fielded density, system reliability, and meet the 60 calendar day repair turn-around-time. The Government agrees to negotiate for the purchase of all remaining depot-level repair parts which were not part of the initial lay-in under the following conditions:

- (1) Contractor support is terminated by the Government prior to end of contract period,
or
- (2) At the end of the contract period, the Government determines to move the effort to an organic facility.

In the event that a follow-on contract is awarded, the Contractor will maintain possession of the repair parts to support the new effort.

3.6.6 Storage, Management and Maintenance of Government-Owned Stock. The Contractor shall be responsible for storing, managing and maintaining the Government-owned replacement stock pool of serviceable LTLMs in a secure, bonded storage area. The Contractor shall repair

failed LTLMs and return them to replacement stock pool ready for re-issue. The Contractor shall maintain a minimum 25% stockage level in serviceable condition in replacement stock at all times. If stockage falls below the 25% level, the Contractor shall provide notification to the PCO/ACO within 24 hours during weekdays and 72 hours during weekends and holidays of having made this assessment. The Government may from time to time increase the GFE stock pool of assets as the fielded density increases.

3.6.7 Shipment Tracking. The Contractor shall track shipments to ensure direct and timely arrival to and from the field destination. The Contractor shall immediately notify the PM and requiring unit about any shipping problems or delivery delays that may be encountered.

3.6.8 Replacement Item Concept. The contractor shall establish a notification system to allow the authorized users of LTLM or their support activity to request replacement LTLM for the failed component worldwide. The notification should include a toll-free phone number, email address and toll-free FAX number. The contractor shall verify all requests for replacement LTLM by contacting the requesting activity to ensure they are or represent an authorized user. The Government will provide the contractor with a list of all authorized users and support activities. The response time shall not exceed 72 hours for the contractor to ship a replacement LTLM to an authorized requestor. The response time is based on the receipt of notification, i.e., time of day, week day, weekend, or holiday. The user will be required to ship the failed LTLM within three (3) working days after receipt of the replacement LTLM.

3.6.9 Inventory. The Contractor, upon receipt of the failed equipment, shall afford the minimum protection necessary to preserve the equipment while in storage prior to being placed into the repair cycle. The Contractor shall be responsible for maintaining, safeguarding, and preventing damage to Government furnished property/equipment while being moved, handled, disassembled, inspected, repaired, reassembled, and stored. The Contractor shall heed any warnings or caution labels. If the LTLM system includes a laser designation capability, the Contractor shall afford the laser designator the same security as a gun or rifle.

3.6.10 Incoming Inspection. Upon receipt of an item for repair, the Contractor shall check for any shipping damage, verify the identity of returned items and ensure the correctness of accompanying paperwork/documentation. DCMA Quality Assurance Representative (QAR) will verify the Contractor's findings. Any deficiencies found because of the above inspection shall be brought to the attention of the PCO/ACO, who will provide further instructions concerning the deficient items. The incoming inspection shall check for the following:

- Item identification.
- Visible damage or mishandling.
- Completeness of item.
- Completeness and accuracy of accompanying paper work/documentation.

3.6.11 Repair Parts. The Contractor shall be responsible for acquisition of all repair parts required to accomplish the work specified in this SOW during the performance period. All parts

and material used during the repair process shall meet or exceed the original specifications and technical data requirements of the contract.

3.6.12 Repairs. The Contractor shall repair all LTLMs to a serviceable production configuration. The contractor shall incorporate all upgrades and/or modifications as directed by the Government at time of repair. Repairs shall be in accordance with established procedures developed by the Contractor and accepted by the Government, and this SOW.

3.6.13 Maintenance Expenditure Limit (MEL). The Contractor shall repair all unserviceable LTLMs when the estimate to repair the item does not exceed the maintenance expenditure limits (MEL). The Contractor shall be paid the contracted labor and material rate for each repair up to the MEL, which is 65% of the current acquisition cost of the item. Should the estimated cost of repair exceed the MEL, the Contractor shall notify the PCO and the PM in writing within five (5) days to request disposition instructions.

3.6.14 Repair Analysis. The Contractor shall receive, inspect, test and fault isolate each item to determine the specific work required to restore it to a serviceable condition. The Contractor shall proceed with the necessary repair only if the item is determined to be defective. Disassembly of the item shall be limited to the minimum extent possible. The Contractor shall not be required to restore the major item to a like-new cosmetic condition. Any damage to protective finishes shall be repaired to the extent necessary to provide adequate protection during field usage. The Contractor shall be required to replace all damaged markings, identifications, and decals as required. The Contractor shall not be allowed to exchange serviceable parts between failed items or other parts without the authorization of the PCO/ACO.

3.6.15 Corrosion. During inspection and functional test, the presence of corrosion on components shall constitute a reason for a more thorough disassembly and assembly. Disassembly shall be made to the extent necessary to remove corrosion or replace parts.

3.6.16 Acceptance Test. After repair, each item shall be tested by the Contractor to verify that it is operational per the Quality Validation Plan. A Government representative may be present to witness verification. Repaired items shall be returned to Government-owned stock pool by a Certificate of Compliance.

3.6.17 Packaging. Reusable containers shall be retained, stored, and protected for reuse. The Contractor shall ensure that each repaired and serviceable item is packaged in accordance with best commercial practices. Field units will use the packaging from replacement item shipments for the return of the unserviceable item back to the Contractor's facility.

3.6.17.1 Markings. The Contractor shall provide DoD unique item identification (UID) or a DoD recognized unique identification equivalent, for all delivered items acquired under this statement of work. The encoded data elements of the UID shall comply with the DFAR 252.211-7003. The UID shall include as a minimum the following: Manufacture's Cage code, NSN or Part Number, and Serial number. The Contractor shall submit the recommended UID label for final approval prior to implementation.

3.6.18 Government Furnished Equipment (GFE) – Test, Measurement, and Diagnostic Equipment (TMDE), Special Tools and Parts. The Contractor may utilize GFE-TMDE provided under previous LTLM-related contracts with the Government for the purpose of production, maintenance, and repair of LTLM components. The Contractor shall be responsible for calibration and maintenance support of GFE-TMDE. When a contractual relationship between the Government and the Contractor no longer exists for LTLM, this equipment shall be returned with current calibration certification, all manuals, and in good operating condition to the Government. The Contractor shall not use GFE-TMDE for purposes other than production, maintenance, and repair of Government owned LTLM components without the approval of the ACO/PCO. For Government approved ECPs or Government initiated configuration changes to LTLM components, the Contractor shall list and separately price any recommended additional TMDE for maintenance support for use during the maintenance contract period.

3.6.19 Transportation. The Contractor shall use either Government or commercial transportation services as the situation dictates, or as directed, to send equipment to locations within the United States. For shipments of replacement components to locations outside the US, the Contractor will be provided with a shipment address for a Government managed staging facility within the US. All shipments will be transported from the contractor's facility to the Government destination as prepaid.

3.6.20. Maintenance Action Reporting. The contractor shall maintain a database, by serial number, that tracks all field inquiries, all unserviceable returns by date, all repair actions (to include date started, date completed, labor category hours expended, repair parts used and their cost), all outgoing serviceable shipments by date, and current on-hand inventory in bonded storage of serviceable and unserviceable Government-owned assets in the CMSE scope. Data shall be in an IPT-approved Contractor format. The database and reporting system shall be on-line and available for Government access via the worldwide web. Contractor may propose the use of the Government's CAV II database and system if contractor is presently using that system.

3.6.21 Contract Closeout. At the time of completion of this contract, the Contractor shall transfer all Government-owned property, residual materials, and files pertaining to the execution and record keeping of this contract to the Government. If a follow-on contract for LTLM is awarded prior to the end of the performance period of this contract, the Contractor shall retain all Government-owned property, residual materials, and files pertaining to the execution and record keeping of this contract which are required for execution of the follow-on contract.

3.7 Optional Tasks - Time and Material Procedures. Time and Material (T&M) tasks can be requested by the Government. The Contractor shall propose labor categories for all labor associated with anticipated Time and Material efforts. The type of tasks may include: on-site technical support of Government fieldings, demonstrations, and tests of the LTLM System; technical evaluation, design, assembly, and testing of new or improved technologies within the LTLM system; and the design and assembly of special-purpose components to support

Government demonstrations or tests. The following procedures will be used in the implementation of these T&Ms:

a. The Procurement Contracting Officer (PCO), will notify the Contractor of the need for a T&M effort with a Statement of Work (SOW).

b. The Contractor shall electronically submit a Time and Materials Task Execution Plan (TEP) for the requested services to the PCO and PM- within seven (7) days. The TEP will be in the Contractor's format, but at a minimum shall include a spreadsheet that identifies all proposed labor categories, labor hours and negotiated rates to arrive at total costs. It shall also include the proposed material, travel and Other Direct Costs that affect the total cost of the effort. The Government will incur no obligation for any work performed prior to the TEP.

c. Upon PCO receipt of PM TEP approval, a Delivery Order (DO) shall be awarded and forwarded to the Contractor to commence performance.

LTLM PERFORMANCE SPECIFICATION

18 MAR 2008

1.0 SCOPE

1.0 Scope. This specification provides the performance requirements for the Laser Target Location Module (LTLM).

2.0 APPLICABLE DOCUMENTS

2.1 Government Documents.2.1.1 Specifications, Standards, and Handbooks.

The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues/revisions shall be those in effect on the date of the issuance of the solicitation.

Military Specifications

ICD-GPS-153C	GPS User Equipment Interface Control Document for the RS-232/RS-422 Interface of DOD Standard GPS UE Radio Receivers.
SLP-MSG-210	Sensor Link Protocol Message Set (Rev - 8)

Military Standards

MIL-STD-461E	Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment
MIL-STD-810F	Environmental Engineering Considerations and Laboratory Tests
MIL-STD-882D	Standard Practice for System Safety
MIL-STD-13231	Marking of Electronic Items
MIL-STD-130N	Identification Marking of U.S. Military Property
MIL-STD-1425A	Safety Design Requirements for Military Laser and Associated Support Equipment.
MIL-STD-1472F	DoD Design Criteria Standard, Human Engineering

3.0 REQUIREMENTS

3.1 Item Description. LTLM is a lightweight, handheld laser target locator with direct view and night sights, and a SAASM GPS receiver.

3.1.1 General Performance Capabilities.

- a. LTLM shall be capable of viewing and adjusting fire on targets during the day without battery power.
- b. LTLM shall be capable of viewing targets in daylight, darkness, and adverse weather using a passive sight.
- c. LTLM shall be capable of determining range, azimuth (yaw) and vertical angle (pitch) to tactical targets.
- d. LTLM shall be capable of presenting Target Location and Self-Location Data to the operator.
- e. LTLM shall have an interface port to support interface cables for peripheral devices i.e. remote fire/control, external power, data export, etc.
- f. LTLM shall have both manual and automatic shutdown features.

3.1.2 System items. Each LTLM system shall be composed of the following items:

- a. LTLM and installed batteries (one set)
- b. Lens Cleaning Kit
- c. Operator's Manual
- d. Tripod
- e. System Batteries (one set)
- f. Field Carrying Case with capacity to carry batteries for a 72 hour mission, and the above mentioned items

3.2 External Interface Requirements.

3.2.1 GPS Receiver Interface. LTLM shall interface with an external GPS device in accordance with GPS-ICD-153C, ICD for the GPS Standard Serial Interface Protocol (GSSIP). The interface shall provide the capability of loading crypto keys. In addition to the external GPS interface, an internal GPS is desired.

3.2.2 Remote Laser Firing Interface/External Controls.

The LTLM shall provide an interface that accommodates remote laser firing, remote function control (objective), data export, and access to display video (objective).

3.2.2.1 Equivalent Firing Device Functionality.

Remote laser firing shall provide the same functionality as the built-in firing device.

3.2.2.2 Parallel Operation. Remote laser firing shall work in parallel with the built-in laser firing device, i.e. it will not prevent the use of the built-in laser firing device.

3.2.2.3 System User Control Support (Objective).

The LTLM remote user controls shall support all built-in user controls and functions.

3.2.2.4 System Display Video Access (Objective). The LTLM user interface display video shall be remotely accessible.

3.2.3 External Power Interface. For operational use, external power is defined as the BA5590 Battery. LTLM shall provide an Interface for external DC power at voltage levels in the range of 20 to 30 VDC.

3.2.3.1 External Power Control. The power from the external source shall be controlled by the LTLM Power Switch.

3.2.3.2 Protection From External Power Source. The external power source shall not damage the internal batteries or other electronic components.

3.2.4 Mounting Interface. The LTLM tripod mount shall have a .25-20 UNC-2B thread, .40 inch minimum depth, located on the bottom approximately at the center of mass. The tripod mount shall be capable of withstanding torque generated by connecting thumbscrew up to 80 in-lbs.

3.2.4.1 Chassis Mounting Surface Area. The LTLM Chassis Mounting Surface Area shall be 0.5 inch minimum diameter (threshold), 1.15 inch minimum diameter (objective) flat mating surface.

3.2.4.2 Mounting Stability. When mounted on the tripod, the system shall remain stable during the ranging operations. It must be capable of successfully ranging to a NATO standard tank target at 2 km range 95% of the time.

3.3 LTLM Performance Parameters.TABLE I. Performance parameters

PARAMETER	THRESHOLD	OBJECTIVE
Base system weight with battery	5.5 pounds	5.0 pounds
Total system weight (including base system, cables, tripod, and lens cleaning kit)	12.1 pounds	10.0 pounds
Day recognition range, vehicle (33% contrast [max-min/max-min} between target and background, target size 2.3m X 2.3m, on a 7km visibility day)	4200 meters	5000 meters
Target location error	45m CEP at 5,000m	10m CEP at 10,000m
Digital connectivity: Interface with	Current (e.g. PLGR,DAGR)and late developmental GPS devices	GPS, FOS, and FBCB2
Thermal recognition range vehicle ($\Delta T = 1.25^{\circ}C$, 2.3m X 2.3m, 70%/km IR transmission)	900 meters	2,000 meters
I2 Night recognition range Vehicle: clear starlight, 2.3m X 2.3m, 33% contrast is defined as (max-min/max+min)	500 meters (900m desired)	2,000 meters
Battery type:	Commercial w/NSN	Same
Battery life	Complete 24-mission on 2 battery sets	Complete 72-hour mission on 1 battery set
Day optics	Monocular	Monocular
Night optics	Monocular	Monocular

3.3.1 Target Location Performance. The threshold Target Location Error (TLE) for LTLM is 45 meters Circular Error Probable (CEP) at a range of 5000 meters. Objective TLE is 10 meters CEP at a range of 10,000 meters.

3.3.1.1 Target/Self Location Units. The LTLM shall provide target and self location data in the Universal Transverse Mercator (UTM)/Universal Polar Stereographic (UPS) format as a system default. Other position format selections outlined in ICD-GPS-153 shall be available for user selection.

3.3.1.2 System Datum Reference. The LTLM shall use the World Geodetic System (WGS) as the system datum default. Other datum format selections outlined in ICD-GPS-153 will be available for user selection.

3.3.1.3 Global Positioning System (GPS) Receiver and External GPS Interface. It is desired that LTLM shall have an internal SAASM compliant GPS receiver to provide self-location to the Operator and to calculate target location. The LTLM shall provide an interface for an external GPS, whether or not the LTLM includes an internal GPS.

3.3.1.4 Self Location Error. The internal GPS self-location error shall be no greater than 10 m CEP.

3.3.1.4.1 Close Proximity Warning. LTLM displayed data/graphics shall include a warning for close proximity of target and self location.

3.3.1.4.2 Close Proximity Warning Distance. LTLM Close Proximity Warning shall alert the user if LTLM and target locations are ≤ 600 m apart.

3.3.1.5 GPS Compliance. The internal GPS shall be SAASM compliant using MIL-PRF-GB-GRAM-300 as a guide.

3.3.1.6 GPS Memory Backup Battery. The LTLM shall have a separate battery to maintain memory storage on the internal GPS when system power is off. The LTLM shall have an integral compartment for this battery allowing the operator to access the GPS backup battery without the use of tools.

3.3.1.7 Geographic Direction. LTLM shall have an internally mounted device to determine azimuth and vertical angle.

3.3.1.7.1 Azimuth and Vertical Angle Units. The LTLM shall provide target azimuth and vertical angle data. These data shall both be displayed in the units of Degrees and Artillery Mils (360°/6400 mils). Only one unit of measure shall be displayed at any one time as selected by the operator.

3.3.1.7.2 Azimuth Angle Error. Azimuth Angle Error shall be ≤ 8 mils (1σ), when the compass calibration and magnetic variance (mag var) are correct.

3.3.1.7.3 Vertical Angle Error. Vertical Angle Error shall be ≤ 4 mils (1σ).

3.3.1.7.4 Azimuth and Vertical Angle Unit Selection. The LTLM shall allow the user to select the unit format for target azimuth and vertical angle data (degrees or mils).

3.3.1.8 Laser Rangefinder Performance. The LTLM shall provide target ranges from 100 meters to not less than 5 km on a 7 km visible day with temperature conditions of 25°C (degradation to a 4 km range on a 7 km visible day at -30°C is acceptable).

3.3.1.8.1 Boresight Requirements. The boresight among the laser transmitter, laser receiver, direct view optics, and night optics shall be established to ensure a 99% probability of a successful ranging to a NATO standard tank-size target (2.3 m X 2.3 m) at ranges out to 5 kilometers, and a beam-filling target at ranges out to 10 kilometers. The targets shall be normal to the laser transmitter beam, and shall have a Lambertian reflectance of $\leq 10\%$. Additionally, these requirements apply over the full operational range requirement, and the full operating temperature requirement.

3.3.1.8.2 Range Error. The range error for LTLM shall not exceed ± 5 meters.

3.3.1.8.3 Target Discrimination. The LTLM shall discriminate between targets along the same line-of-sight where range separation is 30 meters or greater, and the nearest target is at least 100 meters from the LTLM (both targets have $\leq 10\%$ reflectivity).

3.3.1.8.4 Target Indication. The LTLM shall provide positive a visual indication for multiple targets.

3.3.1.8.5 Ranging Logic. Ranging logic shall be first/last pulse, switch selectable. As selected by the operator, the LTLM shall display the range of the first laser return, or the last laser return. Both ranges shall be held in memory to enable the operator to toggle back and forth between the two. Alternatively, the LTLM shall display the range of both the first laser return and the last laser return, and each range shall be clearly and unambiguously labeled accordingly.

3.3.1.8.6 Range Units. The LTLM shall provide target range data in Meters.

3.3.1.8.7 Laser Classification. The LTLM shall be a Class 1 eye-safe device per ANSI Z136.1-2000.

3.3.1.8.8 Sustained Duty Cycle. The LTLM shall provide continuous target-locating operations at a minimum rate of 4 target locations per minute.

3.3.1.8.9 No Target Reporting. The LTLM shall not calculate a range value, display a range value, or report a target location, if no targets are detected. It shall display a positive, unambiguous, non-zero indication (non-numeric) that no return was detected.

3.3.1.8.10 False Alarm Rate. The false alarm rate shall not exceed one false range reading in any one hundred (100) consecutive range operations.

3.3.1.8.11 Probability Of Detection. The LTLM shall exhibit no more than one range failure out of any 100 consecutive range attempts. For testing Probability Of Detection the target shall be not less than 9990 meters from the LTLM, shall not be greater than 10 meters square. Additionally, the target shall be placed normal to the laser beam, and have a diffuse Lambertian reflectance of $\leq 10\%$ at the operating wavelength. The visual range shall be $\geq 20,000$ meters.

3.3.2 Optics.

3.3.2.1 Optical Improvements. The LTLM shall, for all optics, incorporate optical improvements to reduce reflectivity (glint) and protect the operator from threat lasers.

3.3.2.2 Eye Relief. The eye relief shall be ≥ 18 mm.

3.3.2.3 Exit Pupil. The exit pupil shall be ≥ 5 mm.

3.3.2.4 Direct Viewing Optics Performance.

3.3.2.4.1 Magnification. The Direct View Optical Power shall be 7X minimum.

3.3.2.4.2 Direct View Transmission. The Direct View optical transmission shall be $\geq 75\%$ without the Optical Improvements (3.2.2.7.2), and with the Optical Improvements the optical transmission shall be $\geq 32\%$.

3.3.2.4.3 Direct View Waveband. The Direct view wave band shall be the nominal visible band from 380 nm to 680 nm.

3.3.2.4.4 Direct View Resolution. Under conditions similar to full sun illumination, i.e. $\geq 2 \times 10^3$ foot-candles, the limiting resolution (100% contrast target) of the Direct View Optical system shall measure ≥ 12.5 cy/mrad.

3.3.2.4.5 Direct Viewing Optics Channel. The Direct Viewing Optics Channel for LTLM shall be viewable with the hard reticle by the operator regardless of the presence or absence of electrical power. The Direct Viewing Optics Channel shall be available to the operator whenever power is unavailable for any reason, including but not limited to:

- a. power has not been applied as when the system has not been turned on, or has no batteries installed
- b. power has been applied but has gradually depleted to an unusable level
- c. with the LTLM in any mode, power has been applied, but there has been a sudden loss of power for any reason, as when the batteries suddenly lose electrical contact, i.e. an open circuit.

Whether or not both Day Viewing and Night Imagery are provided through a single eyepiece, the LTLM, in the event of either a gradual or sudden loss of power for any reason, shall in ≤ 5 seconds and without the use of tools, provide Day Viewing performance with the hard reticle regardless of what mode the LTLM was in at the time of the power loss.

3.3.2.4.6 Direct View Optics Field Of View (FOV). The Direct Field-of-View (FOV) for the LTLM shall be: Horizontal FOV 6° minimum and Vertical FOV 3.5° minimum for the Direct View scene.

3.3.2.4.7 Direct View Reticle Scale. The Direct View optic shall have a hard reticle graduated in 10 artillery mil increments similar to the M22 binoculars.

3.3.2.5 Night Sight.

3.3.2.5.1 Night Sight Features. The LTLM shall have a monocular night sight with a centrally located aiming indicator which shall maintain its position in accordance with the boresight requirements paragraph, and the performance requirements of Table I.

3.3.2.5.2 Image Intensifier (I2) Imagery Requirements. If an Image Intensifier is provided to satisfy the Night Sight requirements, then the I2 performance shall be Gen 3 or better.

3.3.2.5.3 Thermal Sensor Imagery Requirement. If a thermal sensor is provided to satisfy the Night Sight requirement, then the performance shall be as detailed in Table I.

3.3.3 Tactical Mission Performance. The daily mission profile below provides the usage rates necessary for technical and operational testing of the system to evaluate user requirements. An "Average Daily Profile" column provides the mean daily usage rates across three unique employment concepts for Scouts, Infantrymen, and Forward Observers.

TABLE II. Profile

	Average Daily Profile
Calendar Time(hours)	24
Operating Time(hours)	5.1
Cycles (On and Off)	25
Day Optics (hours)	1.6
Night Optics (hours)	3.5
Laser Firings (number)	55

3.3.4 Shutdown Features. For both tactical and non-tactical operations, the LTLM shall have both a manual shutdown feature, and an automatic shutdown feature, both of which shall place the LTLM in a power off state. When the LTLM is in the power off state, no power is applied to any part of the LTLM, except for the power that is provided by the GPS back-up battery to maintain the GPS data.

3.3.4.1 Manual Shutdown. The LTLM shall enter the power off state when specific, deliberate actions are taken by the operator.

3.3.4.2 Automatic Shutdown. The LTLM shall have an automatic shutdown feature that, during periods of inactivity, shall cause the system to enter the power off state at the end of an operator-configured time interval.

3.3.5 Internal Power.

3.3.5.1 Battery Replacement Method. The LTLM batteries shall be field replaceable by the operator without the use of tools.

3.3.5.2 System Battery Orientation Protection. The LTLM shall be protected against incorrect battery installation (reverse polarity) by mechanical intervention in the system battery compartment. No electrical contact shall be made if batteries are installed incorrectly.

3.3.5.3 GPS Back-Up Battery Orientation Protection. The LTLM shall be protected against incorrect GPS back-up battery installation (reverse polarity) by mechanical intervention in the GPS back-up battery compartment. No electrical contact will be made if battery is installed incorrectly.

3.3.5.4 Battery Life. The LTLM batteries shall last for a minimum of a 24-hour mission at an ambient temperature of 25° C, with the use of two sets of batteries.

3.3.5.5 GPS Back-Up Battery. The GPS Back-Up batteries for the LTLM shall last for a minimum of a 168 total hours at an ambient temperature of 25° C.

3.3.5.6 Low Battery Indicator. A visual indication showing a low main battery condition shall be provided to the operator through the eyepiece.

3.3.5.7 Low Battery Indicator Duration. The LTLM low main battery indicator, once activated, shall remain illuminated until the battery is depleted or replaced.

3.3.5.8 Low Battery Operation. The LTLM shall neither be damaged nor suffer degradation of performance under low battery conditions i.e. the generation of erratic data under low battery conditions. This requirement is applicable to all batteries.

3.3.6 Field Carrying Case. The field carrying case for LTLM shall contain and be closed while storing the LTLM, and batteries to complete a 72 hour mission (one set in unit), tripod, cables, lens cleaning kit, and operator's manual. The field carrying case, the tripod, the lens cleaning kit, and operators' manual shall be provided by the LTLM supplier. The field carrying case shall be a soft case, with the ACU color pattern.

3.3.7 Light Emissions-Human Eye Detection. The LTLM shall not produce light emissions that are visible to the unaided eye beyond 50 meters in any direction under ambient lighting conditions of $\leq 2 \times 10^{-4}$ foot-candles (beginning of starlight). Within 50 meters the LTLM shall not produce light emissions that are visible to the unaided eye outside of a viewing angle of 71 milliradians off axis under ambient lighting conditions of $\leq 2 \times 10^{-4}$ foot-candles (beginning of starlight).

3.3.8 Light Emissions – Image Intensifier Device Detection. The LTLM shall not produce light emissions that are visible to a 3rd generation Omni VI Night Vision Tube beyond 50 meters in any direction under ambient lighting conditions of $\leq 2 \times 10^{-4}$ foot-candles (beginning of starlight). Within 50 meters the LTLM shall not produce light emissions that are visible to the 3rd generation Omni VI Night Vision Tube outside of a viewing angle of 71 milliradians off axis under ambient lighting conditions of $\leq 2 \times 10^{-4}$ foot-candles (beginning of starlight).

3.3.9 Physical Characteristics.

3.3.9.1 Handheld Weight. The handheld weight of LTLM, including batteries, shall not exceed 5.5 lbs.

3.3.9.2. Carry Weight. The carry weight of LTLM shall not exceed 12.1 lbs. This is the amount of weight that the user is required to carry in the field. It includes the field carrying case containing all system components, as described in section 3.3.6 - Field Carrying Case.

3.3.9.3 Finish.

3.3.9.3.1 Anti-Reflective. The LTLM finish, excluding optical surfaces, shall be anti-specular reflective (diffused).

3.3.9.4 Fungus. The LTLM external surfaces shall neither support fungus growth, nor experience damage, nor shall LTLM performance be degraded by either the presence of fungus spores or adjacent fungus growth. Fungus testing shall be performed in accordance with MIL-STD-810F, Method 508.5.

3.3.9.5 Nuclear, Biological, and Chemical Protection (NBC). LTLM shall use chemical and biological agent resistant materials.

3.3.9.6 NBC Decontamination. The LTLM shall be able to be decontaminated with the use of hot soapy water.

3.3.9.7 Color. The LTLM exterior housing color shall be tan, grey, or green consistent with military camouflage.

3.4 Reliability.

3.4.1 Mean Ranges Between Failures (MRBF). LTLM shall provide a Mean Ranges between Failures (MRBF) of not less than 40,000 ranges. This will be the lower test (01) MRBF and will be demonstrated with 80% confidence. The need to replace batteries is not considered a failure in the MRBF calculations.

3.4.2 Mean Time Between Failures (MTBF). The Mean Time between Failures (MTBF) shall be ≥ 720 Hrs, when tested under the reliability usage conditions identified below. This will be the lower test (01) MTBF and will be demonstrated with 80% confidence. The LTLM shall be tested in an environmental consisting of the operational and storage temperature variations identified in paragraph 3.5.1 with 35% of operation time at High Temperature extreme, 10% of operation time at the High Temperature plus Solar Load equivalent temperature, 25% of operating time at Cold Temperature extreme, and the remainder of operating time at 23 degrees C ambient temperature. 70% of operation time accumulated at each temperature shall be in thermal mode and 30% shall be in active day mode. Systems shall be power cycled 5 times per hour and the laser shall be fired 11 times per hour over all operational test temperatures and operating modes. Functional checks and controls manipulation shall be performed during each 24-hour cycle at all operating temperatures. At a minimum, range accuracy, GPS operation, compass operation, night imagery and reticle shall be verified after every 3 cycles. The systems will be exposed to three hours at storage temperature extremes, alternating hot and cold each 24-hour cycle. For 10 minutes per 24-hour cycle the systems shall be exposed to vibration at 75% of the PSD level identified in Figure 1, with equivalent time on each of three axes. Prior to starting operational cycles, each reliability test item shall be subjected to the full Functional Shock test as stated herein. The need to replace batteries is not considered a failure in the MTBF calculations.

3.4.3 Built-In-Test (BIT). The LTLM shall provide BIT execution, to include monitoring and displaying internal BIT data. BIT will identify 95% of faults with 80% confidence.

3.5 Environmental Requirements. Where identified herein, the environmental requirements shall be met by testing in accordance with MIL-STD-810F, including Change Notices 1, 2, and 3.

3.5.1 Temperature.

3.5.1.1 High Temperature Storage. The LTLM shall exhibit neither damage, nor degradation of performance after being stored in non-operating mode, at a constant temperature of + 71° C (+160°F). High Temperature Storage testing shall be performed in accordance with MIL-STD-810F, Method 501.4, Procedure I for constant storage temperature.

3.5.1.2 High Temperature Operation. The LTLM shall exhibit neither damage, nor degradation of performance when operated to + 60° C (+140°F). High Temperature Operation testing shall be performed in accordance with MIL-STD-810F, Method 501.4, Procedure II for constant operating temperature.

3.5.1.3 Low Temperature Storage. The LTLM shall exhibit neither damage, nor degradation of performance after being stored in non-operating mode, in temperatures as low as -40°C Min (-40°F). Low Temperature Storage testing shall be performed in accordance with MIL-STD-810F, Method 502.4, Procedure I for constant temperature.

3.5.1.4 Low Temperature Operation and Manipulation. The LTLM shall exhibit neither damage, nor degradation of performance when handled and manually operated in temperatures as low as -30°C (-22°F Min). Low Temperature Operation and Manipulation testing shall be performed in accordance with MIL-STD-810F, Method 502.4, Procedures II and III for constant temperature.

3.5.1.5 Temperature Shock. The LTLM shall exhibit neither damage, nor degradation of performance after being subjected, in the non-operating mode, to sudden temperature changes between -30°C and 60°C. Temperature Shock testing shall be performed in accordance with MIL-STD-810F, method 503.4, Procedure 1.

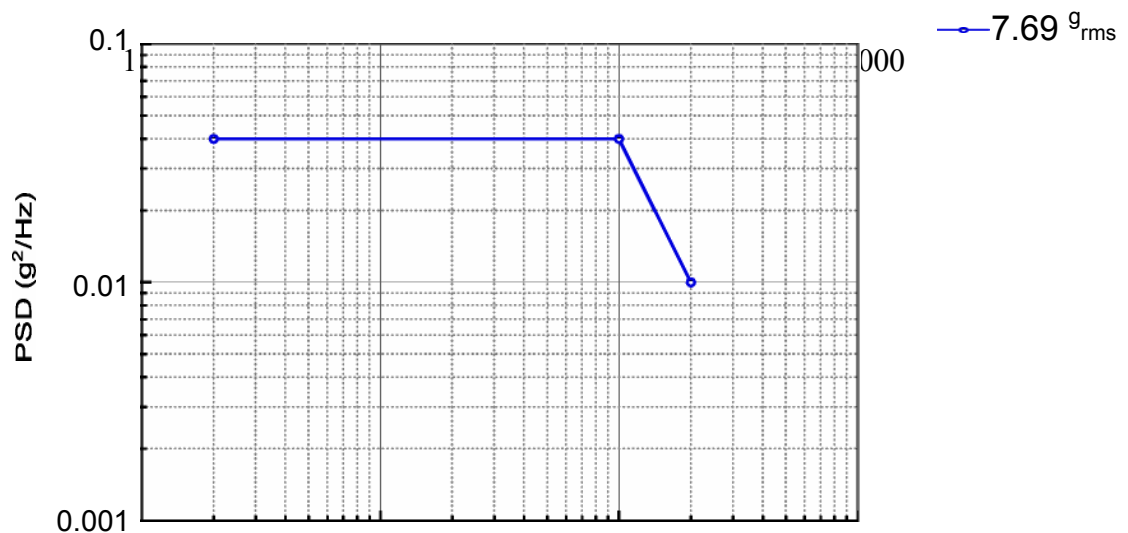
3.5.2 Immersion. The LTLM in non-operating mode shall not leak when immersed under water at least 10 feet for 30 minutes. Upon retrieval, the LTLM shall exhibit neither damage, nor degradation of performance during subsequent operations. Immersion testing shall be performed in accordance with MIL-STD-810F, Method 512.4, Procedure I.

3.5.3 Humidity. The LTLM shall not experience any leakage, damage, or degradation of performance resulting from being subjected to a relative humidity of 95% and ten diurnal temperature excursions from 30 degrees C to 60 degrees C. Humidity testing shall be performed in accordance with MIL-STD-810F, Method 507.4, and Table 507.4-1.

3.5.4 Operating Altitude. The LTLM, in unprotected operating mode, shall exhibit neither damage nor degradation of performance due to operations in altitudes of up to 15,000 feet. Operating Altitude testing shall be performed in accordance with MIL-STD-810F, Method, 500.4, Procedure II.

3.5.5 Rapid Decompression and Subsequent Operation. The LTLM shall not present a safety or health hazard to personnel, or aircraft either during, or after exposure to an air pressure change that is equivalent to an altitude change from 8,000 to 40,000 feet, within 15 seconds. Additionally, the LTLM shall present neither a safety hazard, nor health hazard when subsequent operation is attempted. Rapid Decompression and Subsequent Operation testing shall be performed in accordance with MIL-STD-810F, Method 500.4, Procedure III. Should the LTLM fail to operate after executing the rapid decompression pressure change, the LTLM Built In Test function shall identify any electronic system failures.

3.5.6 Minimum Integrity Vibration. The LTLM shall exhibit neither damage nor degradation of performance after being subjected to Minimum Integrity Vibration. The minimum integrity vibration shall consist of random vibration conducted in accordance with MIL-STD-810F, Method 514.5, Procedure I for Operational Service, using the limits shown in Figure 1 Minimum Integrity Vibration Profile. The LTLM shall be subjected to 1.5 hours of vibration, 30 minutes in each of the three orthogonal axes with the system mounted on a suitable fixture affixed to the vibrating table. With Government concurrence notching of the vibration profile may be incorporated to compensate for major test fixture resonances.



3.5.7 Shock.

3.5.7.1 Functional Shock. The LTLM shall exhibit neither damage nor degradation of performance resulting from physical shocks typically encountered during handling and field use. Functional Shock testing shall be performed in accordance with MIL-STD-810F, Method 516.5, procedure I, Figure 516.5-10, and Table 516.5-II showing 40 g and 11 ms for the Peak (P) and time duration (T_D) respectively.

3.5.7.2 Bench Handling Shock. The LTLM shall exhibit neither damage nor degradation of performance after experiencing mechanical shocks commonly induced during repair, maintenance, and system checkout. Bench Handling Shock testing shall be performed in accordance with MIL-STD-810F, Method 516.5, Procedure VI.

3.5.8 Sand and Dust. The LTLM shall exhibit neither damage nor degradation of performance by exposure, with optical covers installed, to blowing sand and dust. Sand and Dust testing shall be performed in accordance with MIL-STD-810F, Method 510.4, Procedures 1 and 2.

3.5.9 Salt Fog. The LTLM shall exhibit neither damage nor degradation of performance due to exposure, with optical covers removed, to a salt atmosphere. Salt Fog testing shall be performed in accordance with MIL-STD-810F, Method 509.4.

3.5.10 Explosive Atmosphere. The LTLM shall not initiate combustion when operated in an atmosphere that is heavily laden with fumes of aircraft or ground vehicle fuels. Explosive Atmosphere testing shall be performed in accordance with MIL-STD-810F, Method 511.4, Procedure I.

3.6 Design and Construction.

3.6.1 Parts, Materials, and Processes. The contractor will select parts, materials, and processes such that LTLM meets the requirements of this specification. The contractor is encouraged to use commercial / industrial processes and practices that will reduce design, production, and operational support costs while meeting the requirements of this specification.

3.6.1.1 Optical Product Radioactive Contents. Optical products shall not contain thorium or other radioactive source material as defined by Title 10, Code of Federal Regulations, Energy, Part 40, in excess of 0.05 percent by weight (500 ppm).

3.6.2 Electromagnetic Interference (EMI). The LTLM shall meet the requirements of RE102, RS103, CE102, CS101, CS114, CS115, and CS116 per MIL-STD 461E.

3.6.3 Nameplates and Product Marking. The assembly and all spared components, subassemblies, and parts shall be marked in accordance with MIL-STD-13231, MIL-STD-130N, and MIL-STD-1425A as specified on the drawings. In addition to the requirements in MIL-STD-130N, the human readable label shall contain nomenclature and NSN.

3.6.4 Workmanship. Joints and seams shall be tight and electrical wiring shall be secure with unbroken insulation. Padding shall be free of gouges, tears, excess adhesive, or imbedded foreign matter and shall be attached firmly to the proper surface. All plastic parts shall be free from cracks, splits, cold flow, shrinkage, inclusions, porosity, or any similar characteristics. Threads shall be full and undamaged for their entire length or depth. The LTLM shall be free from burrs, chips, dirt, rust, corrosion, or any embedded or surface foreign material. All moving parts and adjustments shall move freely throughout their entire range without sticking, binding, or creeping. Parts shall neither be missing nor damaged. Optical elements shall be free from imperfections that adversely affect the prescribed performance. Optical element surface quality shall be consistent with the best commercial practices. Optics and optical coatings shall neither be stained by fresh, tap water nor by salt water. Any fresh or salt water residue on optics shall be removable by proper use of the lens cleaning kit provided with the system.

3.7 Safety.

3.7.1 Laser Output Identification. The LTLM laser output shall be measured, classified, and marked in accordance with TB MED-524, Control of Hazards to Health from Laser Radiation.

3.7.2 System Hazardous Area Identification. Potentially hazardous areas within the LTLM shall be identified in accordance with MIL-STD-882D.

3.7.3 Fail-Safe Principles. The LTLM system design shall incorporate fail-safe principles to minimize the effects of design, operation, and maintenance errors potentially resulting in un-commanded laser activation or wavelength changes.

3.7.4 Software/Safety Critical Component Failure. Neither software error nor single point failure of safety-critical components shall result in a catastrophic or critical hazard (as defined in MIL-STD-882D, Table 1).

3.7.5 Laser System Firing Safeguard. At least two (2) independent control actions shall be required to cause the laser system to fire.

3.7.6 ANSI Standard Conformance. The contractor shall ensure the system safety implementation conforms to the requirements of ANSI Z136.1-2000, American National Standard for Safe Use of Lasers and use MIL-STD1425A as a guide.

4.0 VERIFICATION

4.1 General. This section identifies the categories of verification, and the verification efforts to be undertaken to confirm acceptable product per the performance requirements established in section 3 of this document.

4.2 Verifications Description. To determine the initial and continued acceptability of the product the contractor shall perform several product verification efforts; Environmental Stress Screening (ESS), Acceptance Testing, Design Verification Testing (DVT) (aka Qualification Testing), and in production shall include periodic Performance, Environmental, and Reliability testing as required by the contract. All verifications shall be performed in accordance with contractor-originated, Government-approved procedures. Verifications shall be performed in accordance with the LTLM Requirements Verification Matrix presented in the contract.

4.3 Verification Categories. Acceptable LTLM product in compliance with the requirements identified in Section 3 herein shall be verified using one or more of the categories of verification described in the following subparagraphs. The Requirements Verification Matrix specifies how the categories of verification shall be applied to verify product acceptability for each requirement of this specification.

4.3.1 Verification by Inspection. Verification by Inspection (**I**) involves a physical examination of the LTLM, a review of pertinent documentation, and a comparison of appropriate characteristics with predetermined standards. This action may require moving, turning, or a partial disassembly of the system, as well as include the use of fixtures, jigs, gauges, or other measurement tools and recording devices to accomplish the verification.

4.3.2 Verification by Analysis. Verification by Analysis (**A**) requires quantitative proof, by means of the technical evaluation of equations, charts, graphs, circuit diagrams, and representative data, that the specifications have been met. Any assumptions required for the analysis shall be realistic and shall be based upon commonly accepted assumptions used by professionals in the discipline involved. Verification by analysis may also be accomplished via similarity. Analysis by similarity entails using analysis, substantiating data, and/or test results

performed on previously developed equipment, provided that an actual similarity exists, and can be shown to exist, between the previously developed equipment and the LTLM developed to meet this specification.

4.3.3 Verification by Test. Verification by Test (**T**) may involve both the operation of the item, with appropriate instrumentation to record quantitative data, and the evaluation of the resultant quantitative data. Acceptability of the item shall be determined by comparison of such data with the quantitative specification requirement. Successful completion of verification by test shall consist of witnessed and documented test results that clearly indicate that the product is meeting, or exceeding the quantitative requirement as specified in this document.

4.3.4 Verification by Demonstration. If a specification cannot be verified quantitatively (i.e. by analysis or by test), verification may be accomplished by a Demonstration (**D**) showing that a requirement has been met. The use of this category of verification may also be permissible when, in unique situations and with Government pre-concurrence, a complete test is determined to be unnecessary to show acceptability for a specific parameter(s).

5.0 PACKAGING

5.1 Packaging. The packaging requirements for the desired level(s) of protection shall be, as specified by the acquisition activity in the contract or purchase order.

6.0 NOTES

6.1 Definitions.

6.1.1 User, operator. The term “user” and the term “operator” are used interchangeably in this document.

SECTION E – INSPECTION AND ACCEPTANCE

Inspection and acceptance instructions will be issued on each individual delivery order.

SECTION F – DELIVERIES OR PERFORMANCE

The government will use the following procedures for issuing orders:

1. A competitive Request for Proposal (RFP) will be sent to the contractor(s) that receive an award.
2. The evaluation criteria will be stated in the RFP.
3. The RFP and the response shall be sent electronically.

Detailed delivery instructions will be issued on each individual order.

Delivery, Conditional Acceptance, and Failure of Items Subject to Initial Production Test (IPT) and Conformance Inspections (CI)

1. Delivery of contract items which are subject to initial production test (IPT) or periodic conformance inspection (CI) shall not be made until successful completion of the inspections as outlined in the QVP, and compliance with the applicable performance specification, except as provided below. The term "periodic CI" refers to all CI testing accomplished on a sample basis to include performance, environmental, and reliability testing, as opposed to the 100% CI acceptance test (AT) and Environmental Stress Screening (ESS). When an IPT is required, no contract items shall be delivered until the items have successfully completed the IPT per the QVP, and the IPPT has concurred on the IPT Report. After successful completion of the IPT or initial periodic CI, delivery to the Government of lots between those where periodic CI is required is authorized, but acceptance is conditional pending the results of the subsequent CI. Every unit shall pass AT prior to delivery.
2. The contractor shall provide the cognizant Government Quality Assurance Representative (QAR) with written notice of the time and place for each periodic CI. This notice shall be provided at least four (4) working days prior to start of each CI if the QAR is in residence at the contractor's facility or ten (10) working days prior to start of each CI if the QAR is not in residence at the contractor's facility. The contractor shall provide within forty-eight (48) hours of completion of each CI, written notification to the QAR the time and date of completion, and whether or not the inspections have been passed.
3. Periodic CI shall be completed, to include approval and Government acceptance of any associated failure reports, within sixty (60) days of sample selection for periodic environmental and performance CI, and within one hundred and twenty (120) days (including submission of final Production Reliability Acceptance Test (PRAT) report), of sample selection for reliability CI. Failure to complete CI within these time periods shall be grounds for revoking acceptance of all units accepted since the last successful periodic CI and shall be deemed a failure to make delivery within the meaning of the Default clause of this contract and the contract shall be subject to termination for default.
4. In the event of a CI failure, the contractor shall perform a failure analysis and report each failure as outlined in the QVP. Government acceptance is discontinued until satisfactory resolution of the failure, and concurrence by the IPPT on the failed item analysis report (FIAR); release under any other conditions is subject to approval of the contracting officer. The Government shall have the right to revoke acceptance of any and all items that may contain the root cause failure mode and to require the contractor to replace or correct at his expense any and all affected units. If corrective action is authorized, any such action may be performed by the contractor at destination, or the affected items may be returned to the contractor subject to approval of the contracting officer, with transportation costs to and from destination at the contractor's expense.
5. In the event of a CI (Reliability) lot failure, the Government may, with contractor concurrence, agree to accept consideration in lieu of correcting units that have already been delivered to the Government. The following calculation shall be used to determine the amount of consideration:

$$\text{Consideration} = \frac{(\text{MTBF}_{\text{required}} - \text{MTBF}_{\text{demonstrated}})}{\text{MTBF}_{\text{required}}} * \# \text{ units} * \text{ cost per unit}$$

The number of units (# units) in the above calculation shall be all units delivered since the last successful CI (Reliability) test, or any other number of units as agreed to by the Government.

6. When shipment has been made of items represented by samples which have failed a periodic CI, the contractor shall notify the contracting officer in writing, with a copy to the ACO and PM representative; notification shall indicate the nature of the failure and shipments made, to include consignees, date of shipments, carriers, waybill numbers, and quantity. The government reserves the right to return the shipments or any portion thereof to the contractor at contractor's expense.

The rights and remedies of the Government provided in this clause shall not be exclusive, and are in addition to any other rights and remedies provided by law under this contract.

SECTION I
– CONTRACT CLAUSES

CLAUSES INCORPORATED BY REFERENCE

52.202-1	Definitions	JUL 2004
52.211-15	Defense Priority And Allocation Requirements	SEP 1990

CLAUSES INCORPORATED BY FULL TEXT

52.212-4 CONTRACT TERMS AND CONDITIONS-- COMMERCIAL ITEMS (FEB 2007)

(a) Inspection/Acceptance. The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. If repair/replacement or reperformance will not correct the defects or is not possible, the Government may seek an equitable price reduction or adequate consideration for acceptance of nonconforming supplies or services. The Government must exercise its post-acceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) Assignment. The Contractor or its assignee may assign its rights to receive payment due as a result of performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727). However, when a third party makes payment (e.g., use of the Governmentwide commercial purchase card), the Contractor may not assign its rights to receive payment under this contract.

(c) Changes. Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) Disputes. This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR

52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) Definitions. The clause at FAR 52.202-1, Definitions, is incorporated herein by reference.

(f) Excusable delays. The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement or any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) Invoice. (1) The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized) to the address designated in the contract to receive invoices. An invoice must include--

(i) Name and address of the Contractor;

(ii) Invoice date and number;

(iii) Contract number, contract line item number and, if applicable, the order number;

(iv) Description, quantity, unit of measure, unit price and extended price of the items delivered;

(v) Shipping number and date of shipment, including the bill of lading number and weight of shipment if shipped on Government bill of lading;

(vi) Terms of any discount for prompt payment offered;

(vii) Name and address of official to whom payment is to be sent;

(viii) Name, title, and phone number of person to notify in event of defective invoice; and

(ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision, contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(2) Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) prompt payment regulations at 5 CFR part 1315.

(h) Patent indemnity. The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any

United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

(i) Payment.--

(1) Items accepted. Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract.

(2) Prompt payment. The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and prompt payment regulations at 5 CFR part 1315.

(3) Electronic Funds Transfer (EFT). If the Government makes payment by EFT, see 52.212-5(b) for the appropriate EFT clause.

(4) Discount. In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

(5) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

(j) Risk of loss. Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

(1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or

(2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) Taxes. The contract price includes all applicable Federal, State, and local taxes and duties.

(l) Termination for the Government's convenience. The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) Termination for cause. The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) Title. Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

- (o) Warranty. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.
- (p) Limitation of liability. Except as otherwise provided by an express warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.
- (q) Other compliances. The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.
- (r) Compliance with laws unique to Government contracts. The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. 3701, et seq., Contract Work Hours and Safety Standards Act; 41 U.S.C. 51-58, Anti-Kickback Act of 1986; 41 U.S.C. 265 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. 423 relating to procurement integrity.
- (s) Order of precedence. Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order: (1) the schedule of supplies/services; (2) the Assignments, Disputes, Payments, Invoice, Other Compliances, and Compliance with Laws Unique to Government Contracts paragraphs of this clause; (3) the clause at 52.212-5; (4) addenda to this solicitation or contract, including any license agreements for computer software; (5) solicitation provisions if this is a solicitation; (6) other paragraphs of this clause; (7) the Standard Form 1449; (8) other documents, exhibits, and attachments; and (9) the specification.
- (t) Central Contractor Registration (CCR). (1) Unless exempted by an addendum to this contract, the Contractor is responsible during performance and through final payment of any contract for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.
- (2)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in FAR subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the CCR database; (B) comply with the requirements of subpart 42.12; and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.
- (ii) If the Contractor fails to comply with the requirements of paragraph (t)(2)(i) of this clause, or fails to perform the agreement at paragraph (t)(2)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.
- (3) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.
- (4) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the internet at <http://www.ccr.gov> or by calling 1-888-227-2423 or 269-961-5757.

(End of clause)

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (FEB 2008)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

(2) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

(1) 52.203-6, Restrictions on Subcontractor Sales to the Government (SEP 2006), with Alternate I (OCT 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).

(2) 52.219-3, Notice of HUBZone Small Business Set-Aside (Jan 1999) (15 U.S.C. 657a).

(3) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JUL 2005) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

(4) [Removed].

(5)(i) 52.219-6, Notice of Total Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

(ii) Alternate I (OCT 1995) of 52.219-6.

(iii) Alternate II (MAR 2004) of 52.219-6.

(6)(i) 52.219-7, Notice of Partial Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

(ii) Alternate I (OCT 1995) of 52.219-7.

(iii) Alternate II (MAR 2004) of 52.219-7.

(7) 52.219-8, Utilization of Small Business Concerns (MAY 2004) (15 U.S.C. 637 (d)(2) and (3)).

(8)(i) 52.219-9, Small Business Subcontracting Plan (Nov 2007) (15 U.S.C. 637(d)(4)).

(ii) Alternate I (OCT 2001) of 52.219-9

(iii) Alternate II (OCT 2001) of 52.219-9.

(9) 52.219-14, Limitations on Subcontracting (DEC 1996) (15 U.S.C. 637(a)(14)).

(10) 52.219-16, Liquidated Damages--Subcontracting Plan (JAN 1999) (15 U.S.C. 637(d)(4)(F)(i)).

___ (11)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (SEP 2005) (10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).

___ (ii) Alternate I (JUNE 2003) of 52.219-23.

___ (12) 52.219-25, Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting (OCT 1999) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

___ (13) 52.219-26, Small Disadvantaged Business Participation Program--Incentive Subcontracting (OCT 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

___ (14) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (MAY 2004) (U.S.C. 657 f).

X (15) 52.219-28, Post Award Small Business Program Rerepresentation (JUNE 2007) (15 U.S.C. 632(a)(2)).

X (16) 52.222-3, Convict Labor (JUNE 2003) (E.O. 11755).

X (17) 52.222-19, Child Labor--Cooperation with Authorities and Remedies (FEB 2008) (E.O. 13126).

X (18) 52.222-21, Prohibition of Segregated Facilities (FEB 1999).

X (19) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).

X (20) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).

X (21) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).

X (22) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).

X (23) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).

X (24)(i) 52.222-50, Combating Trafficking in Persons (AUG 2007) (Applies to all contracts).

___ (ii) Alternate I (AUG 2007) of 52.222-50.

___ (25)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (AUG 2000) (42 U.S.C. 6962(c)(3)(A)(ii)).

___ (ii) Alternate I (AUG 2000) of 52.223-9 (42 U.S.C. 6962(i)(2)(c)).

___ (26) FAR 52.223-15, Energy Efficiency in Energy-Consuming Products (DEC 2007) (42 U.S.C. 8259b) .

___ (27)(i) 52.223-16, IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products (DEC 2007) (E.O. 13423).

___ (ii) Alternate I (DEC 2007) of 52.223-16.

___ (28) 52.225-1, Buy American Act--Supplies (JUNE 2003) (41 U.S.C. 10a-10d).

X (29)(i) 52.225-3, Buy American Act--Free Trade Agreements--Israeli Trade Act (AUG 2007) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, Pub. L 108-77, 108-78, 108-286, 109-53 and 109-169).

___ (ii) Alternate I (JAN 2004) of 52.225-3.

___ (iii) Alternate II (JAN 2004) of 52.225-3.

___ (30) 52.225-5, Trade Agreements (Nov 2007) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301 note).

___ (31) 52.225-13, Restrictions on Certain Foreign Purchases (FEB 2006) (E.O.s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of Treasury).

___ (32) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (Nov 2007) (42 U.S.C. 5150).

___ (33) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (Nov 2007) (42 U.S.C. 5150).

___ (34) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

___ (35) 52.232-30, Installment Payments for Commercial Items (OCT 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

X (36) 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration (OCT 2003) (31 U.S.C. 3332).

___ (37) 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration (MAY 1999) (31 U.S.C. 3332).

X (38) 52.232-36, Payment by Third Party (MAY 1999) (31 U.S.C. 3332).

___ (39) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).

___ (40)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631).

___ (ii) Alternate I (APR 2003) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

___ (1) 52.222-41, Service Contract Act of 1965 (Nov 2007) (41 U.S.C. 351, et seq.).

___ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

___ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act--Price Adjustment (Multiple Year and Option Contracts) (NOV 2006) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

___ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act--Price Adjustment (February 2002) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

___ (5) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Requirements (Nov 2007) (41 U.S.C. 351, et seq.).

___ (6) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services--Requirements (Nov 2007) (41 U.S.C. 351, et seq.).

___ (7) 52.237-11, Accepting and Dispensing of \$1 Coin (AUG 2007)(31 U.S.C. 5112(p)(1)).

(d) Comptroller General Examination of Record. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records--Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) (1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in paragraphs (i) through (vi) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause--

(i) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$550,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).

(vi) 52.222-41, Service Contract Act of 1965 (Nov 2007) (41 U.S.C. 351, et seq.).

(vii) 52.222-50, Combating Trafficking in Persons (AUG 2007) (22 U.S.C. 7104(g)). Flow down required in accordance with paragraph (f) of FAR clause 52.222-50.

(viii) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Requirements (Nov 2007) (41 U.S.C. 351, et seq.).

(ix) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services--Requirements (Nov 2007) (41 U.S.C. 351, et seq.).

(x) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor May include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

52.216-18 ORDERING. (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from **date of award** through **60 months after award**.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

(End of clause)

52.216-19 ORDER LIMITATIONS. (OCT 1995)

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than 100 systems, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor:

(1) Any order for a single item in excess of (b) (4) systems;

(2) Any order for a combination of items in excess of (b) (4) systems; or

(3) A series of orders from the same ordering office within 30 days that together call for quantities exceeding the limitation in subparagraph (1) or (2) above.

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) above.

(d) Notwithstanding paragraphs (b) and (c) above, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 15 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

(End of clause)

52.216-22 INDEFINITE QUANTITY. (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum". The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum".

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and

Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract 90 days after the end of the period of performance.

(End of clause)

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):

<http://www.arnet.gov/far/>

<http://farsite.hill.af.mil/VFFAR1.HTM>

(End of clause)

252.212-7001 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS APPLICABLE TO DEFENSE ACQUISITIONS OF COMMERCIAL ITEMS (MAR 2008)

(a) The Contractor agrees to comply with the following Federal Acquisition Regulation (FAR) clause which, if checked, is included in this contract by reference to implement a provision of law applicable to acquisitions of commercial items or components.

52.203-3, Gratuities (APR 1984) (10 U.S.C. 2207).

(b) The Contractor agrees to comply with any clause that is checked on the following list of Defense FAR Supplement clauses which, if checked, is included in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items or components.

(1) 252.205-7000, Provision of Information to Cooperative Agreement Holders (DEC 1991) (10 U.S.C. 2416).

(2) 252.219-7003, Small Business Subcontracting Plan (DoD Contracts) (APR 2007) (15 U.S.C. 637).

(3) 252.219-7004, Small Business Subcontracting Plan (Test Program) (APR 2007) (15 U.S.C. 637 note).

(4) 252.225-7001, Buy American Act and Balance of Payments Program (JUN 2005) (41 U.S.C. 10a-10d, E.O. 10582).

(5) 252.225-7012, Preference for Certain Domestic Commodities (MAR 2008) (10 U.S.C. 2533a).

(6) 252.225-7014, Preference for Domestic Specialty Metals (JUN 2005) (10 U.S.C. 2533a).

- (7) ___ 252.225-7015, Restriction on Acquisition of Hand or Measuring Tools (JUN 2005) (10 U.S.C. 2533a).
- (8) ___ 252.225-7016, Restriction on Acquisition of Ball and Roller Bearings (MAR 2006) (Section 8065 of Public Law 107-117 and the same restriction in subsequent DoD appropriations acts).
- (9) X 252.225-7021, Trade Agreements (MAR 2007) (19 U.S.C. 2501-2518 and 19 U.S.C. 3301 note).
- (10) ___ 252.225-7027, Restriction on Contingent Fees for Foreign Military Sales (APR 2003) (22 U.S.C. 2779).
- (11) ___ 252.225-7028, Exclusionary Policies and Practices of Foreign Governments (APR 2003) (22 U.S.C. 2755).
- (12)(i) X 252.225-7036, Buy American Act--Free Trade Agreements--Balance of Payments Program (MAR 2007) (41 U.S.C. 10a-10d and 19 U.S.C. 3301 note).
- (ii) ___ Alternate I (OCT 2006) of 252.225-7036.
- (13) ___ 252.225-7038, Restriction on Acquisition of Air Circuit Breakers (JUN 2005) (10 U.S.C. 2534(a)(3)).
- (14) ___ 252.226-7001, Utilization of Indian Organizations, Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns (SEP 2004) (Section 8021 of Pub. L. 107-248 and similar sections in subsequent DoD appropriations acts).
- (15) X 252.227-7015, Technical Data--Commercial Items (NOV 1995) (10 U.S.C. 2320).
- (16) ___ 252.227-7037, Validation of Restrictive Markings on Technical Data (SEP 1999) (10 U.S.C. 2321).
- (17) X 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports(MAR 2008) (10 U.S.C. 2227).
- (18) ___ 252.237-7019, Training for Contractor Personnel Interacting with Detainees (SEP 2006) (Section 1092 of Public Law 108-375).
- (19) ___ 252.243-7002, Requests for Equitable Adjustment (MAR 1998) (10 U.S.C. 2410).
- (20)(i) X 252.247-7023, Transportation of Supplies by Sea (MAY 2002) (10 U.S.C. 2631).
- (ii) ___ Alternate I (MAR 2000) of 252.247-7023.
- (iii) ___ Alternate II (MAR 2000) of 252.247-7023.

(iv) ___ Alternate III (MAY 2002) of 252.247-7023.

(21) ___ 252.247-7024, Notification of Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631).

(c) In addition to the clauses listed in paragraph (e) of the Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items clause of this contract (FAR 52.212-5), the Contractor shall include the terms of the following clauses, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

(1) 252.225-7014, Preference for Domestic Specialty Metals, Alternate I (APR 2003) (10 U.S.C. 2533a).

(2) 252.237-7019, Training for Contractor Personnel Interacting with Detainees (SEP 2006) (Section 1092 of Public Law 108-375).

(3) 252.247-7023, Transportation of Supplies by Sea (MAY 2002) (10 U.S.C. 2631).

(4) 252.247-7024, Notification of Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631).

(End of clause)

AMCAC 52.0204-4001, IDENTIFICATION OF OZONE DEPLETING SUBSTANCES (OCT 1999)

a. The following required Class I Ozone Depleting Substances (ODS) have been identified and approved for use under performance of any resultant contract.

(x) None.

(_) (List any approved ODS requirements): _____

b. If during performance of the contract, an approved Class I ODS is discovered, the contractor is encouraged to notify the contracting officer immediately.

c. The ODS restrictions apply to subcontracts as well.

AMCAC 52.0204-4002, CLASS I OZONE DEPLETING SUBSTANCES (OCT 1999)

a. Per Section 326 of Public Law 102-484, effective 1 Jun 93, specifications and standards cannot require the use of Class I ozone depleting substances (ODS) without approval. There are some cases where a specification or standard allows the use of an ODS, but does not specifically require its use. A situation of this type does not require substitution under the law.

b. If this requirement allows, but does not require, the use of a Class I ODS, although it is not mandatory for the contractor to use a non-ODS substance, the contractor is encouraged to give preference to using the non-ODS choice.

AMCAC 52.0223-4001, OSHA STANDARDS (OCT 1999)

Contractor must comply with all applicable OSHA standards.

AMCAC 52.0228-4001, INSURANCE REQUIREMENTS (JUL 1999)

The following insurance is required as a minimum in accordance with the Federal Acquisition Regulations and the appropriate clause in Section I:

a. Legally Required Insurance: Where certain laws apply, such as State laws governing workman's compensation and employer's liability coverage, etc., the contractor, prior to commencement of work, shall furnish the Contracting Officer a written statement that such laws have been complied with and that compliance will continue throughout the period of contract performance. Minimum coverage of \$100,000 is required.

b. Comprehensive General Liability and Automobile Liability:

	<u>Each Person</u>	<u>Per Occurrence</u>	<u>Property Damage</u>
Comprehensive General Liability	None	\$500,000	None
Automobile Liability	\$200,000	\$500,000	\$20,000

AMCAC 52.0242-4001, INSTRUCTIONS TO PAYING OFFICE AND AMINISTRATIVE CONTRACTING OFFICE (AUG 1999)

a. The Contracting Office representative is:

Name: Tyrone M. Knight

Organization Code: W91CRB

Telephone Area Code and Number: (410) 278-2465

DSN: 298-2465

FAX: (410) 306-3850

Email: tyrone m knight@us.army.mil

b. Payment to the contractor shall be made in accordance with FAR Subpart 32.11, Electronic Funds Transfer.

c. Paying Office Information:

Telephone Inquiries: DFAS Columbus Vender Pay (800) 756-4571

FAX: 1-877-426-4270

AMCAC 52.0242-4003, GOVERNMENT-CONTRACTOR RELATIONSHIPS (SEP 1999)

a. The Government and the contractor understand and agree that the services to be delivered under this contract by the contractor to the Government are non-personal services and the parties recognize and agree that no employer-employee or master-servant relationships exist or will exist under the contract between the Government and the contractor and/or between the Government and the contractor's employees. It is therefore, in the best interest of the Government to afford the parties a full and complete understanding of their respective obligations.

b. Contractor personnel under this contract shall not:

(1) be placed in a position where they are appointed or employed by a Federal Officer, or are under the supervision, direction, or evaluation of a Federal Officer, Military or Civilian.

(2) be placed in a staff or policymaking position.

(3) be placed in a position of command, supervision, administration or control over DA Military or Civilian Personnel, or personnel of other contractors, or become a part of the Government organization.

(4) be used for the purpose of avoiding manpower ceilings or other personnel rules and regulations of DA or the Civil Service Commission.

(5) be used in administration or supervision of military procurement activities.

c. Employee Relationship:

(1) The services to be performed under this contract do not require the contractor or its employees to exercise personal judgment and discretion on behalf of the Government, but rather the contractor's employees will act and exercise personal judgment and discretion on behalf of the contractor.

(2) Rules, regulations, directions, and requirements that are issued by command authorities under their responsibility for good order, administration, and security are applicable to all personnel who enter the installation, or who travel on Government transportation. This is not to be construed or interpreted to establish any degree of Government control that is inconsistent with a non-personal services contract.

AMCAC 52.0247-4001, COMMERCIAL PACKAGING (AUG 1999)

Packaging of ALL CLIN(s) shall be in accordance with standard commercial practices which are necessary to prevent deterioration and damage due to hazards of shipping, handling and storage.

AMCAC 52.0247-4001, COMMERCIAL PACKAGING (AUG 1999)

Packaging of CLIN(s) _____ shall be in accordance with standard commercial practices which are necessary to prevent deterioration and damage due to hazards of shipping, handling and storage.

AMCAC 52.0247-4002, MARKING AND CONSIGNMENT INSTRUCTIONS (AUG 1999)

Marking and consignment instructions for military shipments shall conform to the current issue of MIL-STD-129 (Military Standard Marking for Shipment and Storage).

AMCAC 52.0242-4003, GOVERNMENT-CONTRACTOR RELATIONSHIPS (SEP 1999)

a. The Government and the contractor understand and agree that the services to be delivered under this contract by the contractor to the Government are non-personal services and the parties recognize and agree that no employer-employee or master-servant relationships exist or will exist under the contract between the Government and the contractor and/or between the Government and the contractor's employees. It is therefore, in the best interest of the Government to afford the parties a full and complete understanding of their respective obligations.

b. Contractor personnel under this contract shall not:

(1) be placed in a position where they are appointed or employed by a Federal Officer, or are under the supervision, direction, or evaluation of a Federal Officer, Military or Civilian.

(2) be placed in a staff or policymaking position.

(3) be placed in a position of command, supervision, administration or control over DA Military or Civilian Personnel, or personnel of other contractors, or become a part of the Government organization.

(4) be used for the purpose of avoiding manpower ceilings or other personnel rules and regulations of DA or the Civil Service Commission.

(5) be used in administration or supervision of military procurement activities.

c. Employee Relationship:

(1) The services to be performed under this contract do not require the contractor or its employees to exercise personal judgment and discretion on behalf of the Government, but rather the contractor's employees will act and exercise personal judgment and discretion on behalf of the contractor.

(2) Rules, regulations, directions, and requirements that are issued by command authorities under their responsibility for good order, administration, and security are applicable to all personnel who enter the installation, or who travel on Government transportation. This is not to be construed or interpreted to establish any degree of Government control that is inconsistent with a non-personal services contract.

AMCAC 52.0246-4001, INSPECTION AND ACCEPTANCE (AUG 1999)

Inspection and acceptance of the supplies or services called for by this procurement shall be performed at the destination (s).

AMCAC 52.0247-4001, COMMERCIAL PACKAGING (AUG 1999)

Packaging of CLIN(s) 0001 shall be in accordance with standard commercial practices which are necessary to prevent deterioration and damage due to hazards of shipping, handling and storage.

AMCAC 52.0247-4002, MARKING AND CONSIGNMENT INSTRUCTIONS (AUG 1999)

Marking and consignment instructions for military shipments shall conform to the current issue of MIL-STD-129 (Military Standard Marking for Shipment and Storage).

52.0000-4955 WIDE AREA WORKFLOW (WAWF) INFORMATION/INSTRUCTIONS (13 February 2008)

To implement DFARS 252.232-7003, "ELECTRONIC SUBMISSION OF PAYMENT REQUESTS", RDECOM Acquisition Centers use Wide Area Work Flow – Receipt and Acceptance (WAWF-RA) to electronically process vendor requests for payment. This application allows DoD vendors to submit and track invoices and receipt/acceptance documents electronically.

The contractor is required to use WAWF-RA when processing invoices and receiving reports under this order. Submission of hard copy DD250/invoices will no longer be accepted for payment.

The contractor shall register to use WAWF-RA at <https://wawf.eb.mil>. There is no charge to use WAWF. All questions relating to system setup and vendor training can be directed to the help desk at Ogden, UT. Their number is 1-866-618-5988. Web-based training for WAWF is also available at <http://www.wawftraining.com/>

IMPORTANT INFORMATION:

Please submit your invoice/receiving report in WAWF when you ship your items. We have nothing to receive your shipment against if the information has not been submitted in WAWF when your delivery arrives.

Include the Purchase Request Number in the Line Item Description. You will find it under the Line Item Description on this order.

THE FOLLOWING CODES WILL BE REQUIRED TO ROUTE YOUR INVOICES THROUGH WAWF.

Invoice and Receiving Report Combo (Supplies, OR Supplies And FFP Services)
(pick one)

Invoice as 2-in-1 (Services Only)

Cost Voucher (all Cost or T&M)

If none of the above apply call 1-800-559-WAWF (9293)

Vendor Cage Code: 377Q0

Pay DoDAAC: _DFAS DoDAAC HQ0303

Issue Office DoDAAC: W91CRB

Admin DoDAAC: W91CRB

Ship To DoDAAC: _Customer DoDAAC W91231

Inspect DoDAAC: W91231

Accept DoDAAC: W91231

WAWF will prompt asking for “additional e-mail submission” after clicking “SIGNATURE”. Enter the following e-mail addresses to expedite the routing process of the invoice.

TYRONE.M.KNIGHT@US.ARMY.MIL

foster.g.nickerson@us.army.mil

The paying office DoDAAC and mailing address will be located on the front of your award. You can track your payment information on the DFAS website at <http://www.dod.mil/dfas/contractorpay/myinvoice.html>. Your purchase order/contract number or invoice will be required to inquire about status of your payment.

Questions concerning payment should be directed to the payment office identified in the contract. Please have your Contract number and invoice ready when calling about payment status.

END OF STATEMENT

ADDITIONAL INFORMATION

TECHNICAL POINT OF CONTACT:

Project Manager Soldier Equipment
Product Manager Sensors and Lasers
ATTN: Nick Nickerson
Fort Belvoir, VA 22060
Phone: (703) 704-2705
Fax: (703) 704-3449
Email: foster.g.nickerson@us.army.mil

AA: Funding to be provided on individual delivery orders
AMOUNT: \$0.00
CIN 00000000000000000000000000000000: \$0.00

AB: 218203500001D-1DB25286014031CA744100MIPR8KAPGJ00938S41LVS19130
AMOUNT: \$5,632,100.00
CIN MIPR8KAPGJ00930002: \$5,632,100.00

**SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS
(CONTINUED)**

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/ SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
<p>SEE SCHEDULE</p>					

32a. QUANTITY IN COLUMN 21 HAS BEEN
 RECEIVED INSPECTED ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: _____

32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	32c. DATE	32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
--	-----------	---

32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE
	32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE

33. SHIP NUMBER	34. VOUCHER NUMBER	35. AMOUNT VERIFIED CORRECT FOR	36. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	37. CHECK NUMBER
<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL				

38. S/R ACCOUNT NUMBER	39. S/R VOUCHER NUMBER	40. PAID BY
------------------------	------------------------	-------------

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT	42a. RECEIVED BY (<i>Print</i>)		
41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER	41c. DATE	42b. RECEIVED AT (<i>Location</i>)	
		42c. DATE REC'D (<i>YY/MM/DD</i>)	42d. TOTAL CONTAINERS

Section SF 1449 - CONTINUATION SHEET

SECTION B

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1101	Laser Target Locator Modules (LTLM) FFP (b)(4) LTLM System @ (b)(4) each (Includes Warranty Cost): FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b)(4)	Each	(b)(4)	(b)(4)

MAX NET AMT (b)(4)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1101AA	Funding FFP FOB: Destination	(b)(4)	Dollars, U.S.	(b)(4)	(b)(4)

NET AMT (b)(4)

ACRN AA
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1101AB		(b) (4)	Dollars, U.S.	(b) (4)	(b) (4)
	Funding FFP FOB: Destination				

NET AMT

(b) (4)

ACRN AB
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1101AC		(b) (4)	Dollars, U.S.	(b) (4)	(b) (4)
	Funding FFP FOB: Destination				

NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1102	LTLM Initial Production Test (IPT) FFP PY 1 Includes reliability test, Developmental testing (DT)/Operational Testing(OT) units, accepting testing of units and test support. FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Lot	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1102AA	Funding FFP FOB: Destination	(b) (4)	Dollars, U.S.	(b) (4)	(b) (4)

NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1103	LTLM ITP Report FFP PY1 LTLM Initial Production Test (IPT) Report FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Lot	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1103AA	Funding FFP FOB: Destination	(b) (4)	Dollars, U.S.	(b) (4)	(b) (4)

NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1104	LTLM Safety Assessment Report (SAR) FFP PY 1 LTLM Safety Assessment Report (SAR) FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Lot	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1104AA	Funding FFP FOB: Destination	(b) (4)	Dollars, U.S.	(b) (4)	(b) (4)

NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1105	LTLM LMMD Test Report FFP PY 1 LTLM LMMD Test Report FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Lot	(b) (4)	(b) (4)

MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1105AA	Funding FFP FOB: Destination	(b) (4)	Dollars, U.S.	(b) (4)	(b) (4)

NET AMT (b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1106	Physical Config. Audit Plan & Report FFP LTLM Physical Configuration Audit Plan & Report PY1	(b) (4)	Lot	(b) (4)	(b) (4)
FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110					

MAX
NET AMT

(b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1106AA	Funding FFP FOB: Destination	(b) (4)	Dollars, U.S.	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108	Spares FFP LTLM Spare Parts FOB: Destination	UNDEFINED		UNDEFINED	(b) (4)

MAX NET AMT (b) (4)

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AA	Front Door FFP Front Door - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

MAX NET AMT (b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AB	Battery Door FFP Battery Door - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AC	Switch Knob FFP Switch Knob - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AD	Connector Cap FFP Connector Cap - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AE	Eye Cup FFP Eye Cup - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AF	(b) (4) Cable FFP (b) (4) Cable - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AG	Communications Cable FFP Communications Cable - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1108AH	Power Cable FFP Power Cable - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

NET AMT (b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AJ	Remote Fire Cable FFP Remote Fire Cable - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

MAX NET AMT (b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AK	Soft Case FFP Soft Case - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

MAX NET AMT (b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AL	Battery FFP Battery - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

MAX NET AMT (b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1108AM	Manual FFP Manual - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

MAX
NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1108AN	Neck Strap FFP Neck Strap - FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Each	(b) (4)	(b) (4)

NET AMT

(b) (4)

ACRN AC
CIN: 00000000000000000000000000000000

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1109	Repair Parts Material Lay-In FFP The contractor shall deliver Repair Parts Material Lay-In in accordance with Statement of Work paragraph 3.6.5 Repair Parts. FOB: Destination PURCHASE REQUEST NUMBER: MIPR8LAPGJ0110	(b) (4)	Lot	(b) (4)	(b) (4)
MAX NET AMT					\$0.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1109AA	Funding FFP FOB: Destination	(b) (4)	Dollars, U.S.	(b) (4)	(b) (4)
NET AMT					(b) (4)
ACRN AC CIN: 00000000000000000000000000000000					

ACCOUNTING AND APPROPRIATION DATA

AA: 2182035 0000 1D-1DB2 52860140.00 31CA CC:744100 JONO:8S41LV MIPR9KSSLN0094 S19130
 AMOUNT (b) (4)
 CIN 00000000000000000000000000000000 (b) (4)

AB: 2192035 0000 1D-1DB2 52860140.00 C1CA CC: 744100 JONO: 9S41LZ MIPR9KSSLN0096 S19130
 AMOUNT: (b) (4)
 CIN 00000000000000000000000000000000 (b) (4)

AC: 2182035 0000 1D-1DB2 52860140.00 31CA CC:744100 JONO:8S41L7 MIPR9KSSLN0095 S19130
 AMOUNT: (b) (4)
 CIN 00000000000000000000000000000000 (b) (4)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1 CONTRACT ID CODE	PAGE OF PAGES	
				J	1	2
2 AMENDMENT/MODIFICATION NO P00001	3 EFFECTIVE DATE 01-Jul-2009	4 REQUISITION/PURCHASE REQ NO M PR8KAPGJ0093		5 PROJECT NO (If applicable)		
6 ISSUED BY US ARMY RDECOM CONTR CTR - W91CRB 4118 SUSQUEHANNA AVENUE ABERDEEN PROVING GROUND MD 21005-3013	CODE W91CRB	7 ADMINISTERED BY (If other than item 6) US ARMY RDECOM ACQ CTR - W91CRB 4118 SUSQUEHANNA AVENUE ABERDEEN PROV NG GROUND MD 21005-3013		CODE	W91CRB	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) NORTHROP GRUMMAN GU DANCE AND ELECTRONIC 2787 S ORANGE BLOSSOM TRAIL APOPKA FL 32703-2010				9A. AMENDMENT OF SOLICITATION NO.		
				9B. DATED (SEE ITEM 11)		
				X	10A. MOD. OF CONTRACT/ORDER NO. W91CRB-09-D-0030	
				X	10B. DATED (SEE ITEM 13) 14-May-2009	
CODE 34860	FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS						
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.						
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Schedule						
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.						
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
X B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).						
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
D. OTHER (Specify type of modification and authority)						
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.						
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Modification Control Number: tknight092310 The purpose of this modification is to remove the funding from the basic contract it will be reestablished on the individual delivery orders.						
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect						
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
				TYRONE M. KNIGHT / CONTRACT SPECIALIST		
				TEL: 410-278-2465 EMAIL: tyrone.m.knight@us.army.mil		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED
_____ (Signature of person authorized to sign)				BY <u>Tyrone M Knight</u> (Signature of Contracting Officer)		01-Jul-2009

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION SF 1449 - CONTINUATION SHEET

ACCOUNTING AND APPROPRIATION

Summary for the Payment Office

As a result of this modification, the total funded amount for this document was decreased by (b) (4)
(b) (4)

SUBCLIN 110101:

AB: 218203500001D-1DB25286014031CA744100MIPR8KAPGJ00938S41LVS19130 (CIN
MIPR8KAPGJ00930002) was decreased (b) (4)

(End of Summary of Changes)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1 CONTRACT ID CODE	PAGE OF PAGES	
			J	1	44
2 AMENDMENT/MODIFICATION NO P00002	3 EFFECTIVE DATE 05-Aug-2009	4 REQUISITION/PURCHASE REQ NO M PR8KAPGJ0093		5 PROJECT NO (If applicable)	
6 ISSUED BY US ARMY RDECOM CONTR CTR - W91CRB 4118 SUSQUEHANNA AVENUE ABERDEEN PROVING GROUND MD 21005-3013	CODE W91CRB	7 ADMINISTERED BY (If other than item 6) US ARMY RDECOM ACQ CTR - W91CRB 4118 SUSQUEHANNA AVENUE ABERDEEN PROV NG GROUND MD 21005-3013		CODE	W91CRB
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) NORTHROP GRUMMAN GU DANCE AND ELECTRONIC 2787 S ORANGE BLOSSOM TRAL APOPKA FL 32703-2010			9A. AMENDMENT OF SOLICITATION NO.		
			9B. DATED (SEE ITEM 11)		
			X	10A. MOD. OF CONTRACT/ORDER NO. W91CRB-09-D-0030	
			X	10B. DATED (SEE ITEM 13) 14-May-2009	
CODE 34860	FACILITY CODE				
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.					
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).					
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:					
X D. OTHER (Specify type of modification and authority) Changes Clause					
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Modification Control Number: dwindle092588 To incorporate bi-lateral changes.					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) TYRONE M. KNIGHT / CONTRACT SPECIALIST TEL: 410-278-2465 EMAIL: tyrone.m.knight@us.army.mil		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY <u>Tyrone M Knight</u> (Signature of Contracting Officer)		16C. DATE SIGNED 05-Aug-2009
(Signature of person authorized to sign)					

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION SF 1449 - CONTINUATION SHEET

The following have been added by reference:

52.232-32 Performance-Based Payments JAN 2008

The following have been added by full text:

ADDITIONAL INFORMATION

Government Furnished Property (GFP)

THE GOVERNMENT WILL PROVIDE AS GFP THE APPLICABLE SAASM GB-GRAM UNITS THAT ARE REQUIRED FOR PRODUCTION AND FOR CLS. THERE ARE NO CHANGES TO THE SOW OR PERFORMANCE SPECIFICATION, OR OTHER LTLM DOCUMENTATION IN THE RFP, BASED ON THIS CHANGE.

The following have been modified:

SECTION C

– DESCRIPTION / SPECS / WORK STATEMENT

**STATEMENT OF WORK
FOR THE
LASER TARGET LOCATOR MODULE (LTLM)**

**PRODUCTION AND
MAINTENANCE SUPPORT CONTRACT**

3.5.5.1 Authorized Stockage List (ASL) Kit. The Contractor shall deliver ASL kits in the quantities as ordered and funded by the Government. The contents of the ASL kit shall be defined by the contractor and approved by the government meeting the requirements in paragraph 3.5.5 and packaged as a kit. The quantity of ASL kits will be based on the rate of 10% of total systems delivered. For example: A delivery of ^{(b) (4)}LTLM systems would be accompanied by ^{(b) (4)}ASL kits. This does not include complete spare LTLM systems but, does include all parts which can be replaced by operators and/or unit level maintenance.

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (FEB 2008)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

(2) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

(1) 52.203-6, Restrictions on Subcontractor Sales to the Government (SEP 2006), with Alternate I (OCT 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).

(2) 52.219-3, Notice of HUBZone Small Business Set-Aside (Jan 1999) (15 U.S.C. 657a).

(3) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JUL 2005) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

(4) [Removed].

(5)(i) 52.219-6, Notice of Total Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

(ii) Alternate I (OCT 1995) of 52.219-6.

(iii) Alternate II (MAR 2004) of 52.219-6.

(6)(i) 52.219-7, Notice of Partial Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

(ii) Alternate I (OCT 1995) of 52.219-7.

(iii) Alternate II (MAR 2004) of 52.219-7.

(7) 52.219-8, Utilization of Small Business Concerns (MAY 2004) (15 U.S.C. 637 (d)(2) and (3)).

(8)(i) 52.219-9, Small Business Subcontracting Plan (Nov 2007) (15 U.S.C. 637(d)(4)).

(ii) Alternate I (OCT 2001) of 52.219-9

(iii) Alternate II (OCT 2001) of 52.219-9.

(9) 52.219-14, Limitations on Subcontracting (DEC 1996) (15 U.S.C. 637(a)(14)).

(10) 52.219-16, Liquidated Damages--Subcontracting Plan (JAN 1999) (15 U.S.C. 637(d)(4)(F)(i)).

(11)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (SEP 2005) (10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).

(ii) Alternate I (JUNE 2003) of 52.219-23.

(12) 52.219-25, Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting (OCT 1999) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

(13) 52.219-26, Small Disadvantaged Business Participation Program--Incentive Subcontracting (OCT 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

(14) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (MAY 2004) (U.S.C. 657 f).

- (15) 52.219-28, Post Award Small Business Program Rerepresentation (JUNE 2007) (15 U.S.C. 632(a)(2)).
- (16) 52.222-3, Convict Labor (JUNE 2003) (E.O. 11755).
- (17) 52.222-19, Child Labor--Cooperation with Authorities and Remedies (FEB 2008) (E.O. 13126).
- (18) 52.222-21, Prohibition of Segregated Facilities (FEB 1999).
- (19) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).
- (20) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).
- (21) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).
- (22) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).
- (23) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).
- (24)(i) 52.222-50, Combating Trafficking in Persons (AUG 2007) (Applies to all contracts).
- (ii) Alternate I (AUG 2007) of 52.222-50.
- (25)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (AUG 2000) (42 U.S.C. 6962(c)(3)(A)(ii)).
- (ii) Alternate I (AUG 2000) of 52.223-9 (42 U.S.C. 6962(i)(2)(c)).
- (26) FAR 52.223-15, Energy Efficiency in Energy-Consuming Products (DEC 2007) (42 U.S.C. 8259b)
- (27)(i) 52.223-16, IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products (DEC 2007) (E.O. 13423).
- (ii) Alternate I (DEC 2007) of 52.223-16.
- (28) 52.225-1, Buy American Act--Supplies (JUNE 2003) (41 U.S.C. 10a-10d).
- (29)(i) 52.225-3, Buy American Act--Free Trade Agreements--Israeli Trade Act (AUG 2007) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, Pub. L 108-77, 108-78, 108-286, 109-53 and 109-169).
- (ii) Alternate I (JAN 2004) of 52.225-3.
- (iii) Alternate II (JAN 2004) of 52.225-3.
- (30) 52.225-5, Trade Agreements (Nov 2007) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301 note).
- (31) 52.225-13, Restrictions on Certain Foreign Purchases (FEB 2006) (E.O.s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of Treasury).
- (32) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (Nov 2007) (42 U.S.C. 5150).

___ (33) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (Nov 2007) (42 U.S.C. 5150).

___ (34) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

___ (35) 52.232-30, Installment Payments for Commercial Items (OCT 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

X (36) 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration (OCT 2003) (31 U.S.C. 3332).

___ (37) 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration (MAY 1999) (31 U.S.C. 3332).

___ (38) 52.232-36, Payment by Third Party (MAY 1999) (31 U.S.C. 3332).

___ (39) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).

___ (40)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631).

___ (ii) Alternate I (APR 2003) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

___ (1) 52.222-41, Service Contract Act of 1965 (Nov 2007) (41 U.S.C. 351, et seq.).

___ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

___ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act--Price Adjustment (Multiple Year and Option Contracts) (NOV 2006) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

___ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act--Price Adjustment (February 2002) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

___ (5) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Requirements (Nov 2007) (41 U.S.C. 351, et seq.).

___ (6) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services--Requirements (Nov 2007) (41 U.S.C. 351, et seq.).

___ (7) 52.237-11, Accepting and Dispensing of \$1 Coin (AUG 2007)(31 U.S.C. 5112(p)(1)).

(d) Comptroller General Examination of Record. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records--Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) (1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in paragraphs (i) through (vi) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause--

(i) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$550,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).

(vi) 52.222-41, Service Contract Act of 1965 (Nov 2007) (41 U.S.C. 351, et seq.).

(vii) 52.222-50, Combating Trafficking in Persons (AUG 2007) (22 U.S.C. 7104(g)). Flow down required in accordance with paragraph (f) of FAR clause 52.222-50.

(viii) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Requirements (Nov 2007) (41 U.S.C. 351, et seq.).

(ix) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services--Requirements (Nov 2007) (41 U.S.C. 351, et seq.).

(x) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor May include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

(End of Summary of Changes)