

44 pgs P3

SOLICITATION, OFFER AND AWARD		THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)		R D	G	PAGE 1	35 PAGES
2. CONTRACT NO. USZA22-00-D-0007	3. SOLICITATION NO. USZA22-00-RL003	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED 22 SEP 2000	6. REQUISITION/PURCHASE NO. N/A		
ISSUED BY UNITED STATES SPECIAL OPERATIONS COMMAND DIRECTORATE OF PROCUREMENT, SOAL-KB 7701 TAMPA POINT BOULEVARD MACDILL AFB, FLORIDA 33621-5316		8. ADDRESS OFFER TO (If other than item 7)					

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder"

SOLICITATION

9. Sealed offers in original and _____ copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in SEE SECTION I. until _____ (Hour) _____ (Date) local time

CAUTION - LATE Submissions, Modifications and Withdrawals: See Section I., Provision No. 52.214-7 or 52.215-10. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL:	A. NAME CHRISTOPHER D. STILLER	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (813) 281-0560, Ext. 304 (stillerc@jotc.com)
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OFFER (Must be fully completed by offeror)

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within _____ calendar days (60 calendar days unless different period is inserted by the offeror) from the date of receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

1. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232-8)	10 CALENDAR DAYS	20 CALENDAR DAYS	30 CALENDAR DAYS	CALENDAR DAYS
	%	%	NET	%
1. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated)	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR HARRIS CORPORATION/RF COMMUNICATIONS DIVISION 1680 UNIVERSITY AVENUE ROCHESTER, NY 14610-9983	CODE 14304	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print) MICHAEL J. KUNDRAT CONTRACTS MANAGER
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15B. TELEPHONE NO. (Include area code) (716) 242-3153	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE ENTER SUCH ADDRESS IN SCHEDULE <input type="checkbox"/>	17. SIGNATURE Michael J. Kundrat	18. OFFER DATE 9/28/00
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AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION
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22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION <input checked="" type="checkbox"/> 10 U.S.C. 2034(c) (1) <input type="checkbox"/> 41 U.S.C. 253(c) ()	23. SUBMIT INVOICES TO ADDRESS SHOWN IN ITEM (4 copies unless otherwise specified)
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24. ADMINISTERED BY (If other than item 7) DCMC SYRACUSE 615 ERIE BLVD WEST SYRACUSE, NY 13204-2408	CODE S3306A	25. PAYMENT WILL BE MADE BY DFAS-COLUMBUS CENTER DFAS-COVUNKER HILL ACCOUNT P.O. BOX 182077 COLUMBUS, OH 43218-2977
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26. NAME OF CONTRACTING OFFICER (Type or print) E. J. MORE	27. UNITED STATES OF AMERICA (Signature of Contracting Officer)	28. AWARD DATE 9-25-00
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NSN 7540-01-152-8064

PREVIOUS EDITION NOT USABLE

33-132

STANDARD FORM 33 (REV. 4-83)
Prescribed by GSA
FAR (48 CFR) 52.214(c)

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

This is a Firm Fixed Price (FFP), Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for all contract line items except line items 0120AC AND 0124 which are Time and Material line items. See Section I for the minimum and maximum quantities clause. This is a ten year ordering period, with pricing for each year. All estimated quantities (EST QTY) represent 25% of the maximum quantity that can be ordered against each CLIN.

YEAR FOUR

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0095	COMSEC UPGRADE KIT - AN/PRC-138B (V) 1				\$860,900
0096	LPI/D PERFORMANCE OPTION - AN/PRC-150(C)				
0096AA	ORDERED CONCURRENTLY WITH CLIN 0097				
0096AB	ORDERED WITHOUT CLIN 0097				
0097	COMSEC RADIO - AN/PRC-150(C)				\$8,010,000
0098	125 W VEHICLE CONFIGURATION/COMPONENTS				
0098AA	VEHICLE INSTALLATION MOUNTING ASSY				\$300,900
0098AB	VEHICLE POWER SUPPLY				\$708,800
0098AC	VEHICLE POWER AMPLIFIER				\$431,300
0098AD	VEHICLE AUTO ANTENNA TUNER				\$614,400
0098AE	VEHICLE HF WHIP ANTENNA				\$115,600
0098AF	VEHICLE HF WHIP ANTENNA MOUNT				\$23,700
0098AG	VEHICLE INSTALLATION CABLES				\$223,700
0099	20W VEHICLE CONFIGURATION W/PA & CPLR ALSO REQUIRING SLIN 0098AF				\$253,180
0100	20W VEHICLE CONFIGURATION WO/PA & CPLR ALSO REQUIRING SLIN 0098AF				\$133,160
0101	150W VEHICLE CONFIGURATION ALSO REQUIRING SLIN 0098AD & 0098AF			(b)(4)	\$340,840
0102	150W BASE STATION CONFIGURATION ALSO REQUIRING SLIN 0098AD				\$700,000
0103	400W BASE STATION CONFIGURATION ALSO REQUIRING SLIN 0098AD				\$830,080
0104	ACCESSORIES				
0104AA	MIL-114A (RS-232) 9 PIN COMPUTER-RDO CABLE				\$18,900
0104AB	ADVANCED DATA CONTROLLER CABLE				\$10,250
0104AC	HF E-MAIL CLIENT SOFTWARE				\$286,550
0104AD	HF E-MAIL GATEWAY SOFTWARE				\$509,400
0104AE	RF-3700H-XX HUIITS SOFTWARE W/CABLE				\$254,700
0104AF	REMOTE PROGRAMMING APPLICATION				\$2,400
0104AG	CABLE, PLGR INTERFACE				\$44,400
0104AH	PRE/POST SELECTOR IN TRANSIT CASE (EXT)				\$334,350
0104AJ	ANTENNA, LONGWIRE - MANPACK				\$71,300
0104AK	ANTENNA, LPI/D				\$59,325

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YEAR FOUR (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0104	ACCESSORIES (CONTINUED)				
0104AL	BATTERY CHARGER				\$263,250
0104AM	VIC-3 INTERFACE KIT				\$32,000
0104AN	PRE/POST SELECTOR INTERNAL				\$143,650
0104AP	AUDIO REMOTE CONTROL W/CABLE				\$177,675
0104AQ	PALM MICROPHONE			(b)(4)	\$3,975
0104AR	HF RADIO/INC/FBCB2 SWITCHBOX				\$4,525
0104AS	DELETION CREDIT - CW LEG KEY				-\$22,800
0105	SPARES AND REPAIR PARTS - MANPACK				
0105AA	MANPACK - (V) 2 - IAW ATTACHMENT 4			(b)(4)	\$186,100
0105AB	INDIVIDUAL LINE ITEMS 0105AB - 0105AW AS REQUIRED IAW ATTACHMENT 4				
0106	SPARES AND REPAIR PARTS - MANPACK				
0106AA	B(V)1 & PRC-150(C) - IAW ATTACHMENT 4A			(b)(4)	\$376,800
0106AB	INDIVIDUAL LINE ITEMS 0106AB - 0106BA AS REQUIRED IAW ATTACHMENT 4A				
0107	SPARES AND REPAIR PARTS - 125 W VEHICLE				
0107AA	FOR AN/PRC-138(V)2 - IAW ATTACHMENT 5			(b)(4)	\$123,870
0107AB	INDIVIDUAL LINE ITEMS 0107AB - 0107BQ AS REQUIRED IAW ATTACHMENT 5				
0108	SPARES AND REPAIR PARTS - 125 W VEHICLE				
0108AA	FOR AN/PRC-150(C) - IAW ATTACHMENT 5A			(b)(4)	\$143,870
0108AB	INDIVIDUAL LINE ITEMS 0108AB - 0108BR AS REQUIRED IAW ATTACHMENT 5A				
0109	SPARES AND REPAIR PARTS - 20 W VEHICLE SYSTEM				
0109AA	FOR 20 W VEHICLE IAW ATTACHMENT 5B			(b)(4)	\$103,130
0109AB	INDIVIDUAL LINE ITEMS 0109AB - 0109AX AS REQUIRED IAW ATTACHMENT 5B				
0110	SPARES AND REPAIR PARTS - 150 W VEHICLE SYSTEM				
0110AA	FOR 150 W VEHICLE IAW ATTACHMENT 5C			(b)(4)	\$217,360
0110AB	INDIVIDUAL LINE ITEMS 0110AB - 0110BV AS REQUIRED IAW ATTACHMENT 5C				
0111	SPARES AND REPAIR PARTS - 150 W BASE STATION				
0111AA	FOR 150 W BASE STATION IAW ATTACHMENT 5D			(b)(4)	\$245,300
0111AB	INDIVIDUAL LINE ITEMS 0111AB - 0111BZ AS REQUIRED IAW ATTACHMENT 5D				
0112	SPARES AND REPAIR PARTS - 400 W BASE STATION				
0112AA	FOR 400W BASE STATION IAW ATTACHMENT 5E			(b)(4)	\$413,510
0112AB	INDIVIDUAL LINE ITEMS 0112AB - 0112CU AS REQUIRED IAW ATTACHMENT 5E				
0113	COMMON USAGE SPARES AND REPAIR PARTS - MANPACK RADIO				
0113AA	MANPACK RADIO IAW ATTACHMENT 6			(b)(4)	\$17,040
0113AB	INDIVIDUAL LINE ITEMS 0113AB - 0113CG REQUIRED IAW ATTACHMENT 6				

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

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YEAR FOUR (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0114	COMMON USEAGE SPARES AND REPAIR PARTS - 125 W VEHICLE				
0114AA	125 W VEHICLE IAW ATTACHMENT 6A			(b)(4)	
0114AB	INDIVIDUAL LINE ITEMS 0114AB - 0114BY AS REQUIRED IAW ATTACHMENT 6A				\$15,120
0115	COMMON USEAGE SPARES AND REPAIR PARTS - 20 W VEHICLE				
0115AA	FOR 20W VEHICLE IAW ATTACHMENT 6B			(b)(4)	
0115AB	INDIVIDUAL LINE ITEMS 0115AB - 0115BE AS REQUIRED IAW ATTACHMENT 6B				\$2,260
0116	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W VEHICLE				
0116AA	FOR 150W VEHICLE IAW ATTACHMENT 6C			(b)(4)	
0116AB	INDIVIDUAL LINE ITEMS 0116AB - 0116BY AS REQUIRED IAW ATTACHMENT 6C				\$5,210
0117	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W BASE STATION				
0117AA	FOR 150W BASE STATION IAW ATTACHMENT 6D			(b)(4)	
0117AB	INDIVIDUAL LINE ITEMS 0117AB - 0117CA AS REQUIRED IAW ATTACHMENT 6D				\$5,240
0118	COMMON USEAGE SPARES AND REPAIR PARTS - 400 W BASE STATION				
0118AA	FOR 400W BASE STATION IAW ATTACHMENT 6E			(b)(4)	
0118AB	INDIVIDUAL LINE ITEMS 0118AB - 0118CD AS REQUIRED IAW ATTACHMENT 6E				\$4,690
0119	MANUALS				
0119AA	INSTALLATION & MAINTENANCE				
0119AB	SPARE OPERATOR MANUALS				\$1,300
0119AC	SPARE OPERATOR MANUAL SUPPLEMENTS				\$2,260
0119AD	MAINTENANCE MANUALS			(b)(4)	\$2,260
0119AE	ELECTRONIC PUBLICATIONS - CD				\$1,250
					\$1,260
0120	MAINTENANCE ACTION, REPAIR OF ONE END ITEM LRU, SRU, OR MODULE				
0120AA	DIAGNOSTIC TEST & EVALUATION				\$3,300
0120AB	PRODUCT SERVICES RATE			(b)(4)	\$13,200
0120AC	PRODUCT MATERIAL				\$13,200
					NTE \$50,000
0121	TRAINING COURSES				
0121AA	OPERATOR - 2 INSTRUCTORS				
0121AB	OPERATOR - 1 INSTRUCTOR				\$76,795
0121AC	MAINTENANCE - 2 INSTRUCTORS			(b)(4)	\$47,125
0121AD	MAINTENANCE - 1 INSTRUCTOR				\$81,020
					\$49,090
0122	TECHNICAL SUPPORT SERVICES				
0122AA	ENGINEERING SUPPORT				\$29,550
0122AB	TECHNICAL/MAINTENANCE SUPPORT				\$31,950
0122AC	VEHICLE INSTALLATION SERVICES				\$135,500
0123	WARRANTY & CLSM REPORT IAW CDRL 0001			(b)(4)	\$0
0124	TRAVEL/ PER DIEM FOR TRAINING AND SUPPORT				\$250,000

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

This is a Firm Fixed Price (FFP), Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for all contract line items except line items 0141AC AND 0145 which are Time and Material line items. See Section I for the minimum and maximum quantities clause. This is a ten year ordering period, with pricing for each year. All estimated quantities (EST QTY) represent 25% of the maximum quantity that can be ordered against each CLIN.

YEAR FIVE

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0125	ACCESSORIES				
0125AA	MIL-114A (RS-232) 9 PIN COMPUTER-RDO CABLE				\$19,450
0125AB	ADVANCED DATA CONTROLLER CABLE				\$10,600
0125AC	HF E-MAIL CLIENT SOFTWARE				\$292,250
0125AD	HF E-MAIL GATEWAY SOFTWARE				\$519,550
0125AE	RF-3700H-XX HUIITS SOFTWARE W/CABLE				\$259,800
0125AF	REMOTE PROGRAMMING APPLICATION				\$2,450
0125AG	CABLE, PLGR INTERFACE				\$45,400
0125AH	PRE/POST SELECTOR IN TRANSIT CASE (EXT)				\$341,050
0125AJ	ANTENNA, LONGWIRE - MANPACK				\$72,700
0125AK	ANTENNA, LP/D		(b)(4)		\$60,525
0125AL	BATTERY CHARGER				\$268,500
0125AM	VIC-3 INTERFACE KIT				\$32,650
0125AN	PRE/POST SELECTOR INTERNAL				\$146,525
0125AP	AUDIO REMOTE CONTRO W/CABLE				\$181,250
0125AQ	PALM MICROPHONE				\$4,050
0125AR	HF RADIO/INC/FBCB2 SWITCHBOX				\$4,625
0126	SPARES AND REPAIR PARTS - MANPACK				
0126AA	MANPACK - (V) 2 - IAW ATTACHMENT 4				\$191,960
0126AB	INDIVIDUAL LINE ITEMS 0126AB - 0126AW AS REQUIRED IAW ATTACHMENT 4				
0127	SPARES AND REPAIR PARTS - MANPACK				
0127AA	B(V)1 & PRC-150(C) - IAW ATTACHMENT 4A		(b)(4)		\$384,340
0127AB	INDIVIDUAL LINE ITEMS 0127AB - 0127BA AS REQUIRED IAW ATTACHMENT 4A				
0128	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0128AA	FOR AN/PRC-138(V)2 - IAW ATTACHMENT 5		(b)(4)		\$126,810
0128AB	INDIVIDUAL LINE ITEMS 0128AB - 0128BQ AS REQUIRED IAW ATTACHMENT 5				
0129	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0129AA	FOR AN/PRC-150(C) - IAW ATTACHMENT 5A		(b)(4)		\$146,750
0129AB	INDIVIDUAL LINE ITEMS 0129AB - 0129BR AS REQUIRED IAW ATTACHMENT 5A				
0130	SPARES AND REPAIR PARTS - 20 W VEHICLE SYSTEM				
0130AA	FOR 20 W VEHICLE IAW ATTACHMENT 5B		(b)(4)		\$105,190
0130AB	INDIVIDUAL LINE ITEMS 0130AB - 0130AX AS REQUIRED IAW ATTACHMENT 5B				
0131	SPARES AND REPAIR PARTS - 150 W VEHICLE SYSTEM				
0131AA	FOR 150 W VEHICLE IAW ATTACHMENT 5C		(b)(4)		\$221,710
0131AB	INDIVIDUAL LINE ITEMS 0131AB - 0131BV AS REQUIRED IAW ATTACHMENT 5C				
0132	SPARES AND REPAIR PARTS - 150 W BASE STATION				
0132AA	FOR 150 W BASE STATION IAW ATTACHMENT 5D		(b)(4)		\$250,210
0132AB	INDIVIDUAL LINE ITEMS 0132AB - 0132BZ AS REQUIRED IAW ATTACHMENT 5D				

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

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YEAR FIVE (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0133	SPARES AND REPAIR PARTS - 400 W BASE STATION				
0133AA	FOR 400W BASE STATION IAW ATTACHMENT 5E			(b)(4)	\$421,780
0133AB	INDIVIDUAL LINE ITEMS 0133AB - 0133CU AS REQUIRED IAW ATTACHMENT 5E				
0134	COMMON USEAGE SPARES AND REPAIR PARTS - MANPACK RADIO				
0134AA	MANPACK RADIO IAW ATTACHMENT 6			(b)(4)	\$17,460
0134AB	INDIVIDUAL LINE ITEMS 0134AB - 0134CG REQUIRED IAW ATTACHMENT 6				
0135	COMMON USEAGE SPARES AND REPAIR PARTS - 125 W VEHICLE				
0135AA	125 W VEHICLE IAW ATTACHMENT 6A			(b)(4)	\$15,420
0135AB	INDIVIDUAL LINE ITEMS 0135AB - 0135BY AS REQUIRED IAW ATTACHMENT 6A				
0136	COMMON USEAGE SPARES AND REPAIR PARTS - 20 W VEHICLE				
0136AA	FOR 20W VEHICLE IAW ATTACHMENT 6B			(b)(4)	\$2,300
0136AB	INDIVIDUAL LINE ITEMS 0136AB - 0136BE AS REQUIRED IAW ATTACHMENT 6B				
0137	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W VEHICLE				
0137AA	FOR 150W VEHICLE IAW ATTACHMENT 6C			(b)(4)	\$5,310
0137AB	INDIVIDUAL LINE ITEMS 0137AB - 0137BY AS REQUIRED IAW ATTACHMENT 6C				
0138	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W BASE STATION				
0138AA	FOR 150W BASE STATION IAW ATTACHMENT 6D			(b)(4)	\$5,340
0138AB	INDIVIDUAL LINE ITEMS 0138AB - 0138CA AS REQUIRED IAW ATTACHMENT 6D				
0139	COMMON USEAGE SPARES AND REPAIR PARTS - 400 W BASE STATION				
0139AA	FOR 400W BASE STATION IAW ATTACHMENT 6E			(b)(4)	\$4,790
0139AB	INDIVIDUAL LINE ITEMS 0139AB - 0139CD AS REQUIRED IAW ATTACHMENT 6E				
0140	MANUALS				
0140AA	INSTALLATION & MAINTENANCE				\$1,325
0140AB	SPARE OPERATOR MANUALS				\$2,260
0140AC	SPARE OPERATOR MANUAL SUPPLEMENTS				\$2,260
0140AD	MAINTENANCE MANUALS				\$1,280
0140AE	ELECTRONIC PUBLICATIONS - CD				\$1,290
0141	MAINTENANCE ACTION, REPAIR OF ONE END ITEM LRU, SRU, OR MODULE				
0141AA	DIAGNOSTIC TEST & EVALUATION			(b)(4)	\$3,400
0141AB	PRODUCT SERVICES RATE				\$13,650
0141AC	PRODUCT MATERIAL				NTE \$50,000
0142	TRAINING COURSES				
0142AA	OPERATOR - 2 INSTRUCTORS				\$79,165
0142AB	OPERATOR - 1 INSTRUCTOR				\$48,065
0142AC	MAINTENANCE - 2 INSTRUCTORS				\$63,515
0142AD	MAINTENANCE - 1 INSTRUCTOR				\$50,075

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

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YEAR FIVE (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0143	TECHNICAL SUPPORT SERVICES				
0143AA	ENGINEERING SUPPORT				\$30,420
0143AB	TECHNICAL/MAINTENANCE SUPPORT				\$32,910
0144	WARRANTY & CLSM REPORT IAW CDRL 0001			(b)(4)	\$0
0145	TRAVEL/ PER DIEM FOR TRAINING AND SUPPORT				\$250,000

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

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YEAR SIX

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0146	ACCESSORIES				
0146AA	MIL-114A (RS-232) 9 PIN COMPUTER-RDO CABLE				\$20,050
0146AB	ADVANCED DATA CONTROLLER CABLE				\$10,900
0146AC	HF E-MAIL CLIENT SOFTWARE				\$298,100
0146AD	HF E-MAIL GATEWAY SOFTWARE				\$529,950
0146AE	RF-3700H-XX HUIITS SOFTWARE W/CABLE				\$265,000
0146AF	REMOTE PROGRAMMING APPLICATION				\$2,500
0146AG	CABLE, PLGR INTERFACE				\$46,200
0146AH	PRE/POST SELECTOR IN TRANSIT CASE (EXT)				\$347,875
0146AJ	ANTENNA, LONGWIRE - MANPACK				\$74,200
0146AK	ANTENNA, LPI/D			(b)(4)	\$61,650
0146AL	BATTERY CHARGER				\$273,900
0146AM	VIC-3 INTERFACE KIT				\$33,300
0146AN	PRE/POST SELECTOR INTERNAL				\$149,475
0146AP	AUDIO REMOTE CONTRO W/CABLE				\$184,875
0146AQ	PALM MICROPHONE				\$4,125
0146AR	HF RADIO/INC/FBCB2 SWITCHBOX				\$4,700
0147	SPARES AND REPAIR PARTS - MANPACK				
0147AA	MANPACK - (V) 2 - IAW ATTACHMENT 4				\$197,380
0147AB	INDIVIDUAL LINE ITEMS 0147AB - 0147AW AS REQUIRED IAW ATTACHMENT 4				
0148	SPARES AND REPAIR PARTS - MANPACK				
0148AA	B(V)1 & PRC-150(C) - IAW ATTACHMENT 4A			(b)(4)	\$392,020
0148AB	INDIVIDUAL LINE ITEMS 0148AB - 0148BA AS REQUIRED IAW ATTACHMENT 4A				
0149	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0149AA	FOR AN/PRC-138(V)2 - IAW ATTACHMENT 5			(b)(4)	\$129,610
0149AB	INDIVIDUAL LINE ITEMS 0149AB - 0149BQ AS REQUIRED IAW ATTACHMENT 5				
0150	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0150AA	FOR AN/PRC-150(C) - IAW ATTACHMENT 5A			(b)(4)	\$149,330
0150AB	INDIVIDUAL LINE ITEMS 0150AB - 0150BR AS REQUIRED IAW ATTACHMENT 5A				
0151	SPARES AND REPAIR PARTS - 20 W VEHICLE SYSTEM				
0151AA	FOR 20 W VEHICLE IAW ATTACHMENT 5B			(b)(4)	\$107,290
0151AB	INDIVIDUAL LINE ITEMS 0151AB - 0151AX AS REQUIRED IAW ATTACHMENT 5B				
0152	SPARES AND REPAIR PARTS - 150 W VEHICLE SYSTEM				
0152AA	FOR 150 W VEHICLE IAW ATTACHMENT 5C			(b)(4)	\$226,140
0152AB	INDIVIDUAL LINE ITEMS 0152AB - 0152BV AS REQUIRED IAW ATTACHMENT 5C				
0153	SPARES AND REPAIR PARTS - 150 W BASE STATION				
0153AA	FOR 150 W BASE STATION IAW ATTACHMENT 5D			(b)(4)	\$255,200
0153AB	INDIVIDUAL LINE ITEMS 0153AB - 0153BZ AS REQUIRED IAW ATTACHMENT 5D				

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

This is a Firm Fixed Price (FFP), Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for all contract line items except line items 0162AC AND 0166 which are Time and Material line items. See Section I for the minimum and maximum quantities clause. This is a ten year ordering period, with pricing for each year. All estimated quantities (EST QTY) represent 25% of the maximum quantity that can be ordered against each CLIN.

YEAR SIX (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0154	SPARES AND REPAIR PARTS - 400 W BASE STATION				
0154AA	FOR 400W BASE STATION IAW ATTACHMENT 5E			(b)(4)	\$430,210
0154AB	INDIVIDUAL LINE ITEMS 0154AB - 0154CU AS REQUIRED IAW ATTACHMENT 5E				
0155	COMMON USEAGE SPARES AND REPAIR PARTS - MANPACK RADIO				
0155AA	MANPACK RADIO IAW ATTACHMENT 6			(b)(4)	\$17,910
0155AB	INDIVIDUAL LINE ITEMS 0155AB - 0155CG REQUIRED IAW ATTACHMENT 6				
0156	COMMON USEAGE SPARES AND REPAIR PARTS - 125 W VEHICLE				
0156AA	125 W VEHICLE IAW ATTACHMENT 6A			(b)(4)	\$15,720
0156AB	INDIVIDUAL LINE ITEMS 0156AB - 156BY AS REQUIRED IAW ATTACHMENT 6A				
0157	COMMON USEAGE SPARES AND REPAIR PARTS - 20 W VEHICLE				
0157AA	FOR 20W VEHICLE IAW ATTACHMENT 6B			(b)(4)	\$2,350
0157AB	INDIVIDUAL LINE ITEMS 0157AB - 0157BE AS REQUIRED IAW ATTACHMENT 6B				
0158	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W VEHICLE				
0158AA	FOR 150W VEHICLE IAW ATTACHMENT 6C			(b)(4)	\$5,420
0158AB	INDIVIDUAL LINE ITEMS 0158AB - 0158BY AS REQUIRED IAW ATTACHMENT 6C				
0159	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W BASE STATION				
0159AA	FOR 150W BASE STATION IAW ATTACHMENT 6D			(b)(4)	\$5,450
0159AB	INDIVIDUAL LINE ITEMS 0159AB - 0159CA AS REQUIRED IAW ATTACHMENT 6D				
0160	COMMON USEAGE SPARES AND REPAIR PARTS - 400 W BASE STATION				
0160AA	FOR 400W BASE STATION IAW ATTACHMENT 6E			(b)(4)	\$4,880
0160AB	INDIVIDUAL LINE ITEMS 0160AB - 0160CD AS REQUIRED IAW ATTACHMENT 6E				
0161	MANUALS				
0161AA	INSTALLATION & MAINTENANCE				\$1,350
0161AB	SPARE OPERATOR MANUALS				\$2,330
0161AC	SPARE OPERATOR MANUAL SUPPLEMENTS			(b)(4)	\$2,330
0161AD	MAINTENANCE MANUALS				\$1,300
0161AE	ELECTRONIC PUBLICATIONS - CD				\$1,310
0162	MAINTENANCE ACTION, REPAIR OF ONE END ITEM LRU, SRU, OR MODULE				
0162AA	DIAGNOSTIC TEST & EVALUATION				\$3,500
0162AB	PRODUCT SERVICES RATE			(b)(4)	\$13,950
0162AC	PRODUCT MATERIAL				NTE \$50,000
0163	TRAINING COURSES				
0163AA	OPERATOR - 2 INSTRUCTORS				\$81,735
0163AB	OPERATOR - 1 INSTRUCTOR				\$49,025
0163AC	MAINTENANCE - 2 INSTRUCTORS			(b)(4)	\$86,210
0163AD	MAINTENANCE - 1 INSTRUCTOR				\$51,075

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

This is a Firm Fixed Price (FFP), Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for all contract line items except line items 0162AC AND 0166 which are Time and Material line items. See Section I for the minimum and maximum quantities clause. This is a ten year ordering period, with pricing for each year. All estimated quantities (EST QTY) represent 25% of the maximum quantity that can be ordered against each CLIN.

YEAR SIX (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0164	TECHNICAL SUPPORT SERVICES				
0164AA	ENGINEERING SUPPORT				\$31,350
0164AB	TECHNICAL/MAINTENANCE SUPPORT				\$33,900
0165	WARRANTY & CLSM REPORT IAW CDRL 0001			(b)(4)	\$0
0166	TRAVEL/ PER DIEM FOR TRAINING AND SUPPORT				\$50,000

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

This is a Firm Fixed Price (FFP), Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for all contract line items except line items 0183AC AND 0187 which are Time and Material line items. See Section I for the minimum and maximum quantities clause. This is a ten year ordering period, with pricing for each year. All estimated quantities (EST QTY) represent 25% of the maximum quantity that can be ordered against each CLIN.

YEAR SEVEN

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0167	ACCESSORIES				
0167AA	MIL-114A (RS-232) 9 PIN COMPUTER-RDO CABLE	(b)(4)			\$20,650
0167AB	ADVANCED DATA CONTROLLER CABLE				\$11,200
0167AC	HF E-MAIL CLIENT SOFTWARE				\$304,050
0167AD	HF E-MAIL GATEWAY SOFTWARE				\$540,550
0167AE	RF-3700H-XX HUIITS SOFTWARE W/CABLE				\$270,300
0167AF	REMOTE PROGRAMMING APPLICATION				\$2,550
0167AG	CABLE, PLGR INTERFACE				\$47,200
0167AH	PRE/POST SELECTOR IN TRANSIT CASE (EXT)				\$354,825
0167AJ	ANTENNA, LONGWIRE - MANPACK				\$75,700
0167AK	ANTENNA, LP/D				\$62,925
0167AL	BATTERY CHARGER				\$279,375
0167AM	VIC-3 INTERFACE KIT				\$33,950
0167AN	PRE/POST SELECTOR INTERNAL				\$152,450
0167AP	AUDIO REMOTE CONTRO W/CABLE				\$188,550
0167AQ	PALM MICROPHONE				\$4,225
0167AR	HF RADIO/INC/FBCB2 SWITCHBOX	\$4,800			
0168	SPARES AND REPAIR PARTS - MANPACK				
0168AA	MANPACK - (V) 2 - IAW ATTACHMENT 4	(b)(4)			\$202,960
0168AB	INDIVIDUAL LINE ITEMS 0168AB - 0168AW AS REQUIRED IAW ATTACHMENT 4				
0169	SPARES AND REPAIR PARTS - MANPACK				
0169AA	B(V)1 & PRC-150(C) - IAW ATTACHMENT 4A	(b)(4)			\$399,860
0169AB	INDIVIDUAL LINE ITEMS 0169AB - 0169BA AS REQUIRED IAW ATTACHMENT 4A				
0170	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0170AA	FOR AN/PRC-138(V)2 - IAW ATTACHMENT 5	(b)(4)			\$132,480
0170AB	INDIVIDUAL LINE ITEMS 0170AB - 0170BQ AS REQUIRED IAW ATTACHMENT 5				
0171	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0171AA	FOR AN/PRC-150(C) - IAW ATTACHMENT 5A	(b)(4)			\$152,680
0171AB	INDIVIDUAL LINE ITEMS 0171AB - 0171BR AS REQUIRED IAW ATTACHMENT 5A				
0172	SPARES AND REPAIR PARTS - 20 W VEHICLE SYSTEM				
0172AA	FOR 20 W VEHICLE IAW ATTACHMENT 5B	(b)(4)			\$109,440
0172AB	INDIVIDUAL LINE ITEMS 0172AB - 0172AX AS REQUIRED IAW ATTACHMENT 5B				
0173	SPARES AND REPAIR PARTS - 150 W VEHICLE SYSTEM				
0173AA	FOR 150 W VEHICLE IAW ATTACHMENT 5C	(b)(4)			\$230,670
0173AB	INDIVIDUAL LINE ITEMS 0173AB - 0173BV AS REQUIRED IAW ATTACHMENT 5C				
0174	SPARES AND REPAIR PARTS - 150 W BASE STATION				
0174AA	FOR 150 W BASE STATION IAW ATTACHMENT 5D	(b)(4)			\$260,310
0174AB	INDIVIDUAL LINE ITEMS 0174AB - 0174BZ AS REQUIRED IAW ATTACHMENT 5D				

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

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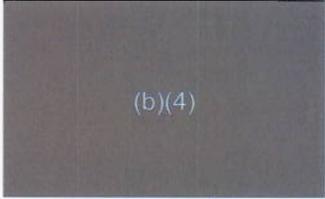
YEAR SEVEN (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0175	SPARES AND REPAIR PARTS - 400 W BASE STATION				
0175AA	FOR 400W BASE STATION IAW ATTACHMENT 5E			(b)(4)	
0175AB	INDIVIDUAL LINE ITEMS 0175AB - 0175CU AS REQUIRED IAW ATTACHMENT 5E				\$438,820
0176	COMMON USEAGE SPARES AND REPAIR PARTS - MANPACK RADIO				
0176AA	MANPACK RADIO IAW ATTACHMENT 6			(b)(4)	
0176AB	INDIVIDUAL LINE ITEMS 0176AB - 0176CG REQUIRED IAW ATTACHMENT 6				\$18,360
0177	COMMON USEAGE SPARES AND REPAIR PARTS - 125 W VEHICLE				
0177AA	125 W VEHICLE IAW ATTACHMENT 6A			(b)(4)	
0177AB	INDIVIDUAL LINE ITEMS 0177AB - 0177BY AS REQUIRED IAW ATTACHMENT 6A				\$16,050
0178	COMMON USEAGE SPARES AND REPAIR PARTS - 20 W VEHICLE				
0178AA	FOR 20W VEHICLE IAW ATTACHMENT 6B			(b)(4)	
0178AB	INDIVIDUAL LINE ITEMS 0178AB - 0178BE AS REQUIRED IAW ATTACHMENT 6B				\$2,400
0179	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W VEHICLE				
0179AA	FOR 150W VEHICLE IAW ATTACHMENT 6C			(b)(4)	
0179AB	INDIVIDUAL LINE ITEMS 0179AB - 0179BY AS REQUIRED IAW ATTACHMENT 6C				\$5,530
0180	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W BASE STATION				
0180AA	FOR 150W BASE STATION IAW ATTACHMENT 6D			(b)(4)	
0180AB	INDIVIDUAL LINE ITEMS 0180AB - 0180CA AS REQUIRED IAW ATTACHMENT 6D				\$5,560
0181	COMMON USEAGE SPARES AND REPAIR PARTS - 400 W BASE STATION				
0181AA	FOR 400W BASE STATION IAW ATTACHMENT 6E			(b)(4)	
0181AB	INDIVIDUAL LINE ITEMS 0181AB - 0181CD AS REQUIRED IAW ATTACHMENT 6E				\$4,980
0182	MANUALS				
0182AA	INSTALLATION & MAINTENANCE				\$1,375
0182AB	SPARE OPERATOR MANUALS				\$2,400
0182AC	SPARE OPERATOR MANUAL SUPPLEMENTS				\$2,400
0182AD	MAINTENANCE MANUALS				\$1,330
0182AE	ELECTRONIC PUBLICATIONS - CD				\$1,340
0183	MAINTENANCE ACTION, REPAIR OF ONE END ITEM				
	LRU, SRU, OR MODULE				
0183AA	DIAGNOSTIC TEST & EVALUATION				\$3,600
0183AB	PRODUCT SERVICES RATE				\$14,400
0183AC	PRODUCT MATERIAL			(b)(4)	NTE \$50,000
0184	TRAINING COURSES				
0184AA	OPERATOR - 2 INSTRUCTORS				\$84,185
0184AB	OPERATOR - 1 INSTRUCTOR				\$50,005
0184AB	MAINTENANCE - 2 INSTRUCTORS				\$88,795
0184AC	MAINTENANCE - 1 INSTRUCTOR				\$52,095

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

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YEAR SEVEN (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0185	TECHNICAL SUPPORT SERVICES			(b)(4)	
0185AA	ENGINEERING SUPPORT				\$32,280
0185AB	TECHNICAL/MAINTENANCE SUPPORT				\$34,920
0186	WARRANTY & CLSM REPORT IAW CDRL 0001				\$0
0187	TRAVEL/ PER DIEM FOR TRAINING AND SUPPORT				\$50,000

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

This is a Firm Fixed Price (FFP), Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for all contract line items except line items 0204AC AND 0208 which are Time and Material line items. See Section I for the minimum and maximum quantities clause. This is a ten year ordering period, with pricing for each year. All estimated quantities (EST QTY) represent 25% of the maximum quantity that can be ordered against each CLIN.

YEAR EIGHT

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0188	ACCESSORIES				
0188AA	MIL-114A (RS-232) 9 PIN COMPUTER-RDO CABLE				\$21,300
0188AB	ADVANCED DATA CONTROLLER CABLE				\$11,550
0188AC	HF E-MAIL CLIENT SOFTWARE				\$310,150
0188AD	HF E-MAIL GATEWAY SOFTWARE				\$551,350
0188AE	RF-3700H-XX HUIITS SOFTWARE W/CABLE				\$275,700
0188AF	REMOTE PROGRAMMING APPLICATION				\$2,600
0188AG	CABLE, PLGR INTERFACE				\$48,200
0188AH	PRE/POST SELECTOR IN TRANSIT CASE (EXT)				\$361,925
0188AJ	ANTENNA, LONGWIRE - MANPACK			(b)(4)	\$77,200
0188AK	ANTENNA, LPI/D				\$64,200
0188AL	BATTERY CHARGER				\$284,925
0188AM	VIC-3 INTERFACE KIT				\$34,650
0188AN	PRE/POST SELECTOR INTERNAL				\$155,500
0188AP	AUDIO REMOTE CONTRO W/CABLE				\$192,325
0188AQ	PALM MICROPHONE				\$4,300
0188AR	HF RADIO/INC/FBCB2 SWITCHBOX				\$4,900
0189	SPARES AND REPAIR PARTS - MANPACK				
0189AA	MANPACK - (V) 2 - IAW ATTACHMENT 4			(b)(4)	\$208,700
0189AB	INDIVIDUAL LINE ITEMS 0189AB - 0189AW AS REQUIRED IAW ATTACHMENT 4				
0190	SPARES AND REPAIR PARTS - MANPACK				
0190AA	B(V)1 & PRC-150(C) - IAW ATTACHMENT 4A			(b)(4)	\$407,860
0190AB	INDIVIDUAL LINE ITEMS 0190AB - 0190BA AS REQUIRED IAW ATTACHMENT 4A				
0191	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0191AA	FOR AN/PRC-138(V)2 - IAW ATTACHMENT 5			(b)(4)	\$135,400
0191AB	INDIVIDUAL LINE ITEMS 0191AB - 0191BQ AS REQUIRED IAW ATTACHMENT 5				
0192	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0192AA	FOR AN/PRC-150(C) - IAW ATTACHMENT 5A			(b)(4)	\$155,730
0192AB	INDIVIDUAL LINE ITEMS 0192AB - 0192BR AS REQUIRED IAW ATTACHMENT 5A				
0193	SPARES AND REPAIR PARTS - 20 W VEHICLE SYSTEM				
0193AA	FOR 20 W VEHICLE IAW ATTACHMENT 5B			(b)(4)	\$111,630
0193AB	INDIVIDUAL LINE ITEMS 0193AB - 0193AX AS REQUIRED IAW ATTACHMENT 5B				
0194	SPARES AND REPAIR PARTS - 150 W VEHICLE SYSTEM				
0194AA	FOR 150 W VEHICLE IAW ATTACHMENT 5C			(b)(4)	\$235,280
0194AB	INDIVIDUAL LINE ITEMS 0194AB - 0194BV AS REQUIRED IAW ATTACHMENT 5C				
0195	SPARES AND REPAIR PARTS - 150 W BASE STATION				
0195AA	FOR 150 W BASE STATION IAW ATTACHMENT 5D			(b)(4)	\$265,520
01950AB	INDIVIDUAL LINE ITEMS 0195AB - 0195BZ AS REQUIRED IAW ATTACHMENT 5D				

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

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YEAR EIGHT (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0196	SPARES AND REPAIR PARTS - 400 W BASE STATION				
0196AA	FOR 400W BASE STATION IAW ATTACHMENT 5E			(b)(4)	\$447,590
0196AB	INDIVIDUAL LINE ITEMS 0196AB - 0196CU AS REQUIRED IAW ATTACHMENT 5E				
0197	COMMON USEAGE SPARES AND REPAIR PARTS - MANPACK RADIO				
0197AA	MANPACK RADIO IAW ATTACHMENT 6			(b)(4)	\$18,840
0197AB	INDIVIDUAL LINE ITEMS 0197AB - 0197CG REQUIRED IAW ATTACHMENT 6.				
0198	COMMON USEAGE SPARES AND REPAIR PARTS - 125 W VEHICLE				
0198AA	125 W VEHICLE IAW ATTACHMENT 6A			(b)(4)	\$16,380
0198AB	INDIVIDUAL LINE ITEMS 0198AB - 0198BY AS REQUIRED IAW ATTACHMENT 6A				
0199	COMMON USEAGE SPARES AND REPAIR PARTS - 20 W VEHICLE				
0199AA	FOR 20W VEHICLE IAW ATTACHMENT 6B			(b)(4)	\$2,440
0199AB	INDIVIDUAL LINE ITEMS 0199AB - 0199BE AS REQUIRED IAW ATTACHMENT 6B				
0200	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W VEHICLE				
0200AA	FOR 150W VEHICLE IAW ATTACHMENT 6C			(b)(4)	\$5,640
0200AB	INDIVIDUAL LINE ITEMS 0200AB - 0200BY AS REQUIRED IAW ATTACHMENT 6C				
0201	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W BASE STATION				
0201AA	FOR 150W BASE STATION IAW ATTACHMENT 6D			(b)(4)	\$5,670
0201AB	INDIVIDUAL LINE ITEMS 0201AB - 0201CA AS REQUIRED IAW ATTACHMENT 6D				
0202	COMMON USEAGE SPARES AND REPAIR PARTS - 400 W BASE STATION				
0202AA	FOR 400W BASE STATION IAW ATTACHMENT 6E			(b)(4)	\$5,080
0202AB	INDIVIDUAL LINE ITEMS 0202AB - 0202CD AS REQUIRED IAW ATTACHMENT 6E				
0203	MANUALS				
0203AA	INSTALLATION & MAINTENANCE				\$1,400
0203AB	SPARE OPERATOR MANUALS				\$2,470
0203AC	SPARE OPERATOR MANUAL SUPPLEMENTS				\$2,470
0203AD	MAINTENANCE MANUALS				\$1,360
0203AE	ELECTRONIC PUBLICATIONS - CD				\$1,370
0204	MAINTENANCE ACTION, REPAIR OF ONE END ITEM				
	LRU, SRU, OR MODULE				
0204AA	DIAGNOSTIC TEST & EVALUATION			(b)(4)	\$3,675
0204AB	PRODUCT SERVICES RATE				\$14,700
0204AC	PRODUCT MATERIAL				NTE \$50,000
0205	TRAINING COURSES				
0205AA	OPERATOR - 2 INSTRUCTORS				\$86,710
0205AB	OPERATOR - 1 INSTRUCTOR				\$51,005
0205AC	MAINTENANCE - 2 INSTRUCTORS				\$91,460
0205AD	MAINTENANCE - 1 INSTRUCTOR				\$53,140

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

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YEAR EIGHT (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0206	TECHNICAL SUPPORT SERVICES				
0206AA	ENGINEERING SUPPORT				\$33,240
0206AB	TECHNICAL/MAINTENANCE SUPPORT				\$35,970
0207	WARRANTY & CLSM REPORT IAW CDRL 0001			(b)(4)	\$0
0208	TRAVEL/ PER DIEM FOR TRAINING AND SUPPORT				\$50,000

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

This is a Firm Fixed Price (FFP), Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for all contract line items except line items 0225AC AND 0229 which are Time and Material line items. See Section I for the minimum and maximum quantities clause. This is a ten year ordering period, with pricing for each year. All estimated quantities (EST QTY) represent 25% of the maximum quantity that can be ordered against each CLIN.

YEAR NINE

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0209	ACCESSORIES				
0209AA	MIL-114A (RS-232) 9 PIN COMPUTER-RDO CABLE	(b)(4)			\$21,900
0209AB	ADVANCED DATA CONTROLLER CABLE		\$11,900		
0209AC	HF E-MAIL CLIENT SOFTWARE		\$316,350		
0209AD	HF E-MAIL GATEWAY SOFTWARE		\$562,400		
0209AE	RF-3700H-XX HUIITS SOFTWARE W/CABLE		\$281,200		
0209AF	REMOTE PROGRAMMING APPLICATION		\$2,650		
0209AG	CABLE, PLGR INTERFACE		\$49,000		
0209AH	PRE/POST SELECTOR IN TRANSIT CASE (EXT)		\$369,150		
0209AJ	ANTENNA, LONGWIRE - MANPACK		\$78,700		
0209AK	ANTENNA, LPI/D		\$65,475		
0209AL	BATTERY CHARGER		\$290,625		
0209AM	VIC-3 INTERFACE KIT		\$35,350		
0209AN	PRE/POST SELECTOR INTERNAL		\$158,625		
0209AP	AUDIO REMOTE CONTRO W/CABLE		\$196,175		
0209AQ	PALM MICROPHONE	\$4,375			
0209AR	HF RADIO/INC/FBCB2 SWITCHBOX	\$5,000			
0210	SPARES AND REPAIR PARTS - MANPACK				
0210AA	MANPACK - (V) 2 - IAW ATTACHMENT 4	(b)(4)			\$214,600
0210AB	INDIVIDUAL LINE ITEMS 210AB - 210AW AS REQUIRED IAW ATTACHMENT 4				
0211	SPARES AND REPAIR PARTS - MANPACK				
0211AA	B(V)1 & PRC-150(C) - IAW ATTACHMENT 4A	(b)(4)			\$416,020
0211AB	INDIVIDUAL LINE ITEMS 0211AB - 0211BA AS REQUIRED IAW ATTACHMENT 4A				
0212	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0212AA	FOR AN/PRC-138(V)2 - IAW ATTACHMENT 5	(b)(4)			\$138,400
0212AB	INDIVIDUAL LINE ITEMS 0212AB - 0212BQ AS REQUIRED IAW ATTACHMENT 5				
0213	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0213AA	FOR AN/PRC-150(C) - IAW ATTACHMENT 5A	(b)(4)			\$158,840
0213AB	INDIVIDUAL LINE ITEMS 0213AB - 0213BR AS REQUIRED IAW ATTACHMENT 5A				
0214	SPARES AND REPAIR PARTS - 20 W VEHICLE SYSTEM				
0214AA	FOR 20 W VEHICLE IAW ATTACHMENT 5B	(b)(4)			\$113,860
0214AB	INDIVIDUAL LINE ITEMS 0214AB - 0214AX AS REQUIRED IAW ATTACHMENT 5B				
0215	SPARES AND REPAIR PARTS - 150 W VEHICLE SYSTEM				
0215AA	FOR 150 W VEHICLE IAW ATTACHMENT 5C	(b)(4)			\$239,980
0215AB	INDIVIDUAL LINE ITEMS 0215AB - 0215BV AS REQUIRED IAW ATTACHMENT 5C				
0216	SPARES AND REPAIR PARTS - 150 W BASE STATION				
0216AA	FOR 150 W BASE STATION IAW ATTACHMENT 5D	(b)(4)			\$270,830
0216AB	INDIVIDUAL LINE ITEMS 0216AB - 0216BZ AS REQUIRED IAW ATTACHMENT 5D				

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

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YEAR NINE (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0217	SPARES AND REPAIR PARTS - 400 W BASE STATION				
0217AA	FOR 400W BASE STATION IAW ATTACHMENT 5E			(b)(4)	\$456,550
0217AB	INDIVIDUAL LINE ITEMS 0217AB - 0217CU AS REQUIRED IAW ATTACHMENT 5E				
0218	COMMON USEAGE SPARES AND REPAIR PARTS - MANPACK RADIO				
0218AA	MANPACK RADIO IAW ATTACHMENT 6			(b)(4)	\$19,290
0218AB	INDIVIDUAL LINE ITEMS 0218AB - 0218CG REQUIRED IAW ATTACHMENT 6				
0219	COMMON USEAGE SPARES AND REPAIR PARTS - 125 W VEHICLE				
0219AA	125 W VEHICLE IAW ATTACHMENT 6A			(b)(4)	\$16,710
0219AB	INDIVIDUAL LINE ITEMS 0219AB - 0219BY AS REQUIRED IAW ATTACHMENT 6A				
0220	COMMON USEAGE SPARES AND REPAIR PARTS - 20 W VEHICLE				
0220AA	FOR 20W VEHICLE IAW ATTACHMENT 6B			(b)(4)	\$2,490
0220AB	INDIVIDUAL LINE ITEMS 0220AB - 0220BE AS REQUIRED IAW ATTACHMENT 6B				
0221	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W VEHICLE				
0221AA	FOR 150W VEHICLE IAW ATTACHMENT 6C			(b)(4)	\$5,750
0221AB	INDIVIDUAL LINE ITEMS 0221AB - 0221BY AS REQUIRED IAW ATTACHMENT 10C				
0222	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W BASE STATION				
0222AA	FOR 150W BASE STATION IAW ATTACHMENT 6D			(b)(4)	\$5,790
0222AB	INDIVIDUAL LINE ITEMS 0222AB - 0222CA AS REQUIRED IAW ATTACHMENT 6D				
0223	COMMON USEAGE SPARES AND REPAIR PARTS - 400 W BASE STATION				
0223AA	FOR 400W BASE STATION IAW ATTACHMENT 6E			(b)(4)	\$5,180
0223AB	INDIVIDUAL LINE ITEMS 0223AB - 0223CD AS REQUIRED IAW ATTACHMENT 6E				
0224	MANUALS				
0224AA	INSTALLATION & MAINTENANCE				\$1,425
0224AB	SPARE OPERATOR MANUALS				\$2,540
0224AC	SPARE OPERATOR MANUAL SUPPLEMENTS				\$2,540
0224AD	MAINTENANCE MANUALS				\$1,380
0224AE	ELECTRONIC PUBLICATIONS - CD				\$1,390
0225	MAINTENANCE ACTION, REPAIR OF ONE END ITEM LRU, SRU, OR MODULE				
0225AA	DIAGNOSTIC TEST & EVALUATION			(b)(4)	\$3,775
0225AB	PRODUCT SERVICES RATE				\$15,150
0225AC	PRODUCT MATERIAL				NTE \$50,000
0226	TRAINING COURSES				
0226AA	OPERATOR - 2 INSTRUCTORS				\$89,310
0226AB	OPERATOR - 1 INSTRUCTOR				\$52,030
0226AC	MAINTENANCE - 2 INSTRUCTORS				\$94,200
0226AD	MAINTENANCE - 1 INSTRUCTOR				\$54,200

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

This is a Firm Fixed Price (FFP), Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for all contract line items except line items 0225AC AND 0229 which are Time and Material line items. See Section I for the minimum and maximum quantities clause. This is a ten year ordering period, with pricing for each year. All estimated quantities (EST QTY) represent 25% of the maximum quantity that can be ordered against each CLIN.

YEAR NINE (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0227	TECHNICAL SUPPORT SERVICES				
0227AA	ENGINEERING SUPPORT				\$33,930
0227AB	TECHNICAL/MAINTENANCE SUPPORT				\$37,050
0228	WARRANTY & CLSM REPORT IAW CDRL 0001			(b)(4)	\$0
0229	TRAVEL/ PER DIEM FOR TRAINING AND SUPPORT				\$50,000

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

This is a Firm Fixed Price (FFP), Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for all contract line items except line items 0246AC AND 0250 which are Time and Material line items. See Section I for the minimum and maximum quantities clause. This is a ten year ordering period, with pricing for each year. All estimated quantities (EST QTY) represent 25% of the maximum quantity that can be ordered against each CLIN.

YEAR TEN

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0230	ACCESSORIES				
0230AA	MIL-114A (RS-232) 9 PIN COMPUTER-RDO CABLE				\$22,550
0230AB	ADVANCED DATA CONTROLLER CABLE				\$12,250
0230AC	HF E-MAIL CLIENT SOFTWARE				\$322,700
0230AD	HF E-MAIL GATEWAY SOFTWARE				\$573,650
0230AE	RF-3700H-XX HUIITS SOFTWARE W/CABLE				\$286,800
0230AF	REMOTE PROGRAMMING APPLICATION				\$2,700
0230AG	CABLE, PLGR INTERFACE				\$50,000
0230AH	PRE/POST SELECTOR IN TRANSIT CASE (EXT)				\$376,550
0230AJ	ANTENNA, LONGWIRE - MANPACK				\$80,300
0230AK	ANTENNA, LP/D			(b)(4)	\$66,750
0230AL	BATTERY CHARGER				\$296,475
0230AM	VIC-3 INTERFACE KIT				\$36,050
0230AN	PRE/POST SELECTOR INTERNAL				\$161,775
0230AP	AUDIO REMOTE CONTROL W/CABLE				\$200,100
0230AQ	PALM MICROPHONE				\$4,475
0230AR	HF RADIO/INC/FBCB2 SWITCHBOX				\$5,100
0231	SPARES AND REPAIR PARTS - MANPACK				
0231AA	MANPACK - (V) 2 - IAW ATTACHMENT 4				\$220,680
0231AB	INDIVIDUAL LINE ITEMS 0231AB - 0231AW AS REQUIRED IAW ATTACHMENT 4				
0232	SPARES AND REPAIR PARTS - MANPACK				
0232AA	B(V)1 & PRC-150(C) - IAW ATTACHMENT 4A			(b)(4)	\$424,340
0232AB	INDIVIDUAL LINE ITEMS 0232AB - 0232BA AS REQUIRED IAW ATTACHMENT 4A				
0233	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0233AA	FOR AN/PRC-138(V)2 - IAW ATTACHMENT 5			(b)(4)	\$141,450
0233AB	INDIVIDUAL LINE ITEMS 0233AB - 0233BQ AS REQUIRED IAW ATTACHMENT 5				
0234	SPARES AND REPAIR PARTS - 125 W VEHICLE SYSTEM				
0234AA	FOR AN/PRC-150(C) - IAW ATTACHMENT 5A			(b)(4)	\$161,630
0234AB	INDIVIDUAL LINE ITEMS 0234AB - 0234BR AS REQUIRED IAW ATTACHMENT 5A				
0235	SPARES AND REPAIR PARTS - 20 W VEHICLE SYSTEM				
0235AA	FOR 20 W VEHICLE IAW ATTACHMENT 5B			(b)(4)	\$116,140
0235AB	INDIVIDUAL LINE ITEMS 0235AB - 0235BV AS REQUIRED IAW ATTACHMENT 5B				
0236	SPARES AND REPAIR PARTS - 150 W VEHICLE SYSTEM				
0236AA	FOR 150 W VEHICLE IAW ATTACHMENT 5C			(b)(4)	\$244,790
0236AB	INDIVIDUAL LINE ITEMS 0236AB - 0236BV AS REQUIRED IAW ATTACHMENT 5C				
0237	SPARES AND REPAIR PARTS - 150 W BASE STATION				
0237AA	FOR 150 W BASE STATION IAW ATTACHMENT 5D			(b)(4)	\$276,250
0237AB	INDIVIDUAL LINE ITEMS 0237AB - 0237BZ AS REQUIRED IAW ATTACHMENT 5D				

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

This is a Firm Fixed Price (FFP), Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for all contract line items except line items 0246AC AND 0250 which are Time and Material line items. See Section I for the minimum and maximum quantities clause. This is a ten year ordering period, with pricing for each year. All estimated quantities (EST QTY) represent 25% of the maximum quantity that can be ordered against each CLIN.

YEAR TEN (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0238	SPARES AND REPAIR PARTS - 400 W BASE STATION				
0238AA	FOR 400W BASE STATION IAW ATTACHMENT 5E			(b)(4)	
0238AB	INDIVIDUAL LINE ITEMS 0238AB - 0238CU AS REQUIRED IAW ATTACHMENT 5E				\$465,680
0239	COMMON USEAGE SPARES AND REPAIR PARTS - MANPACK RADIO				
0239AA	MANPACK RADIO IAW ATTACHMENT 6			(b)(4)	
0239AB	INDIVIDUAL LINE ITEMS 0239AB - 0239CG REQUIRED IAW ATTACHMENT 6				\$19,770
0240	COMMON USEAGE SPARES AND REPAIR PARTS - 125 W VEHICLE				
0240AA	125 W VEHICLE IAW ATTACHMENT 6A			(b)(4)	
0240AB	INDIVIDUAL LINE ITEMS 0240AB - 0240BY AS REQUIRED IAW ATTACHMENT 6A				\$17,040
0241	COMMON USEAGE SPARES AND REPAIR PARTS - 20 W VEHICLE				
0241AA	FOR 20W VEHICLE IAW ATTACHMENT 6B			(b)(4)	
0241AB	INDIVIDUAL LINE ITEMS 0241AB - 0241BE AS REQUIRED IAW ATTACHMENT 6B				\$2,540
0242	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W VEHICLE				
0242AA	FOR 150W VEHICLE IAW ATTACHMENT 6C			(b)(4)	
0242AB	INDIVIDUAL LINE ITEMS 0242AB - 0242BY AS REQUIRED IAW ATTACHMENT 6C				\$5,870
0243	COMMON USEAGE SPARES AND REPAIR PARTS - 150 W BASE STATION				
0243AA	FOR 150W BASE STATION IAW ATTACHMENT 6D			(b)(4)	
0243AB	INDIVIDUAL LINE ITEMS 0243 AB - 0243CA AS REQUIRED IAW ATTACHMENT 6D				\$5,900
0244	COMMON USEAGE SPARES AND REPAIR PARTS - 400 W BASE STATION				
0244AA	FOR 400W BASE STATION IAW ATTACHMENT 6E			(b)(4)	
0244AB	INDIVIDUAL LINE ITEMS 0244AB - 0244CD AS REQUIRED IAW ATTACHMENT 6E				\$5,290
0245	MANUALS				
0245AA	INSTALLATION & MAINTENANCE				\$1,475
0245AB	SPARE OPERATOR MANUALS				\$2,620
0245AC	SPARE OPERATOR MANUAL SUPPLEMENTS				\$2,620
0245AD	MAINTENANCE MANUALS				\$1,410
0245AE	ELECTRONIC PUBLICATIONS - CD				\$1,420
0246	MAINTENANCE ACTION, REPAIR OF ONE END ITEM				
	LRU, SRU, OR MODULE				
0246AA	DIAGNOSTIC TEST & EVALUATION			(b)(4)	\$3,875
0246AB	PRODUCT SERVICES RATE				\$15,450
0246AC	PRODUCT MATERIAL				NTE \$50,000
0247	TRAINING COURSES				
0247AA	OPERATOR - 2 INSTRUCTORS				\$91,990
0247AB	OPERATOR - 1 INSTRUCTOR				\$53,070
0247AC	MAINTENANCE - 2 INSTRUCTORS				\$97,030
0247AD	MAINTENANCE - 1 INSTRUCTOR				\$55,285

ISHMRS II SECTION B SUPPLIES/SERVICES AND PRICES

This is a Firm Fixed Price (FFP), Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for all contract line items except line items 0246AC AND 0250 which are Time and Material line items. See Section I for the minimum and maximum quantities clause. This is a ten year ordering period, with pricing for each year. All estimated quantities (EST QTY) represent 25% of the maximum quantity that can be ordered against each CLIN.

YEAR TEN (CONTINUED)

LINE ITEM	SUPPLIES	EST QTY	UNIT	PRICE	AMOUNT
0248	TECHNICAL SUPPORT SERVICES				*
0248AA	ENGINEERING SUPPORT				\$35,280
0248AB	TECHNICAL/MAINTENANCE SUPPORT				\$38,160
0249	WARRANTY & CLSM REPORT IAW CDRL 0001			(b)(4)	\$0
0250	TRAVEL/ PER DIEM FOR TRAINING AND SUPPORT				\$50,000

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SECTION C Description/Specifications/Work Statement

The contractor shall provide Improved SOF HF Manpack Radio Systems (ISHMRS) and associated support in accordance with Section J, Attachment 4, Statement of work entitled Improved SOF HF Manpack Radio Systems (ISHMRS) dated 20 September 2000.

SECTION D Packaging and Marking

CLAUSES INCORPORATED BY FULL TEXT

Packaging and Marking -- F.O.B. Destination (1998)

The shipping, address, contract number, device number, and any other "MARK FOR" information shall be clearly marked on the outside of all packages shipped under this contract. Information shall be easily identified without opening the package. This information shall also be included on the inside of all packages.

5652.246-9000 Markings of Warranted Items (1998)

Each item covered by a warranty shall be stamped or marked with contract number, item description, ship to address. Items shall also include markings that state (i) the existence and substance of the warranty, (ii) the warranty duration, and (iii) who to notify if supplies are found to be defective. Where this is impractical, written notice shall be attached to or furnished with the warranted item.

SECTION E Inspection and Acceptance

CLAUSES INCORPORATED BY REFERENCE:

52.246-2	Inspection Of Supplies--Fixed Price	AUG 1996
52.246-4	Inspection Of Services -- Fixed Price	AUG 1996
52.246-16	Responsibility For-Supplies	APR 1984

CLAUSES INCORPORATED BY FULL TEXT

Material Inspection and Receiving Reports (DD 250) Mailing Addresses (1998)
Material Inspection and Receiving Reports shall be mailed in accordance with DFAR
252.246-7000 to the following addresses:

RAO/COR Address: USSOCOM/SOAL-PMC4
ATTN: (b)(3)(10 U.S.C. 130b), (b)(6)
7701 TAMPA POINT BLVD.
MACDILL AFB, FL 33621-5323

Procurement Office Address: USSOCOM/SOAL-KB
ATTN: SANDRA SMITH
7701 TAMPA POINT BLVD.
MACDILL AFB, FL 33621-5323

DFAS: DFAS-COLUMBUS CENTER
ATTN: BUNKER HILL ACCOUNT
P.O. BOX 182077
COLUMBUS, OH 43218-2977

DCMC Address: DCM BUFFALO
T.J. DULSKI FEDERAL BUILDING
ROOM 1103
111 WEST HURON STREET
BUFFALO, NY 14202-2392

Government Inspection and Acceptance.

Government inspection and acceptance shall be performed at the source, by the cognizant DCMA office.

SECTION F Deliveries or Performance

CLAUSES INCORPORATED BY REFERENCE:

52.211-17	Delivery of Excess Quantities	SEP 1989
52.242-15	Stop-Work Order	AUG 1989
52.242-17	Government Delay of Work	APR 1984
52.247-34	F.O.B. Destination	NOV 1991

CLAUSES INCORPORATED BY FULL TEXT

52.211-8	TIME OF DELIVERY	JUN 1997
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(a) The Government requires delivery to be made according to the following schedule:

REQUIRED DELIVERY SCHEDULE

ITEM NO.	TOTAL QUANTITIES (on individual delivery orders)	WITHIN DAYS AFTER DATE OF ISSUANCE OF DELIVERY ORDER
0004, 0036		480
0006, 0015, 0016		
0038, 0047, 0048		150
0068, 0077, 0078		150
0098, 0107, 0108		150
0128, 0129		150
0149, 0150		150
0170, 0171		150
0191, 0192		150
0212, 0213		150
0233, 0234		150
0007, 0011		120
0039, 0043		120
0069, 0073		120
0099, 0103		120

All other line items are to be delivered with 90 days after date of delivery order.

The following conditions apply to this requirement:

Place of Delivery: TO BE CITED ON SPECIFIC DELIVERY ORDERS

Period of Performance: The total duration of this contract shall not exceed ten (10) years. No new delivery orders will be issued after the 10 year ordering period but any delivery orders in progress will be allowed to complete past the 10 year point.

Maximum 50 units per month notwithstanding the number of delivery orders issued and cumulative quantities ordered thereunder

SECTION G Contract Administration Data

CLAUSES INCORPORATED BY FULL TEXT

5652.232-9003 Instructions to Paying Office (1998).

(a) The Contracting Office Point of Contact is Ms. Sandra Smith, SOAL-KB, 7701 Tampa Point Blvd., (813) 281-0560, ext 304: Email: smiths@jotc.com

(b) The Requiring Activity Official is (b)(6) who can be reached at (b)(6) (b)(6)

(b)(3)(10 U.S.C. 130b), (b)(6)

(c) Payment will be made by the office designated in Block 12 on Standard Form 26, Block 25 on Standard Form 33, or Block 15 on DD form 1155, or otherwise designated paying office. Invoice(s) should be forwarded directly to the designated paying office.

(d) Payment to the contractor shall be EFT to the following address:

Harris Corporation
RF Communications Division
MELLON BANK
3 Mellon Center – Room 3530
Pittsburgh, PA 15259
Attn: Charlotte Ford
Account No: 185-0023
ABA No: 043000261
SWIFT No: MELNUS3P

(e) Special Payment Instructions: Payment will be by EFT

5652.232-9004 Distribution of Vouchers/Invoices (1998)

(a) The contractor shall forward vouchers/invoices to the addresses below in a simultaneous mailing.

(1) The original and six (6) copies shall be submitted to:

DCM BUFFALO
T.J. DULSKI FEDERAL BUILDING
ROOM 1103
111 WEST HURON STREET
BUFFALO, NY 14202-2392

(2) One copy shall be submitted to:

USSOCOM

Attn: (b)(3)(10 U.S.C. 130b), (b)(6)

SOAL-PMC4

7701 Tampa Point Blvd

MacDill AFB, FL 33621-5323

(3) One copy shall be submitted to the Contracting Officer.

b. Contract completion voucher will be forwarded by the DCAA Contract Auditor to the Defense Contract Management Command (DCMC) Administrative Contracting Officer (ACO), or to the PCO who signed this contract if no DCMC ACO has been designed, for approval and transmittal to the cognizant disbursing office.

Accounting and Appropriation Data: TO BE DESIGNATED ON INDIVIDUAL DELIVERY ORDERS.

CLIN/SLIN:

Appropriation Number: ACRN:

PR Number:

Amount:

MIPR Number:

SECTION H Special Contract Requirements

Notice of Incorporation of Section K

Section K entitled Representations, Certifications and Other Statements of Offerors, submitted on 09/22/00 by Harris Corporation, RF Communications Division is hereby incorporated by reference.

5652.201-9001 Technical Representative (1998)

(a) The Contracting Officer may appoint one or more Government employees as a technical representative to assist the Contracting Officer with scientific engineering or field of discipline matters directly related to the contract. The technical representative is not authorized to act on behalf of the contracting officer or to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

The appointments will be in writing, signed by the Contracting Officer.

SECTION I Contract Clauses

CLAUSES INCORPORATED BY REFERENCE:

52.202-1	Definitions	OCT 1995
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-6	Restrictions On Subcontractor Sales To The Government	JUL 1995
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	JAN 1997
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	JAN 1997
52.203-12	Limitation On Payments To Influence Certain Federal Transactions	JUN 1997
52.204-2	Security Requirements	AUG 1996
52.204-4	Printing/Copying Double-Sided on Recycled Paper	JUN 1996
52.209-4	First Article Approval--Government Testing.	SEP 1989
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	JUL 1995
52.211-5	Material Requirements	OCT 1997
52.211-15	Defense Priority And Allocation Requirements	SEP 1990
52.215-8	Order of Precedence--Uniform Contract Format	OCT 1997
52.215-11	Price Reduction for Defective Cost or Pricing Data -- Modifications	OCT 1997
52.215-13	Subcontractor Cost or Pricing Data -- Modifications	OCT 1997
52.215-14	Integrity of Unit Prices	OCT 1997
52.215-21	Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data--Modifications	OCT 1997
52.219-8	Utilization of Small Business Concerns	OCT 1999
52.219-9	Small Business Subcontracting Plan	OCT 1999
52.222-20	Walsh-Healy Public Contracts Act	DEC 1996
52.222-21	Prohibition of Segregated Facilities.	FEB 1999
52.222-26	Equal Opportunity	FEB 1999
52.222-35	Affirmative Action For Disabled Veterans And Veterans of the Vietnam Era	APR 1998
52.222-36	Affirmative Action For Workers with Disabilities	JUN 1998
52.222-37	Employment Reports On Disabled Veterans And Veterans Of The Vietnam Era	JAN 1999
52.223-6	Drug Free Workplace	JAN 1997
52.223-14	Toxic Chemical Release Reporting	OCT 1996
52.225-13	Restrictions On Certain Foreign Purchases	FEB 1998
52.226-1	Utilization Of Indian Organizations And Indian-Owned	

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	Economic Enterprises	FEB 2000
52.227-1	Authorization and Consent	JUL 1995
52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement	AUG 1996
52.229-3	Federal, State And Local Taxes	JAN 1991
52.229-5	Taxes--Contracts Performed In U S Possessions Or Puerto Rico	APR 1984
52.230-2	Cost Accounting Standards	APR 1998
52.230-6	Administration of Cost Accounting Standards	APR 1996
52.232-1	Payments	APR 1984
52.232-8	Discounts For Prompt Payment	MAY 1997
52.232-9	Limitation On Withholding Of Payment	APR 1984
52.232-11	Extras	APR 1984
52.232-16	Progress Payments	JUL 1991
52.232-17	Interest	JUN 1996
52.232-23	Assignment Of Claims ALT I (APR 1984)	JAN 1986
52.232-25	Prompt Payment	JUN 1997
52.232-33	Payment by Electronic Funds Transfer- Central Contractor Registration	MAY 1999
52.233-1	Disputes	DEC 1998
52.233-3	Protest After Award	AUG 1996
52.242-13	Bankruptcy	JUL 1995
52.243-1	Changes--Fixed-Price	APR 1984
52.243-7	Notification Of Changes	APR 1984
52.244-2	Subcontracts	AUG 1998
52.244-5	Competition in Subcontracting	DEC 1996
52.244-6	Subcontracts for Commercial Items and Commercial Components	OCT 1998
52.245-1	Property Records	APR 1984
52.245-2	Government Property (Fixed Price Contracts)	DEC 1989
52.246-23	Limitation Of Liability	FEB 1997
52.248-1	Value Engineering	FEB 2000
52.249-2	Termination For Convenience Of The Government (Fixed-Price)	SEP 1996
52.249-8	Default (Fixed-Price Supply & Service)	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
	Prohibition On Persons Convicted of Fraud or Other Defense Contract-Related Felonies	MAR 1999
252.203-7002	Display Of DOD Hotline Poster	DEC 1991
252.204-7000	Disclosure of Information	DEC 1991
252.204-7002	Payment For Subline Items Not Separately Priced	DEC 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004	Required Central Contractor Registration	MAR 2000
252.204-7005	Oarl Attestation of Security Responsibilities	AUG 1999
252.205-7000	Provisions Of Information To Cooperative	

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Agreement Holders	DEC 1991
252.209-7000 Acquisition From Subcontractors Subject To On-Site Inspection Under The Intermediate Range Nuclear Forces (INF) Treaty	NOV 1995
252.209-7004 Subcontracting With Firms That Are Owned or Controlled By The Government of a Terrorist Country	MAR 1998
252.215-7000 Pricing Adjustments	DEC 1991
252.219-7003 Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (DOD Contracts)	APR 1996
252.223-7006 Prohibition On Storage And Disposal Of Toxic And Hazardous Materials	APR 1993
252.225-7001 Buy American Act And Balance Of Payments Program	MAR 1998
252.225-7002 Qualifying Country Sources as Subcontractors	DEC 1991
252.225-7009 Duty-Free Entry--Qualifying Country Supplies (End Products and Components)	MAR 1998
252.225-7012 Preference For Certain Domestic Commodities	MAY 1999
252.225-7025 Restriction on Acquisition of Forgings	JUN 1997
252.225-7031 Secondary Arab Boycott Of Israel	JUN 1992
252.227-7013 Rights in Technical Data Noncommercial Items	NOV 1995
252.227-7016 Rights in Bid or Proposal Information	JUN 1995
252.227-7027 Deferred Ordering Of Technical Data Or Computer Software	APR 1988
252.227-7030 Technical Data - Withholding of Payment	MAR 2000
252.227-7036 Declaration of Technical Data	JAN 1997
252.227-7037 Validation of Restrictive Markings on Technical Data	SEP 1999
252.231-7000 Supplemental Cost Principles	DEC 1991
252.232-7004 DoD Progress Payment Rates	FEB 1996
252.235-7003 Frequency Authorization	DEC 1991
252.242-7000 Postaward Conference	DEC 1991
252.243-7000 Engineering Change Proposals	OCT 1998
252.243-7001 Pricing Of Contract Modifications	DEC 1991
252.243-7002 Requests for Equitable Adjustment	MAR 1998
252.245-7001 Reports Of Government Property	MAY 1994
252.246-7001 Warranty Of Data	DEC 1991
252.247-7023 Transportation of Supplies by Sea	MAR 2000
252.248-7000 Preparation of Value Engineering Change Proposals	MAY 1994

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CLAUSES INCORPORATED BY FULL TEXT

5652.204-9002 Communication Security Monitoring (1998)

All communications with Department of Defense (DOD) organizations shall be subject to communications security (COMSEC) review. All communications originating or terminating at DOD organizations may be monitored or recorded. The contractor shall inform all employees and subcontractors that all communications with DOD organizations are subject to COMSEC review.

52.215-19 NOTIFICATION OF OWNERSHIP CHANGES (OCT 1997)

(a) The Contractor shall make the following notifications in writing:

(1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

(2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

(b) The Contractor shall--

(1) Maintain current, accurate, and complete inventory records of assets and their costs;

(2) Provide the ACO or designated representative ready access to the records upon request;

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(3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and

(4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

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 contract award through end of month forty-eight (48) for hardware and month one hundred twenty (120) for spares and support.

(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.

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 \$1,000.00, 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:

Any order for a single item in excess of the items as set forth in Section B;

(2) Any order for a combination of items in excess of \$4,000,000.00 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.

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(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 7 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.

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 after month 120 from date of contract award.

As referred to in paragraph (b) of the above "Indefinite Quantities" clause of this contract, the contract minimum quantity is a total of \$300,000 worth of orders for the first year basic ordering period at the contract unit price(s). The contract maximum is ~~\$53,400,000.00~~ for the life of the contract.

\$153,400,000.00

*rec
P00003
Mar 2003*

CONTINUATION SHEET
P00003

REFERENCE NO. OF DOCUMENT BEING CONTINUED
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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): soal.socom.mil

Invoicing (1998)

(a) The contractor shall segregate and bill separately costs for each Delivery/Task Order issued under this contract. Cost for performing work set forth in one Delivery/Task Order shall not be allowable under any other Delivery Task Order.

(b) If a Delivery/Task Order contains multiple CLINs/SLINs the contractor shall segregate and bill separately costs for each CLIN/SLIN of the Delivery/Task Order. Costs for performing work set forth on one CLIN/SLIN shall not be allowable under any other CLIN/SLIN.

(c) The contract number and Delivery/Task Order number shall appear on all work accomplished and on all invoices.

SECTION J List of Documents, Exhibits and Other Attachments

ATTACHMENT	DOCUMENTS	DATE
1	DD Form 254 Contract Security Classification Specification (2 pages)	010601
2	Small Business Subcontracting Plan Comprehensive Subcontracting Plan RFC PLAN NUMBER: 01-002 (9 pages)	9/27/00
3	Statement of Work Entitled: IMPROVED SOF HIGH FREQUENCY MANPACK RADIO SYSTEM	9/20/00
4	Spares and Repair Parts for AN/PRC-138(V)(2) Non Embedded COMSEC Radio Separately Price Sub-CLINS	6/7/01
4A	Spares and Repair Parts for AN/PRC-138(V)1 Non-Embedded ISHMRS Radio and AN/PRC-150(C) Embedded Type I ISHMRS Radio	6/7/01
5	Spares and Repair Parts for AN/VRC-102 Vehicular System	6/7/01
5A	Spares and Repair Parts for 125-Watt Vehicular System	6/7/01
5B	Spares and Repair Parts for 20-Watt Vehicular System	6/7/01
5C	Spares and Repair Parts for 150-Watt Vehicular System	6/7/01
5D	Spares and Repair Parts for 150-Watt Base Station System (2 pages)	6/7/01
5E	Spares and Repair Parts for 400-Watt Base Station System (2 pages)	6/7/01
6	AN/PRC-138B(V)1 AN/PRC-150(C) Common Usage Spares and Repair Parts Separately Priced Sub-CLINS (2 pages)	6/7/01
6A	Common Usage Spares and Repair Parts 125 Watt Vehicular System Separately Priced Sub-CLINS	6/7/01
6B	Common Usage Spares and Repair Parts 20 Watt Vehicular System Separately Priced Sub-CLINS	6/7/01
6C	Common Usage Spares and Repair Parts 150 Watt Vehicular System Separately Priced Sub-CLINS	6/7/01
6D	Common Usage Spares and Repair Parts 150W Base Station System Separately Priced Sub-CLINS	6/7/01
6E	Common Usage Spares and Repair Parts 400 Watt Base Station Separately Priced Sub-CLINS	6/7/01

FOR OFFICIAL USE ONLY

DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATION <i>(Requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)</i>		1. CLEARANCE AND SAFEGUARDING a. FACILITY CLEARANCE REQUIRED (b)(2)High b. LEVEL OF SAFEGUARDING REQUIRED (b)(2)High	
2. THIS SPECIFICATION IS FOR: (X and complete as applicable)		3. THIS SPECIFICATION IS: (X and complete as applicable)	
<input checked="" type="checkbox"/>	a. PRIME CONTRACT NUMBER USZA22-00-D-0007	<input checked="" type="checkbox"/>	a. ORIGINAL (Complete date in all cases) Date (YYMMDD) 010601
	b. SUBCONTRACT NUMBER		b. REVISED (Supersedes all previous specs) Revision No. Date (YYMMDD)
	c. SOLICITATION OR OTHER NUMBER DUE DATE (YYYYMMDD)		c. FINAL (Complete Item 5 in all cases) Date (YYMMDD)
4. IS THIS A FOLLOW-ON CONTRACT? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If YES, complete the following Classified material received or generated under MDA911-95-D-0005 (Preceding Contract Number) is transferred to this follow-on contract			
5. IS THIS A FINAL DD FORM 254? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If Yes, complete the following: In response to the contractor's request dated _____, retention of the classified material is authorized for the period of _____			
6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)			
a. NAME, ADDRESS, AND ZIP CODE Harris Corporation RF Communications Division 1680 University Avenue Rochester, NY 14610		b. CAGE CODE 14304	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) Defense Security Service Northeast Region Barnes Building 495 Summer Street Boston, MA 02210-2192
7. SUBCONTRACTOR			
a. NAME, ADDRESS, AND ZIP CODE		b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)
8. ACTUAL PERFORMANCE			
a. LOCATION		b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT Commercial-Off-the-Shelf HF Manpack Radio with embedded Communications Security (COMSEC) and vehicle mounting hardware with logistic/repair support.			
10. THIS CONTRACT WILL REQUIRE ACCESS TO:		YES NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION		(b)(2)High	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY
b. RESTRICTED DATA			b. RECEIVE CLASSIFIED DOCUMENTS ONLY
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION			c. RECEIVE AND GENERATE CLASSIFIED MATERIAL
d. FORMERLY RESTRICTED DATA			d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE
e. INTELLIGENCE INFORMATION			e. PERFORM SERVICES ONLY
(1) Sensitive Compartmented Information (SCI)			f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES
(2) Non-SCI			g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER
f. SPECIAL ACCESS INFORMATION			h. REQUIRE A COMSEC ACCOUNT
g. FOREIGN GOVERNMENT INFORMATION			i. HAVE TEMPEST REQUIREMENTS
i. LIMITED DISSEMINATION INFORMATION			j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS
j. FOR OFFICIAL USE ONLY INFORMATION WILL BE HANDLED IAW DOD 5400.7-R			k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE
k. OTHER (Specify)			l. OTHER (Specify)

FOR OFFICIAL USE ONLY

12. PUBLIC RELEASE. Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual or unless it has been approved for public release by appropriate U.S. Government authority. Proposed public information shall be submitted for approval prior to release. Direct Through (Specify)

US Special Operations Command
7701 Tampa Point Blvd.
ATTN: SOAL-IIS-PMC4
MacDill AFB, FL 33621-5323

To the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs)* for review.
* In the case of non-DoD User Agencies, requests for disclosure shall be submitted to that agency

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

(b)(2)High

14. APPROVED AND APPROVED

(b)(3)(10 U.S.C. 130b), (b)(6)

4. 2001

HQ USSOCOM/SOCS-SM

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract.

(b)(2)High

(b)(2)High

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the Cognizant Security Office.

(b)(2)High

(b)(2)High

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

a. TYPED NAME OF CERTIFYING OFFICIAL

b. TITLE

c. TELEPHONE (Include Area Code)

(b)(6)

DPM ISMRS

(b)(6)

d. ADDRESS (Include Zip Code)

HQ United States Special Operations Command
7701 TAMPA POINT BLVD
MacDill AFB, FL 33621-5323

17. REQUIRED DISTRIBUTION

X

a. CONTRACTOR

b. SUBCONTRACTOR

X

c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR

D. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION

X

E. ADMINISTRATIVE CONTRACTING OFFICER

F. OTHERS AS NECESSARY

e. SIGNATURE

(b)(6)

IMPROVED SOF HIGH FREQUENCY MANPACK RADIO SYSTEM (ISHMRS)
DESCRIPTION / SPECIFICATION / STATEMENT OF WORK

1.0 SCOPE:

1.1 INTRODUCTION: This specification/statement-of-work establishes the performance, design, and inspection system plan requirements for a Medium Frequency (MF)/High Frequency (HF) manpack transceiver system for Special Operations Forces (SOF). The program is established to provide Improved SOF HF Manpack Radio Systems (ISHMRS). This procurement includes: manpack transceivers, antennas, vehicle installation assemblies with HF 125 Watt amplifiers (wattage may not be exactly 125 Watts) and HF automatic antenna tuners, operator manuals, maintenance manuals, spares, repair parts, logistics documentation, Contractor Depot Level Maintenance Support (CDLMS), training and National Security Agency (NSA) certification documentation. The systems shall consist of nondevelopmental items (NDI). This procurement fulfills the near-term and immediate operational needs for an improved, secure, manpack, MF/HF radio system for SOF.

a. SOF personnel must be able to function under extremely adverse conditions and, as such, their equipment is routinely exposed to and must be capable of withstanding severe physical stress. The ISHMRS radio system shall support SOF during planning, preparation and deployment in support of unconventional warfare, foreign internal defense, and direct actions in support of U.S. national policy. Successful execution of SOF missions requires reliable, versatile, long range communications equipment capable of operating with both SOF and conventional forces. The ISHMRS shall provide SOF a HF radio with Automatic Link Establishment (ALE) capability, low power consumption, High-performance data modems, and embedded Communications Security (COMSEC).

(b)(2)High

(b)(2)High

b. The ISHMRS will often be used in a dynamic and often saturated communications environment where high energy level RF ambients exist. As such the ISHMRS shall have strong rejection of undesired signals. The ISHMRS shall not cause interference problems with other MF, HF, VHF, UHF, Super High Frequency (SHF), and Extremely High Frequency (EHF) radios and other electronic systems in use at the same location. Undesired RF radiations shall be minimized.

c. The ISHMRS shall not be operator intensive. The ISHMRS shall be simple in form, function and ease of operation.

d. ISHMRS shall be supportable. All aspects of logistical support shall be effective and efficient.

1.2 RESERVED.

1.3 RESERVED.

1.4 GENERAL DESCRIPTION OF RADIO REQUIREMENTS: The overriding goal for this procurement is to provide a reliable, high quality, rugged, tactical communications system which is interoperable with existing systems and provides enhanced performance over existing AN/PRC70, AN/PRC-74, AN/PRC-104 and AN/PRC-132 radio systems by adding Automatic Link Establishment (ALE) capability in accordance with MIL-STD-188-141A; High-performance HF Data Modem in accordance with Appendix B, MIL-STD-188-110A; LPC-10-52E standard compliant digital voice; and embedded COMSEC. The radio system must provide International Morse Code (IMC), data burst, data and voice capabilities. In the data and voice modes, both secure and non-secure capabilities must be provided.

a. The primary component of this procurement is a MF/HF, minimum 20 Watt PEP AVG (the output shall be capable of continuously providing a minimum of 20 Watts Peak-Envelope Power on average when voice modulated at a compression level of 5 dB), manpack radio system which has embedded COMSEC and is lightweight, reliable and ruggedized for military tactical operations in the climates defined in MIL-STD-810E. The goal is to quickly obtain, a ruggedized, tactical, embedded COMSEC manpack radio system, built in accordance with MIL-STD-810E, MIL-STD-188-141A, MIL-STD-188-110A, and the specifications listed herein.

b. The embedded COMSEC portion of this radio system must include narrowband (3 kHz) capability, benign key, benign fill, advanced KG-84C HF modes, generate and receive Over the Air Re-key (OTAR) and be NSA certified no later than 24 months after receipt of the first order for embedded COMSEC upgrade kits. The embedded COMSEC must be able to load a minimum of 5 crypto Traffic Encryption Keys (TEK) and 1 Key Encryption Key (KEK) via KOI-18, KYK13, KYX-15, DTD, OTAR, or generated from the crypto Key Generator (KG), as appropriate. The non-embedded and embedded COMSEC manpack radio systems must also function with external COMSEC.

c. The Contractor is responsible for obtaining NSA endorsement. The Contractor is required to perform the security analysis under the NSA Certified Module Embedment (CME) program. NSA endorsement must be obtained prior to the delivery of any embedded COMSEC manpack radio or embedded COMSEC manpack radio upgrade kit with one exception. The Contractor may provide COMSEC radios for test and evaluation prior to NSA endorsement if the Government and the Contractor agree. Any non-embedded COMSEC manpack radio systems must be upgradeable to full embedded COMSEC manpack radio system configuration.

1.5 GENERAL DESCRIPTION OF INTEROPERABILITY REQUIREMENTS:

a. The ISHMRS non-embedded COMSEC manpack radio must be interoperable with external COMSEC equipment and external HF modems.

b. The ISHMRS embedded COMSEC manpack radio must be interoperable in all narrowband and ANDVT modes with SUNBURST AN/CSZ-1A, MINTERM TSEC/KY-99, TACTERM AN/USC-43 and selected TSEC/KG-84C modes. The embedded COMSEC manpack radio must also operate using these external COMSEC devices as the radio's COMSEC device. Interoperable includes establishing end-to-end communications and includes

the modems, modem formats, bit rates, and signal processing such as Forward Error Correction (EEC) and interleaving.

c. All radios must operate with the OA-8990/P Digital Message Device Group (DMDG), the TSEC/KL-43C, AN/CYZ-10 Data Transfer Device (DTD), and the Advanced Data Controller (ADC) as input/output/interface devices. Some of these provide external encryption; the embedded COMSEC manpack radio is required to be compatible with external encryption devices.

d. All radios must be interoperable with previously fielded HF systems: AN/PRC-104, AN/PRC-132, AN/GSC-62, AN/GRC-233, AN/TSC-26, AN/TSC-126A, and AN/TSC-99.

e. All radios must be interoperable with previously Government procured MF/HF radios, radio systems, and HF Data Modems which have:

- (1) MIL-STD-188-141A Automatic Link Establishment (ALE) in the ALE mode.
- (2) MIL-STD-188-110A FSK data modems in all MIL-STD FSK data modes.
- (3) MIL-STD-188-110A, Appendix B, High-performance Data Modems in the MIL-STD high performance data mode.

f. Interface cables:

(1) The ISHMRS shall interface with the MINTERM TSEC/KY-99 via the standard cable which is provided with this equipment. If for some overriding technical requirement, the standard cable won't work or won't provide access to all features, then the contractor shall provide an interface cable for this equipment as a component of every ISHMRS.

(2) Separate ordering of cables allowing ISHMRS to interface with the ADC and MIL-STD-188-114A devices has been provided in Section B of this contract.

1.6 RESERVED:

1.7 RESERVED:

1.8 GOVERNMENT EVALUATION OF DELIVERIES: The Government maintains the right to test any deliverables to insure they meet the contracted specifications. The Government will test the first production deliverables of the non-embedded COMSEC manpack radio system, the embedded COMSEC manpack radio system, the embedded COMSEC upgraded radio systems, the vehicle installation mounting assemblies with vehicle power supply, the HF 125 Watt Amplifier, the HF Automatic Antenna Tuner, the manpack whip antenna, vehicular whip antenna and longwire antenna and interconnecting cables. A field test will be conducted to ensure the radios operate in all the specified environments.

1.9 RESERVED

2.0 APPLICABLE DOCUMENTS: The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the revision level and date for each specification or standard cited within this contract (including any specifications or standards cited in any drawing, handbook, or referenced specification or standard contained within this solicitation) shall be that listed in the Department of Defense (DoD) Index of Specifications and Standards (DoDISS) dated 1 July 1993.

2.1 MILITARY, FEDERAL AND COMMERCIAL STANDARDS: The following documents are either Interface or Test Standards that are required to ensure interoperability and compatibility with legacy and/or similar tactical radio systems.

- a. MIL-STD-188-110A Interoperability and Performance Standards for Data Modems dated 30 Sep 91.
- b. MIL-STD-188-114A Electrical Characteristics of Digital Interfaces dated 30 Sep 85 with Notice 1 and 13 Dec 91..
- c. MIL-STD-188-141A Interoperability and Performance Standards for Medium and High Frequency Radio Equipment dated 15 Sep 88 (basic) and 10 Sep 93. with Notice 2
- d. MIL-STD-188-184 Interoperability and Performance Standards for the Data Control Waveform, 20 Aug 93.
- e. MIL-STD-461D Requirements for the Control of Electromagnetic Interference Emissions and Susceptibility dated 11 Jan 93.
- f. MIL-STD-462D Measurement of Electromagnetic Interference Characteristics dated 11 Jan 93.
- g. MIL-STD-810E Environmental Test Methods and Engineering Guidelines dated 15 Sep 80 (basic) and 9 Feb 90 (notice 1). with Notice 1
- h. FED-STD-1015 Telecommunications: Analog to Digital Conversion of Voice by 2,400 BIT/Second Linear Predictive Coding, 28 Nov 84.
- i. ABSI S3.2-1989 Method for Measuring the Intelligence of Speech Over Communications Systems

2.2 MILITARY AND FEDERAL STANDARDS: The standards cited below and throughout the document are for *Guidance Only*.

- a. MIL-STD-129 Marking for Shipment and Storage (Part of 4 Parts) dated 15 Jun 93.
- b. MIL-STD-130H Identification Marking of U.S. Military Property dated 1 Dec 93.
- c. MIL-STD-187-721A Planning and Guidance Standard for Automated Control Applique for HF Radio dated 22 Oct 93.
- d. MIL-STD-454N Electronic Equipment, Standard General Requirements for dated 30 Jun 92.
- e. MIL-STD-973 Configuration Management dated 17 Apr 92 (basic) and 1 Dec 92 (notice 1)
 with Interim Notice 1
- f. MIL-STD-1275A Characteristics of 28 Volt DC Electrical Systems in Military Vehicles, 17 SEP 76.
- g. MIL-STD-2000A Standard requirements for Soldered Electrical and Electronic Assemblies dated 14 Feb 91.
- h. MIL-STD-2036A General Requirements for Electronic Equipment Specifications dated 3 Sep 93.
- i. FED-STD-595B Colors Used in Government Procurements, 15 Dec 89

2.3 MILITARY SPECIFICATIONS: The specifications cited below and throughout the document are for *Guidance Only*.

- a. MIL-B-49436/1A(ER) Battery, Rechargeable, Sealed Nickel Cadmium, BB-590/U dated 5 Oct 90.
- b. MIL-C-28883A Military Specification for Advanced Narrowband Digital Voice Terminal (ANDVT) Terminal Set AN/USC-43(V), 1 Jun 87.
- c. MIL-F-10472D(ER) Finishes for Ground Based Electronic Equipment, 4 Oct 90.

3.0 SPECIFIC REQUIREMENTS:

3.1 RESERVED.

3.2 RADIO MISSION SUPPORT: The following are the missions and environments for which the radio systems shall operate and provide reliable service.

3.2.1 ISHMRS Manpack Radio Mission Support: The Contractor's manpack radio system must support the intended mission and communications requirements for SOF personnel:

a. The manpack radio system procured under this SOW is for SOF and is needed now to fill existing requirements.

b. SOF personnel must be able to function under extremely adverse conditions. Their communications equipment is routinely exposed to and must be capable of withstanding severe physical stress. Specifically, the communications equipment must be able to operate in any light conditions, in all environmental conditions and must be operable by SOF personnel wearing combat clothing and conducting a variety of missions on land, on water, in the water, and in the air. These missions can be conducted along any seacoast, in tropical jungles, in hot dry deserts, in mountains, in temperate forests, in arctic regions during any season of the year.

c. SOF personnel must be able to function for long duration missions without support or resupply. (b)(2)High

(b)(2)High Their communications equipment must be reliable, self-diagnosing, repairable through simple board swaps, and power efficient. Their communications equipment must be able to support either intermittent data communications with minimum power and on-air time and support constant voice and data communications for intense combat situations.

d. SOF personnel must be able to function in small groups and conduct operations over large areas. Their communications equipment must be lightweight and small.

e. SOF personnel must be able to function and communicate reliably at short distances (0 to 50 miles), medium distances (0 to 300 miles) and long distances (300 to 1500 miles) from friendly forces. Their manpack radio must be able to operate over long distances, make effective use of all transmission time, and provide COMSEC.

f. SOF personnel must be able to function in intense, combat situations. Their communications equipment must be simple and reliable to operate. Communications must be able to be established and maintained as automatically as possible to support intense combat situations.

g. SOF personnel must be able to function with foreign forces, regular and irregular. Their manpack radio must be able to interoperate with foreign communications equipment in standard civilian and military communications modes.

h. SOF personnel must be able to function with U.S. and Allied forces. Their communications equipment must be able to interoperate with U.S. and Allied forces, not cause interference to other electronic equipment and not be interfered with by other electronic equipment.

3.2.2 ISHMRS Vehicle Mounted MF/HF Communications System Mission Support:

a. SOF personnel must be able to function in fast moving, tactical and civilian, cross country vehicles. They therefore must be able to install the Manpack RT in a Vehicle Mounted MF/HF Communications system which shall provide improved MF/HF communications through the addition of a MF/HF 125 Watt Amplifier, a MF/HF Automatic Antenna Tuner, and a MF/HF 15 to 20 foot Whip Antenna System (b)(2)High

(b)(2)High

b. SOF personnel operate from many different civilian and military vehicles throughout the world. Their Vehicle Mounted MF/HF Communications must be adaptable to 12 volt DC vehicle power systems, 24 volt DC vehicle power systems, and 28 Volt DC electrical systems in military vehicles as specified by MIL-STD-1275A. (b)(2)High

the Vehicle Mounted MF/HF Communication system must be able to be powered from commercial or tactical generated power sources. This includes 110 volt AC and 220 Volt AC sources operating at 50 and 60 Hz.

c. SOF personnel operate over rough terrain. As such, the Vehicle Mounted MF/HF Communications systems must be able to withstand the shock and impulse of traveling cross country on unimproved rough roads at up to 60 mph. The Vehicle Mounted MF/HF Communication systems must have high quality, effective shock mounts and be securely attached to the vehicle.

d. SOF personnel must be able to respond to sudden changes in the mission. This requires that the vehicle mounted Manpack RT be quickly dismounted and configured to manpack operations in less than 1 minute.

e. The Vehicle Mounted MF/HF Communications systems shall also meet all of the requirements stated in paragraph 3.2.1 above.

3.3 RECEIVER/TRANSMITTER SPECIFICATIONS:

3.3.1 Frequency/Channels:

- | | |
|---------------------|---|
| a. Frequency Range: | HF: Minimum 1.60000 to 29.9999 MHz
VHF: Minimum 30.000 to 59.975 |
| b. Channel Spacing: | HF: minimum 10 Hz spacing via remote control;
minimum 100 Hz spacing via front panel.
Provision shall be made for fast, efficient tuning, e.g.
frequency changes larger than 10 Hz steps)
VHF: Minimum 25 kHz spacing. |
| c. Channel Presets: | Minimum 100 Channel Presets. Each preset must
include all variables which can be associated with the
channel (e.g. frequency, COMSEC algorithm,
COMSEC cipher code, vocoder, bandwidth,
communications mode, data rate, |

power output, antenna port, etc.).

- d. Channel Scanning: Operator selectable; minimum scanning of at least 9 channels in SSB mode; minimum scanning of at least 100 of the preset channels in ALE mode. Each preset must include all variables which can be associated with the channel. The inclusion of channel scanning capability shall not degrade non-channel scanning modes (e.g. receiver response time in a non-scanning mode). Minimum scanning of at least 9 of the preset channels in SSB mode.
- e. Channels Quickly Selectable from Front Panel: Minimum 10. Each preset must include all variables which can be associated with the channel. This could be implemented as a rotary knob. The channels must be quickly selectable, in total darkness, with great confidence by the radio operator.
- f. Channel Memory Retention: Minimum 1.67 year retention.
- g. Frequency Stability: Minimum ± 1.00 ppm over the entire specified temperature operating range for a period of not less than 30 days.
- h. Phase Stability: HF IAW MIL-STD-188-141A, paragraph 5.2.4.
- i. Phase Noise: HF IAW MIL-STD-188-141A, paragraph 5.2.5.
- j. Bandwidths: HF IAW MIL-STD-188-141A, paragraph 5.2.6, as applicable to single channel radios.
- k. HF Channel Response: HF IAW MIL-STD-188-141A, paragraph 5.2.7.1.

3.3.2 Operational Modes:

- a. Operational Modes: HF: J3E (single sideband, upper and lower (one at a time), suppressed carrier telephony).
- H3E (compatible AM single sideband plus full carrier telephony).
- J2A MCW (single sideband suppressed carrier keyed tone).

- VHF: F3E (FM telephony).
- b. Receive Only Mode: Receive only mode for radio silence operations.
- c. Receive/Transmit Modes: Simplex and Half-Duplex.
- 3.3.3 Receiver: (Receiver input amplitudes are in terms of available power in dBm from a 50 ohm source impedance signal generator.)
- a. Receiver Sensitivity: J3E SSB: Minimum -115 dBm or better for 10 dB SINAD, nominal 3kHz bandwidth (minimum 2750 Hz bandwidth at the 2 dB points).
- H3E AM: Minimum -100 dBm or better for 10 dB SINAD.
- J2A MCW: Minimum -121 dBm or better for 10 dB SINAD.
- F3E FM: minimum -113 dBm or better for 10 dB SINAD.)
- b. Image Rejection: Greater than 80 dB.
- c. IF Rejection: Greater than 80 dB.
- d. Spurious Responses: Greater than 55 dB for frequencies from +2.5 % to +30 and from -2.5% to -30% of the center frequency.
- Greater than 70 dB for frequencies greater than +/- 30% of the center frequency.
- e. Internally Generated Spurious Outputs: IAW MIL-STD-188-141A, paragraph 5.4.2.4:
Less than -112 dBm, for 99 percent of available 3 kHz channels.
Less than -100 dBm, for 0.8 percent.
For 0.2 percent may exceed the above stated specifications.
- f. Intermodulation IN BAND: IAW MIL-STD-188-141A, paragraph Distortion 5.4.2.1: -35 dB or better for two signals up to 0 dBm PEP (-6 dBm/tone) at rated audio output.
- 3rd order intercept point greater shall not be less than + 10 dBm.
- g. Adjacent Channel Reject any signal in the undesired Rejection: sideband and adjacent channel in accordance with paragraph 5.4.1.3,

MIL-STD-188-141A.

- h. Audio Output: Minimum 15 mW @ 1000 ohms to handset. Shall be used with standard H-250/U handsets.
- i. Automatic Gain Control (AGC): Automatic, mode dependent, in accordance with paragraph 5.4.3, MIL-STD-188-141A.
- j. Receiver Linearity: Receiver linearity shall be in accordance with MIL-STD 188-141A, change notice 2, paragraph 5.4.4 for frequencies of operation from 1.60000 MHz to 29.99999 MHz.
- k. Front End Overload Protection: Total protection from a 20 Watts input.
- l. Squelch: User selectable in MF/HF AM SSB. For VHF, squelch interoperable with AN/PRC-77 is mandatory. Include an operator selectable, digitally coded squelch to reduced the level of noise to which the operator is subjected and to provide enhanced retransmission capability.

3.3.4 Transmitter:

- a. Power Output: HF: Minimum 1, 5, and 20 Watts PEP AVG (+2/-1 dB) outputs with a Voltage Standing Wave Ratio (VSWR) of 2:1. Incremental power outputs from 0.2 to 20 Watts PEP AVG available via remote control.
VHF: Minimum 1, 5, and 10 Watts (+2/-1 dB).
- b. Over Temperature: Protection: The transmitter automatically reduces power output if excessive temperature occurs internal to the transceiver. An indicator that the over temperature condition has occurred and the power has been reduced shall be provided to the operator.
- c. Output Protection: The antenna outputs fully protected from damage for any VSWR, including an open circuit and short circuit condition.
- d. Indicators: Indicators for VSWR, forward power output, and over temperature.
- e. J3E Carrier Suppression: IAW paragraph 5.3.3, WL-STD-188-141 A: At least 60 dBc below the output level, at rated PEP output.
- f. Broadband IAW paragraph 5.3.2.1, MIL-STD-188-141A: Not

- Emissions: exceeding levels specified in Table II and Figure 8.
- g. Undesired Sideband Rejection: At least 60 dBc below the output level, at rated PEP output.
- h. In Band Noise: -75 dBc below PEP @ rated PEP output, noise bandwidth of 1 Hz in the selected sideband.
- i. Intermodulation Distortion: -30 dB below PEP @ 20 Watts maximum (1.6-30 MHz).
- j. Spurious Output: IAW paragraph 5.3.2.2, MIL-STD-188-141A (see paragraph 3.3.4K for harmonics).
- k. Harmonics: -40 dB Minimum 1.6000 – 29.9999
-30 dB Minimum 30.000 - 59.9999
- l. Automatic Level Starting at ALC threshold, 20 dB Control (ALC): increase in audio input shall result in less than 1 dB increase in average RF power output.
- m. Attack Time Delay: Reach minimum of 90% of steady state power output within less than 100 ms, not counting antenna tune time.
- n. Release Time Delay: Reach less than 10 % of power output within less than 25 ms.
- o. Input Signal Power: The transmitter rated PEP shall be obtained without manual adjustment.
- p. Audio Input: Dynamic mic (1mV) and 600 ohm @ 0 dBm for full rated output. Shall be used with standard H-250/u handsets.
- 3.3.5 Tuning:
- a. RF Impedance: 50 ohms nominal, unbalanced.
- b. Antenna Tuning Capability: 50 ohm output: Minimum .6 to 59.999 MHz.
10' whip: Minimum 1.6 to 59.999 MHz, minimum VSWR of 1.5:1 typical and 2:1 maximum, using an internal antenna matching unit.
75' to 150' longwire: Minimum 1.6 to 30 MHz with appropriate load terminating devices.

- c. RF-289/290 Ant: Minimum 30 to 59.9999 MHz.
- d. Antenna Coupler Tune Times: Initial tune time on a new frequency shall be 2 seconds, typical.
- Tunes states for frequencies stored in memory. Operator selectable manual update.
Memory tune time shall be 50 msec, maximum.
- e. Antenna Tune Power: Shall be minimum amount of power for as short a duration as possible.
Maximum .1 Watt + 2 dB.

3.3.6 Power:

- a. Voltage Input: 24 and Tactical 28 VDC nominal. The vehicle system must be able to support operation from a 24 VDC power source or a tactical 28 VDC power source that meets MIL-STD-1275A.
- b. Battery Life: The following battery life requirements are based on the following communications mission profile:
- Continuous, constant operation.
 - 9 to 1 receive to transmit ratio.
 - Transmit power output of 20 watts PEP AVG.
 - SSB.
 - Encrypted voice using ANDVT.
- Minimum of 8 hours, on two each BA-5590/U lithium batteries.
- Minimum of 6.5 hours on two each BB-590 rechargeable batteries.
- Reduced power requirement and maximize battery life through intelligent power management, e.g. circuits not requiring power are automatically powered down if not in use or not used for a period of time.
- c. Battery Compatibility: As a minimum, operable off any of the following combinations:
- 1 each BA-5590.
 - 2 each BA-5590.
 - 1 each BB-590.
 - 2 each BB-590.

- 1 each BB-490.
- 2 each BB-490.

For all batteries listed above, except 1 each BA-5590, the power output shall be a minimum of 20 watts output for the communications mission profile specified in paragraph 3:3.6b above. For 1 each BA-5590, the minimum output shall be 10 Watts.

- d. Battery Indication: Battery warning indicating that battery is getting very low and the ability to transmit will shortly end.
- e. Battery Box: Battery box shall be designed to preclude personnel injury and equipment damage in the event of a lithium battery failure. A lithium battery failure may be explosive in nature. The battery box shall not allow explosive gases into the main radio compartment. The battery box shall contain all electrolyte in the event of battery failure.
- f. Power Protection: All power inputs and outputs shall be protected from damage due to incorrect power source and load.

3.3.7 Size and Weight:

- a. Dimensions: Less than 380 cubic inches maximum. Height, width, and length to be suitable for manpack operation. For example: 3" H x 10" W x 8" D. Includes battery box and Receiver/Transmitter.
- b. Weight: 20 lbs. maximum including 2 each BB-590 batteries, 10 ft whip antenna, handset, battery box, and Receiver/Transmitter.

3.3.8 Embedded COMSEC:

3.3.8.1 Required Capabilities: Integrated COMSEC providing embedded COMSEC which must include:

- a. Narrowband (3 kHz) capability.
- b. Benign key and benign fill.
- c. KG-84C HF modes; redundant synch and non-redundant synch as implemented in the RAILMAN COMSEC module.
- d. Reserved.

- e. Secure narrowband voice.
- f. Non-secure analog and digital voice.
- g. Secure narrowband data.
- h. Non-secure analog data.
- i. Synchronous and asynchronous data.
- j. (Reserved)

k. LPC-10-52E voice in accordance with FED-STD-1015 and interoperable with ANDVT in accordance with MIL-C-28883A. Must pass Diagnostic Rhyme Test (DRT) in accordance with MIL-C-28883A and ANSI S3.2-1989. The following DRT tests must be passed with a minimum score as indicated: 86 in Quiet, 0 bit error rate; 85 in Shipboard (Saipan), 0 bit error rate; 82 in Aircraft (P-3C), 0 bit error rate; 82 in Aircraft (E-3A), 0 bit error rate; 58 in Helicopter (RH-53), 0 bit error rate; 82 in Jeep, 0 bit error rate; and 82 in Quiet, 2 bit error rate.

- l. Appropriate security safeguards.
- m. Appropriate alarms and system faults.
- n. Reflect CCI classification and protection requirements when not keyed.
- o. Safeguard the key from unauthorized extraction.
- p. Generate and receive OTAR via SARK AK and MK..
- q. Radio must operate using external COMSEC devices.

3.3.8.2 Interoperability - Complete: The embedded COMSEC must be interoperable in Net Voice Mode and data modes (300, 600, 1200, 2400 bps) with:

- a. MINTERM TSEC/KY-99
- b. TACTERM AN/USC-43

3.3.8.3 Interoperability - Narrowband: The embedded COMSEC must be interoperable in all narrowband modes with:

- a. SUNBURST AN/CSZ-1A, Mod 5
- b. Reserved

3.3.8.4 (Reserved)

3.3.8.5 Interoperability - TSEC/KG-84C:

a. The embedded COMSEC must be interoperable in two HF modes with TSEC/KG-84C. These are the two modes implemented in the RAILMAN COMSEC module. One has redundant synch and one has non-redundant synch.

b. Receive a re-synchronization from a KG-84C.

3.3.8.6 Upgradeability: It is expected that all non-embedded COMSEC manpack radios will be upgraded at the Contractor's facilities. After upgrade the Contractor shall fully test and certify the upgraded manpack radio for correct operation in all modes. The Contractor shall return ship the upgraded manpack radio to the Government. The upgraded parts of the upgraded radio shall be covered by a 1 year warranty IAW FAR 52.246-17 ALT II. All non-embedded COMSEC manpack radios procured under this requirement must be fully upgradable to the embedded COMSEC model. Separate, pricing shall be provided for:

a. Procuring the manpack radio without embedded COMSEC.

b. Procuring the manpack radio with embedded COMSEC.

c. Procuring the embedded COMSEC upgrade of an existing manpack radio which doesn't have embedded COMSEC and the installation, test, and certification of the upgrade at the Contractor's facility. This upgrades the radio to embedded COMSEC. The upgraded radio shall be returned F.O.B. Destination to the site specified in Section F.

3.3.8.7 NSA Endorsement: The Contractor is responsible for obtaining NSA endorsement:

a. NSA endorsement must be obtained prior to delivery of any embedded COMSEC radio.

b. The Contractor shall submit all required documentation, make all changes required to all documentation, accomplish and pass all required testing, accomplish and pass all required inspections required to obtain NSA endorsement of the embedded COMSEC radio. The Contractor is required to perform the security analysis under the NSA CME program.

c. The Contractor shall establish a Memorandum of Understanding (MOU) with NSA and adhere to all NSA requirements to build, sell, and maintain embedded COMSEC radios. A Classified Generic NSA Security Specification and NSA DD-254 will be provided for the Contractor's guidance. NSA will provide specific guidance during the course of the certification.

d. NSA personnel approving security requirements documents always reserve the right to use the latest guidance available in evaluating submissions. Until approved by NSA, the requirement for any given submission can change to the most recent guidance at any time. Further, if an error is later discovered in any submission which must be corrected to comply

with NSA guidance, NSA approval can be withdrawn. The Contractor must comply with and provide all information requested by NSA for endorsement.

3.3.8.8 Number of Crypto keys: The embedded COMSEC must be able to load a minimum of 11 NSA approved crypto keys, 10 each Traffic Encryption Keys (TEK) and one each Key Encryption Key (KEK).

3.3.8.9 Key Loading: The keys must be able to be loaded via:

- a. KOI-18
- b. KYK-13
- c. KYX-15
- d. DTD
- e. Over The Air Rekey (OTAR) via SARK AK and MK.

3.3.8.10 Key Generation: The embedded COMSEC radio must be able to generate TEKs and KEKs and down load as appropriate to keying devices as approved by NSA.

3.3.8.11 The NSA approved and recommended RAILMAN COMSEC module shall be used as the basis for the embedded COMSEC.

3.3.8.12 External COMSEC Equipment: The non-embedded COMSEC radio and the embedded COMSEC radio must be fully operable using external COMSEC equipment as specified in paragraph 3.3.8.2 through 3.3.8.5 of this specification. Interface cables:

(1) The ISHMRS shall interface with the MINTERM TSEC/KY-99 via the standard cable which is provided with MINTERM.

(2) Separate ordering of interface cables for the ADC and MIL-STD-188-114A equipment has been provided in Section B of this contract.

3.3.9 Automatic Link Establishment (ALE): The ISHMRS shall have interoperable Automatic Link Establishment (ALE) capability, in accordance with MIL-STD-188-141A (appendix A), to allow automatic link-up and communication on the best available channel. However, the following portions of MIL-STD-188-141A do not apply:

(1) Group Address Programming - ISHMRS is required to only receive group calls; placing group calls is not required.

(2) LQA Memory Aging Function - ISHMRS is not required to degrade LQA scores with an automatic aging function.

(3) Wildcard, Self-address, null-address capability - ISHMRS is not required to support Selfaddress and Null-address functions. Wildcard functions must be supported through a remote terminal.

(4) AMD's and DTM's (not applicable with internal COMSEC).

3.3.9.1 Selectable ALE: System must be able to use ALE and not use ALE, as the operator desires.

3.3.9.2 Passive ALE: System must have passive receive ALE capability. The system must be able to receive Link Quality Analysis (LQA) information from a transmitting ALE capable radio, store this LQA information, and use this information without transmitting.

3.3.9.3 Interoperability: The system must be compatible and interoperable in the ALE mode with systems in service within the Government which are MIL-STD-188-141A compliant. The Contractor's system shall be interoperable with the AN/TSC-122 in all HF MIL-STD-188-141A ALE functions.

3.3.9.4 Multiple Frequency Channel Groups: The system shall have the capability to store LQA measurements for multiple frequency channel groups and transmit from any specific group. The system shall have the capability to store unique LQA measurements for each individual address for the multiple frequency channel group assigned to that station. The system shall use the frequencies in the channel group assigned to that station when establishing a link.

a. System shall have the capability to store and select from a minimum of 10 channel groups.

b. This shall be operator selectable. The alphanumeric address and net address shall be selectable by the operator from the front panel.

c. This shall be automatically selectable based on operator programming of the preset channels.

d. (Reserved)

e. System shall have the capability to store a minimum of 100 channels in each of the 10 channel groups.

f. System shall have the capability to store a minimum of 200 individual addresses, 20 self addresses, and 20 net addresses.

3.3.9.5 Channel Group Manipulation: The operator shall have the capability to add or delete channels from each channel group and review the list of channels programmed into each group.

3.3.9.6 Microprocessor Output: The system shall have the capability to output the LQA Channel Groups and LQA information to an MSDOS PC compatible microprocessor based computer system. This will be used by the operator to analyze HF channel availability by time of day.

3.3.9.7 Microprocessor Input: The System shall have the capability to program channel groups and individual address information from an MSDOS PC compatible microprocessor based computer system.

3.3.9.8 (Reserved)

3.3.9.9 (Reserved)

3.3.10 Data Modems: The ISHMRS shall have:

3.3.10.1 High-performance Data modems: High-performance, HF Data Modem compliant with Appendix B, MIL-STD-188-110A to allow reliable communications.

a. The system must be compatible and interoperable in the High-performance, HF Data Modem mode with systems in service with the Government which are FSK and Appendix B, MIL-STD-188-110A compliant. The Contractor's system shall be interoperable with the AN/GRC-233 and AN/TSC-122 in the specified MIL-STD-188-110A functions and modes. The MIL-STD-188-110A specified modes are FSK and Appendix B 39 tone parallel modem. In 39-Tone mode, 7 and 8 bit Asynchronous data, and synchronous data, shall be supported. The system must also be compatible and interoperable with the ANDVT, end to end.

b. In addition, serial tone modem, including transmission at all data rates and reception at 75 bits per second, in accordance with MIL-STD-188-110A capability shall be provided. MIL-STD-188-110A serial tone modem must be interoperable with the Harris RF 5720 serial tone modem and the AN/TSC-122.

3.3.10.2 ANDVT Data Modems: (The contractor may delay providing the ANDVT data modems until the contractor provides the embedded COMSEC ISHMRS and embedded COMSEC upgrades to ISHMRS.)

a. ANDVT 39 tone parallel modem.

b. ANDVT 16 tone parallel modem.

c. ANDVT Line-of-sight (for wireline, VHF and UHF operation) modem.

3.3.10.3 HF FSK Data Modems: HF FSK Modems, Narrow- and Wideband, in accordance with MIL-STD-188-110A, paragraph 5.

3.3.10.4 External HF Data Modems: The non-embedded COMSEC radio and embedded COMSEC radio must be fully operable using external HF data modems.

3.3.10.5 (Reserved)

3.3.11 User's Interface: ISHMRS shall have:

3.3.11.1 Simple Operations/Multiple Environments: The user's interface to the radio shall provide for simple operations in all environments.

3.3.11.2 Manual Control of Automatic Functions: Appropriate automatic functions shall have a simple means of manual control and selection of user desired parameters.

3.3.11.3 Channel Automatic Parameter Selection: The user shall be able to select a radio channel and all other required settings shall go to the preselected defaults for that channel. For example, the COMSEC crypto key, operational mode, etc. shall automatically be set to the correct settings once the user has selected the radio channel.

3.3.11.4 Light Conditions: The user interface shall support operation during hectic military tactical operations under all light conditions:

- a. Operable in bright sunlight
- b. Operable in dim sunlight
- c. Operable in darkness
- d. Operable in blackout conditions
- e. Operable with Night Vision Devices

3.3.11.5 BackLight: The display shall have an operator controlled variable intensity backlight display.

3.3.11.6 System Status and Health: The user shall have provided to him, on demand, the status of the radio such that the user can be confident in its correct configuration, operation and projected remaining time of operation.

3.3.12 Environmental Requirements: Operational configuration includes power on, 10 ft whip antenna attached, and the handset attached.

a. Shock/Vibration: MIL-STD-810E:

Shock: Method 516.4: Procedure IV - 48" transit drop.

Vibration: Method 514.4:

Procedure I (Category 8 – Random) with all frequencies at or below 9 Hz removed). Procedure III (Category 3)- Loose

Cargo Transport (Equipment carried on ground vehicles as unrestrained cargo).

- b. Leakage: MIL-STD-810E: 1 meter depth.
Method 512.3, Procedure I - Basic Leakage.
- c. Humidity: MIL-STD-810E: 0-95 % .
Method 507.3;
Procedure II – Cycle 4 – Hot, Humid
- d. Fungus: Analysis showing resistance to Fungal damage.
- e. Salt Fog: MIL-STD-810E: 5 % solution for 8 hours. Method 509.3,
Procedure I.
- f. Rain: MIL-STD-810E: 4 in/hr.
Method 506.3;
Procedure I - Blowing Rain.
- g. Sand and Dust:
and dust. MIL-STD-810E: Analysis showing resistance to blowing sand
- h. Temperature: MIL-STD-810E: -40°C to +70°C
Includes operating and storage.

High Temperature: Method 501.3:
Procedure II (+70 C), Table 501.3-I

Cold Temperature: Method 502.3:
Procedure I - Storage.
Procedure II - Operation.

Thermal Shock: Method 503.3; from min. and max. to +20C)
- i. Altitude: MIL-STD-810E: Maximum 15,000 ft. Method 500.3;
Procedure I – Storage (1 hour).

3.3.13 Interoperability -Complete: ISHMRS shall interoperate with the following equipment and shall comply with the specific additional requirements stated. COMSEC interoperability is covered in paragraph 3.3.8.

3.3.13.1 Data Input and Output Devices:

- a. OA-8990/P Digital Message Device Group, both analog and digital.

b. ISHMRS in both digital data and analog mode; both through direct cable attachment and through audio coupling to the radio's handset.

c. Advanced Data Controller (ADC) IAW MIL-STD-188-184.

d. AN/CYZ-10 DTD.

e. MIL-STD-188-114A unbalanced serial input/output, HP 95 using the HP PN: F1015A serial interface cable, AN/PSC-2 Digital Communications Terminal (DCT), and AN/UXC-7A Facsimile.

f. Interface cables:

(1) The ISHMRS shall interface with the OA-8990/P Digital Message Device Group, and the TSEC/KL-43C.

(2) Separate ordering of interface cables for ADC and , MIL-STD-188-114A devices have been provided in Section B of this contract..

3.3.13.2 Radios and Communications Systems – in SSB plain text voice:

a. AN/PRC-104

b. AN/PRC-132

c. AN/GSC-62

d. AN/GRC-233

e. AN/TSC-26

f. AN/TSC-126A

g. AN/TSC-99 Communications Central

3.3.13.3 VHF Radios:

a. AN/PRC-77 -- FM plain text voice.

b. AN/PRC-126 – FM plain text voice.

c. AN/PRC-68 – FM plain text voice.

d. SINCGARS (Single Channel Mode Only) – plain and secure CVSD voice and data from 30-60 MHz.

3.3.13.4 Data Modems:

- a. MIL-STD-188-110A, Appendix B modems. In 39-Tone mode, sync and asynchronous (7-8 bit) modes shall be supported. Long and Short interleaving shall be supported.
- b. HF FSK Modems, Narrow- and Wideband, in accordance with MIL-STD-188-110A, paragraph 5.
- c. ANDVT 39 tone parallel modem,
- d. ANDVT 16 tone parallel modem.
- f. Serial Tone MIL-STD-188-110A

3.3.14 LPC-10 Digitized Voice: LPC-10-52E voice in accordance with FED-STD-1015 and MIL-C-28883A and interoperable with ANDVT in accordance with MIL-C-28883A. Must pass Diagnostic Rhyme Test (DRT) in accordance with MIL-C-28883A and ANSI S3.2-1989. The following DRT tests must be passed with a minimum score as indicated: 86 in Quiet, 0 bit error rate; 85 in Shipboard (Saipan), 0 bit error rate; 82 in Aircraft (P-3C), 0 bit error rate; 82 in Aircraft (E-3A), 0 bit error rate; 58 in Helicopter (RH-53), 0 bit error rate; 82 in Jeep, 0 bit error rate; and 82 in Quiet, 2% bit error rate.

3.3.15 Supported Communications Modes:

3.3.15.1 Voice:

- a. 2.4 kbps secure voice.
- b. 3 kHz analog, non-secure voice.

3.3.15.2 IMC: International Morse Code (IMC) via Modulated Continuous Wave (MCW).

3.3.15.3 FSK: FSK Narrowband & Wideband IAW MIL-STD-188-110A, paragraph 5.

3.3.15.4 Data Burst: 300 bps analog and digital and 1200 bps digital via OA-8990/P. Analog and digital via the KL-43 series. Digital via the AN/CYZ-10 DTD.

3.3.15.5 Data:

- a. Secure and non-secure.
- b. Asynchronous and synchronous in accordance with MIL-STD-188-110A (75, 150, 300, 600, 1200, 2400 bps). KY-99 mode shall support sync data modes from 300-2400 bps.
- c. MIL-STD-188-114A compatible electrical interface.

3.3.16 EMC/EMI: The radio shall be designed to meet the applicable sections of MIL-STD-461D.

3.3.17 Reliability:

a. Mean Time Between Failure: Minimum 3,000 hours (Design Objective).

Conditions: - All tested radios shall first under go an environmental stress test to eliminate initial failures.

- 25° C ambient temperature condition.
- Ground mobile environment.
- Continuous operation.
- 1 to 9 transmit to receive ratio.
- 20 Watts output on transmit.
- SSB.

b. Mean Time To Repair: Maximum 15 minutes to module level.

3.3.18 BIT: The system shall be designed with Built In Test (BIT) capability to identify faults down to the Line Replaceable Unit (LRU) and Shop Replaceable Unit (SRU) levels. SRUs and LRUs shall be identified by the contractor using internal procedures to generate a Maintenance Task Analysis (MTA) and Maintenance Allocation Chart (MAC).

3.3.19 Color: All external painted surfaces shall be painted with paint conforming to GREEN 383 (#34094 chip color in FED-STD-595B) Chemical Agent Resistant (CARC) paint as specified in MIL-F-14072D (ER).

3.3.20 Use of Common Military Connectors: All connectors shall be common military style connectors, to the maximum extent practical.. The Contractor shall list the NSN for all connectors and identify on which cables and equipment, each connector is used.

3.4 ISHMRS VEHICLE INSTALLATION MOUNTING ASSEMBLY REQUIREMENTS:

The ISHMRS Vehicle Installation Mounting Assembly shall include all vehicle shock mounts, mounting hardware, cable restraints, equipment restraints, protective markings, and protective covers to securely mount the ISHMRS Manpack RT, HF 125 Watt Amplifier, HF Automatic Antenna Tuner, and Vehicle Power Supply in a tactical and commercial vehicle. The assembly shall also include a maintenance/installation manual and an external speaker with volume control and a built-in amplifier and cable. The ISHMRS Vehicle Installation Mounting Assembly shall protect the equipment when the equipment is installed and operated.

a. All external painted surfaces shall be painted with paint conforming to GREEN 383 (#34094 chip color in FED-STD-595B) Chemical Agent Resistant (CARC) paint as specified in MIL-F-14072D (ER) for all items.

b. The mounts shall provide for easy and quick- (less than 60 seconds) installation and deinstallation of the Manpack RT and the 125 Watt Amplifier.

c. The manpack RT mount shall provide a means of securely locking the Manpack RT with an appropriate locking device. The requirement is to provide adequate physical security measures to meet unattended Controlled Cryptographic Items (CCI) physical security requirements as required by DA-PAM 25-380-2, Chapter 2, and AR-190-91 paragraph 3-24 when the Manpack RT is installed in the mount, in an operable condition, in a non-enclosed tactical vehicle (Ref. AR 190-51, paragraph 3-24c(1)(c)). The security measures shall not impede normal operation.

d. All controls, visual indicators and connectors for Handset, Key Fill, and antennas must be easily accessible and easily operable. Sufficient room must be allowed for easy installation of all cables.

e. The Manpack RT and 125 Watt Amplifier will normally be mounted side by side.

f. The contractor shall provide a specific installation kit for the HMMWV. The installation kit for the HMMWV shall include the vehicle mounts, vehicle power supply, vehicle whip antenna, and all interconnecting cables cut to length. The kit shall be configured to accept the manpack R/T, the HF 125 Watt amplifier, and HF Automatic Antenna Tuner.

3.4.1 Size and Weight:

a. Dimensions: Each shock mount shall be small and compact to allow flexibility in installing in various locations in tactical and commercial vehicles. Mount shall not add more than 3 inches to any dimension of the item being mounted.

b. Weight: Total System Weight: The total system weight shall not exceed 155 pounds: for weight calculations the total system consists of the vehicle installation mounting assemblies installed; the manpack embedded COMSEC ISHMRS installed; the HF 125 watt amplifier mounted; the HF automatic antenna tuner mounted; the vehicle power supply mounted; the HF Whip antenna mounted; all interconnecting power, RF, and control cables; and all mounting hardware.

Shock Mount Weight: Each shock mount shall be light to minimize additional weight on the vehicle. The maximum weight limit on each shock mount is 20 lbs each.

3.4.2 Environmental Requirements: The same as paragraph 3.3.12 with and without the equipment installed in the shock mounts, except as changed in the following:

- Altitude: Minimum 15,000 ft.

3.4.3 EMC/EMI: Not applicable to Installation Mounting Assembly.

3.4.4 Reliability: See paragraph 3.3.17.

Shock Mounts are replaced at the unit level.

3.5 ISHMRS VEHICLE POWER SUPPLY REQUIREMENTS: Provide power from any of the following power sources: vehicle 12 volt DC system, vehicle 24 volt DC system, tactical vehicle 28 volt DC system, commercial 110 volt AC 48 thru 62 Hz system, and 220 volt AC 48 thru 62 Hz system; to the vehicle shock mounted Manpack RT, HF 125 Watt Amplifier, and HF Automatic Antenna Tuner (Only one of the power sources will be used at a time). The Vehicle Power Supply shall include all hardware necessary to firmly mount it and interconnection facilities to the shock mounted Manpack RT, HF 125 Watt Amplifier and HF Automatic Antenna Tuner.

a. The Vehicle Power Supply shall be mounted on its own shock tray or on the shock tray for the Manpack RT or HF 125 Watt Amplifier, or if applicable, the power supply may be hard mounted..

b. All external painted surfaces shall be painted with paint conforming to GREEN 383 (#34094 chip color in FED-STD-595B) Chemical Agent Resistant (CARC) paint as specified in MIL-F-14072D (ER).

c. Powered by the Vehicle Power Supply, the ISHMRS components must be capable of continuous operation at a 9 to 1 receive to transmit ratio, with the vehicle engine off. The ISHMRS components must be capable of continuous transmit capability from the vehicle system, including the Manpack RT, with the vehicle engine running, with a 3 to 1 receive to transmit ratio except 4 to 1 in CW mode.

d. The power inputs and outputs shall be protected from incorrect power sources and loads.

3.5.1 Size and Weight:

a. Dimensions: Vehicle Power Supply shall be small and compact. The Vehicle Power Supply shall not be greater than 475 cubic inches.

b. Weight: Each Vehicle Power Supply shall be light to minimize additional weight on the vehicle. The maximum weight limit on each Vehicle Power Supply is 20 lbs.

3.5.2 Environmental Requirements: The same as paragraph 3.3.12

3.5.3 EMC/EMI: The same as specified in paragraph 3.3.16

3.5.4 Reliability: See paragraph 3.3.17.a. Power supplies are to be replaced at the unit level.

3.6 ISHMRS VEHICLE MOUNTED HF 125 WATT AMPLIFIER REQUIREMENTS: The HF 125 Watt Amplifier shall have a minimum power output of 125 Watts PEP and AVG.

- An amplifier of slightly more or less power output is acceptable (100 to 150 Watts). Power efficiency is required to ensure minimum load of the Vehicle Power Supply.

- The amplifier shall be able to automatically interface with the Manpack RT and the HF Automatic Antenna Tuner to accomplish ALE capabilities and High-performance Data Modem capabilities.

- The amplifier shall provide the Manpack RT status conditions on the status of the amplifier and have the status displayed on the Manpack RT.

- All external painted surfaces shall be painted with paint conforming to GREEN 383 (#34094 chip color in FED-STD-595B) Chemical Agent Resistant (CARC) paint as specified in MIL-F-14072D (ER).

- a. Frequency: 1.6000 MHz to 29.9999 MHz
- b. Frequency Stability: The amplifier shall not affect frequency stability.
- c. Operational Modes: BE (single sideband, upper and lower, suppressed carrier telephony).
H3E (compatible AM single sideband plus full carrier telephony).
J2A MCW (single sideband suppressed carrier keyed tone).
- d. Power Output: Three manpack front panel selectable power outputs of 125 Watts (nominal), 50 Watts (nominal) and 10 Watts (nominal) shall be provided. Additionally, minimum power outputs adjustable in 1 dB steps from 10 Watts to max PEP AVG continuous output shall be available via the remote control port. Power outputs shall be directly related to a specific wattage output with a maximum VSWR of 2:1. (1.6 to 29.9999 MHz)
The amplifier shall be able to power the 15 to 20 foot whip antenna (with Antenna Tuner) and a properly cut long wire antenna directly, without Antenna Tuner.
- e. Over Temperature Protection: The amplifier automatically reduces power output if excessive temperature occurs internal to the amplifier. An indicator that the over temperature condition has occurred and the power has been reduced should be provided to the operator.

- f. Output Protection: The power outputs fully protected from damage for any VSWR, including an open circuit and short circuit condition.
- g. Remote Indicators: Remote indicators shall be provided for VSWR, forward power output, and over temperature.
- h. Broadband Emissions: IAW paragraph 5.3.2.1, MIL-STD-188-141 A.
- i. In Band Noise: -75 dBc/Hz below PEP @ maximum output.
- j. Intermodulation Distortion: -30 dB below PEP @ maximum power output.
- k. Spurious Output: -50 dBc minimum.
-60 dBc beyond +/- 5 % removed from the carrier.
- l. Harmonics: -40 dB minimum.
- m. T/R Switching Time: Less than 20 ms.
- n. Attack Time Delay: Reach minimum of 90% of steady state power output in less than 100 ms.
- o. Release Time Delay: Reach less than 10% of power output in less than 25 ms.
- p. Input Signal Power: The amplifier rated PEP shall be obtained without manual adjustment.

The amplifier shall be capable of being excited by a 100 mw exciter power input.
- q. RF Impedance: 50 ohms nominal, unbalanced.

3.6.1 Size and Weight:

- a. Dimensions: The Amplifier shall not be greater than 800 cubic inches.
- b. Weight: The Amplifier shall be a maximum of 30 lbs.

3.6.2 Environmental Requirements: The same as paragraph 3.3.12 except as changed in the following:

Vibration: Method 514.4 Category 8, Procedure I -- Ground Mobile.
 Shock: Method 516.4 Procedure I -- Functional Shock
 Humidity: Method 507.3 Procedure I -- Natural Conditions

3.6.3 EMC/EMI: The same as specified in paragraph 3.3.16.

3.6.4 Reliability: See paragraph 3.3.17, except MTTR is maximum 45 minutes to module level..

3.7 ISHMRS VEHICLE MOUNTED HF AUTOMATIC ANTENNA TUNER: A fast tuning HF Automatic Antenna Tuner shall be provided. The HF Automatic Antenna Tuner shall be able to automatically interface with the Manpack RT and the HF 125 Watt Amplifier to accomplish ALE capabilities and High-performance Data Modem capabilities.

- a. Frequency: 1.6000 MHz to 29.9999 MHz
- b. Tuning time: Sufficiently short to handle ALE capabilities.

 Initial tune time on a new frequency shall be less than seconds.

 Tunes states for frequencies shall be stored in memory. Operator shall be able to select manual update for any specific frequency.

 Memory tune time less than 25 msec.
- c. Antenna Tune Power: Tuning capable from 10 to 50 Watt PEP/average minimum input. Tuning power shall be as small as possible and as short in duration as possible.

 Maximum power input 400 Watt PEP power, 200 Watt PEP/average continuous power capability.
- d. Output Protection: The antenna outputs fully protected from damage for any VSWR, including an open and short circuit condition.
- e. Over Temp Protection: The Automatic Antenna Tuner automatically provides protection against excessive temperature occurring internal to the Automatic Antenna Tuner.
- f. Input Protection: The Automatic Antenna Tuner automatically provides protection against excessive power inputs up to 750 Watts PEP.

The Automatic Antenna Tuner shall be protected from Damage from lightning strikes.

g. Antenna Tuning: The antenna tuner shall be capable of tuning NVIS.

3.7.1 Size and Weight:

a. Dimensions: The Automatic Antenna Tuner shall not be greater than 1300 cubic inches.

b. Weight: The Automatic Antenna Tuner shall be a maximum of 30 lbs.

3.7.2 Environmental Requirements: The same as paragraph 3.3.12 except as changed in the following:

Vibration: Method 514.4 Category 8, Procedure I – Ground Mobile.
Shock: Method 516.4 Procedure I – Functional Shock
Humidity: Method 507.3 Procedure I – Natural Conditions

3.7.3 EMC/EMI: The same as specified in paragraph 3.3.16

3.7.4 Reliability: See paragraph 3.3.17, except MTTR is maximum 30 minutes to module level..

3.7.5 Color: All external painted surfaces shall be painted with paint conforming to GREEN 383 (#34094 chip color in FED-STD-595B) Chemical Agent Resistant (CARC) paint as specified in MIL-F-14072D (ER).

3.8 ISHMRS VEHICLE HF WHIP ANTENNA ASSEMBLY: This shall include the Antenna Base, Spring Mount, and Antenna Sections sufficient for a 15 to 20 foot long whip antenna.

a. The antenna shall be capable of handling a minimum of 200 Watts PEP average continuously across the band from 1.6 to 29.9999 MHz.

b. All external painted surfaces shall be painted with paint conforming to GREEN 383 (#34094 chip color in FED-STD-595B) Chemical Agent Resistant (CARC) paint as specified in MIL-F-14072D (ER).

c. The whip antenna shall be used for operation while the vehicle is moving and while the vehicle is stopped. The whip antenna shall be used while it is fully extended in the vertical position and while tied down in the horizontal position using the tie down system.

d. The whip antenna shall be rugged enough to withstand impacts which result from the vehicle moving under overhead obstructions such as road over passes, train over passes, overhead tree limbs etc.

e. The antenna must be designed for safe operation. Protection should be provided against personnel inadvertently touching the antenna while the transmitter is transmitting and against puncture injuries from the tip of the antenna. Protection shall be provided from conducting high voltage, i.e., 10 KV at 60 HZ, from overhead power lines if the antenna should inadvertently come in contact with overhead power lines.

3.8.1 Size and Weight:

- a. Dimensions: The Antenna Base and Spring mount shall be no larger than 120 cubic inches. The antenna sections shall be capable of being broken down into sections which are no longer than 10 ft and when assembled shall be between 16 and 20 foot long.
- b. Weight: Each Antenna Assembly shall be light to minimize additional weight on the vehicle. The maximum weight limit on each antenna system is 20 lbs.

3.8.2 Environmental Requirements: The same as paragraph 3.3.12 except as changed in the following:

- Altitude: Minimum 15,000 ft.

3.8.3 EMC/EMI: The same as specified in paragraph 3.3.16.

3.8.4 Reliability: See paragraph 3.3.17.

Whip Antenna is replaced at the unit level.

3.9 CABLES FOR INSTALLATION OF THE VEHICLE SYSTEMS:

3.9.1 Cables: When ordered, a lot of ISHMRS vehicle cables shall consist of:

a. Cable, Power, Vehicle batteries to the ISHMRS Vehicle Power Supply. Standard length shall be approximately 15 feet long. Provision shall be provided for tailoring the length to a given installation.

b. Cable, Control, ISHMRS HF Manpack RT to vehicle mounted ISHMRS HF 125 Watt Amplifier, standard length appropriate for side by side mounting.

c. Cable, RF, ISHMRS Manpack RT to vehicle mounted ISHMRS HF 125 Watt Amplifier, standard length appropriate for side by side mounting.

d. Cable, Control, vehicle mounted ISHMRS HF 125 Watt Amplifier to vehicle mounted ISHMRS Automatic Antenna Tuner, standard length shall be approximately 20 feet long. Provision shall be provided for tailoring the length to a given installation.

e. Cable, RF, vehicle mounted ISHMRS HF 125 Watt Amplifier to vehicle mounted ISHMRS Automatic Antenna Tuner, standard length shall be approximately 20 feet long. Provision shall be provided for tailoring the length to a given installation.

f. Cable, RF, vehicle mounted ISHMRS Automatic Antenna Tuner to vehicle mounted ISHMRS HF Whip Antenna, standard length shall be approximately 20 foot long maximum. Provision shall be provided for tailoring the length to a given installation.

g. Cable, RF, vehicle mounted ISHMRS HF 125 Watt Amplifier and vehicle mounted ISHMRS HF Automatic Antenna Tuner to longwire antenna, length shall be approximately 50 feet long.

h. Cable, power, vehicle mounted ISHMRS Manpack to vehicle mounted ISHMRS Vehicle Power Supply, length shall be approximately 24 inches long. Provision shall be provided for tailoring the length to a given installation.

i. Cable, power, vehicle mounted ISHMRS HF 125 Watt Amplifier to ISHMRS vehicle mounted Vehicle Power Supply, length shall be approximately 24 inches long. Provision shall be provided for tailoring the length to a given installation.

j. Cable, power, AC 110 Volts, 60 Hz to vehicle mounted ISHMRS Vehicle Power Supply, length 50 feet.

k. Cable, power, AC 220 Volts, 50 Hz to vehicle mounted ISHMRS Vehicle Power Supply, with adapters for worldwide use, length 50 feet.

3.9.2 Color: All cables shall be a subdued color. All external painted surfaces shall be painted with paint conforming to GREEN 383 (#34094 chip color in FED-STD-595B) Chemical Agent Resistant (CARC) paint as specified in MIL-F-14072D (ER).

3.9.3 Use of Common Military Connectors: All connectors shall be common military style connectors, to the maximum extent practical.

3.9.4 Size and Weight:

- a. Dimensions: Cables shall be small and compact.
- b. Weight: Cables shall be lightweight. A full length cable shall not exceed 20 pounds.

3.9.5 Environmental Requirements: The same as paragraph 3.3.12 except as changed in the following:

- Altitude: Minimum 15,000 ft.

3.9.6 EMC/EMI: The same as specified in paragraph 3.3.16.

3.9.7 Reliability: See paragraph 3.3.17.

External cable assemblies are replaced at the unit level.

3.10 RESERVED.

3.11 Components and Accessories:

3.11.1 ISHMRS Manpack Radio Components: Each manpack transceiver system shall consist of the following:

- a. 1 each MF/HF receiver/transmitter unit.
- b. 1 each manpack whip antenna kit for HF communications while on the move and at temporary halts. Antenna shall also be tunable by the radio up to 59.9999 MHz.
- c. 1 each handset (standard military (H-250/U) with U-229 type connector) for voice communications over MF/HF.
- d. Battery case (attaches to receiver/transmitter unit, supports up to two BB-590 style batteries internally).
- e. Leg Key.
- f. An external audio "Y" cable.
- g. Carrying case for whip antenna, handset, leg key, "Y" cable and operators manual.
- h. Interface cables: The non-embedded ISHMRS shall interface with the MINTERM TSEC/KY-99, via the standard cable which is provided with this equipment. If for some overriding technical requirement, the standard cable won't work or won't provide access to all features, then the contractor shall provide an interface cable for this equipment as a component of every non-embedded ISHMRS ordered.

3.11.2 ISHMRS Vehicle Installation Mounting Assembly Components:

- a. 1 each vehicle tactical shock mount for the installation of the ISHMRS non-embedded COMSEC and embedded COMSEC Manpack R/T less battery box (only one at a time). This may be combined with the 125 Watt Amplifier shock mount.
- b. 1 each vehicle tactical shock mount for the installation of the ISHMRS HF 125 Watt Amplifier. This may be combined with the Manpack shock mount.

c. 1 each vehicle tactical shock mount or a location on one of the previously mentioned vehicle tactical shock mounts for installation of the vehicle DC and AC 110/220 Volts power supply/regulator.

d. 1 each vehicle tactical shock mount for installation of the ISHMRS HF Automatic Antenna Tuner.

e. 1 each external speaker with volume control and built in amplifier and cable to interconnect to the Manpack RT when installed in the shock mounts. Speaker to be used for monitoring received communications.

f. Any warning sticker requirements.

g. Weather proof covers for any exposed connectors when not in use.

h. A hardware mounting kit for securely mounting each mount, grounding each mount, and retaining all cables.

3.11.3 ISHMRS Vehicle Power Supply Components: ISHMRS vehicle power supply,

3.11.4 ISHMRS Vehicle Mounted HF 125 Watt HF Amplifier Components:

a. 1 each 125 Watt HF Amplifier.

b. Any warning sticker requirements,

c. Weatherproof covers for any exposed connectors when not in use.

3.11.5 ISHMRS Vehicle Mounted HF Automatic Antenna Tuner Components:

a. 1 each HF Automatic Antenna Tuner.

b. Any warning sticker requirements.

c. Weather proof covers for any exposed connectors when not in use:

3.11.6 ISHMRS Vehicle Mounted HF Whip Antenna Components:

a. Vehicular HF Whip Antenna.

b. Vehicular HF Whip Antenna Mount.

c. HF Whip Antenna Tie Down Kit.

d. HF Whip Antenna Safety Tip.

- e. HF Whip Antenna Safety, Insulating Boot.
- f. HF Whip Antenna Safety Cover.
- g. Installation, operation, and maintenance instructions.

3.11.7 Reserved.

3.11.8 ISHMRS Backpack Harness Accessory:

3.11.8.1 General. The ISHMRS backpack harness assembly will be used by service members to carry the ISHMRS manpack radio on tactical missions when the service member is not carrying a rucksack. The ISHMRS manpack radio shall be fully operational when carried via the ISHMRS backpack harness. The harness shall secure and carry one ISHMRS manpack radio and one set of manpack components. Regardless of orientation of user, the ISHMRS manpack radio shall not come loose from the harness. The Center of gravity of the load shall be as near as possible to porter's spine. The harness and load shall be free of extremities, other than the handset and antennae, which would catch on vegetation or clothing and cause noise during movement.

3.11.8.2 The harness shall be:

- a. Lightweight, less than 2 pounds
- b. Adjustable so as to comfortably fit users with standing body dimensions of General Forces between the 5th percentile female and the 95 percentile male.
- c. Subdued in color. Metal components shall be painted with the same paint required in paragraph 3.3.19. Cloth or other components will be the same subdued color.
- d. Resistant to retention of external particles, moisture, mildew and corrosion. Moisture absorption shall not exceed 1.0% of the weight of the entire assembly.
- e. Able to be fitted to the manpack and components and to the porter in one minute or less. The loaded harness shall be able to be removed from the porter in five seconds or less.
- f. Designed to produce a laterally balanced load, allow normal head movements, squatting, walking or climbing over obstacles, movement of shoulder girdle and regulation of body temperature. It should minimize application of pressure to the chest, armpits, nerves, blood vessels and areas without muscular padding and eliminate local strain of muscle groups.

3.12 SAFETY: The Contractor shall comply with all required and standard safety practices to provide a safe radio for user operation and maintenance.

- a. The design and operation of the radio shall be applicable to manpack and vehicle installed radios.

b. The Contractor shall state what certifications/evidence that the NDI meets health and safety requirements shall be provided.

c. All exposed edges shall be rounded.

d. The design shall minimize the possibility of personnel injury and equipment damage.

e. The design shall minimize the possibility of equipment damage due to operator error and incorrect installation.

f. Safety requirements may be validated during the contractor's equipment demonstration and the Government's test and evaluation.

3.13 PARTS, SUBASSEMBLIES AND ASSEMBLIES: The Contractor shall provide all parts, assemblies and subassemblies necessary to support ISHMRS. Mechanisms shall be established to provide the required items and support.

3.13.1 Spares and Repair Parts: The Contractor shall list all items which may be required to repair all ISHMRS deliverables. The Contractor shall recommend, and the Government approve, which items shall be stocked, at which level, and in what quantities. The Contractor shall deliver spares or repair parts within 30 days after receipt of delivery order.

3.13.2 Shop Replaceable Unit (SRU) and Line Replaceable Unit (LRU): SRU and LRU shall be determined by the contractor using internal procedures.

3.13.3 Interchangeability: All parts, subassemblies and assemblies shall be interchangeable to the maximum extent possible.

a. Individual components shall not be handpicked for fit and performance.

b. All items having the same part number shall be functionally and physically interchangeable without modification. The Contractor shall have written concurrence from the Government prior to making any changes that would impact on interchangeability.

3.14 WARRANTY: For all items delivered under this contract, the Contractor shall provide a 1 year warranty in accordance with FAR 52.246-17 ALT II. This FAR clause is located in Section I of this contract. Government maintenance performed in accordance with the terms of the contract shall not invalidate the warranty specified above. For warranty purposes only, 'acceptance' as relates to FAR 52.246-17 ALT II is 14 days after the date of the signature on the DD-250 by an authorized representative of the Government.

3.15 ILS MANAGEMENT. The Contractor shall appoint a Logistics Manager as the single point of contact for ILS management.

3.16 CONFIGURATION MANAGEMENT: The Contractor shall maintain a Configuration Management (CM) program on all hardware/ software configuration items in accordance with the Contractor's CM Plan.

3.16.1 Contractor Configuration Management POC: The Contractor shall be required to specify an individual to serve as a single point of contact for all Configuration Management related issues.

3.16.2 Subcontractor and Vendor Configuration Management: The Contractor shall maintain configuration control over work performed by subcontractors and vendors.

3.16.3 Configuration Control: The Contractor shall extend configuration control to cover hardware, firmware, software, and documentation. The Contractor shall maintain traceability and currency of the baseline and consistency among all project documentation and system equipment.

a. Contractor generated changes after the baseline has been established, which provide the same form, fit and function, will not require formal approval by the Government.

b. Any changes that change form, fit and function in any way shall require Government approval. The Contractor shall outline the procedures to gain Government approval in the ISP.

3.17 RESERVED.

3.18 RESERVED.

3.19 MAINTENANCE:

3.19.1 ISHMRS Maintenance Concept: ISHMRS shall have a two level maintenance concept, Organizational Level and Depot Level:

3.19.1.1 Organizational Level Maintenance:

3.19.1.1.1 Operator Maintenance: ISHMRS shall require minimal operator maintenance. Operator maintenance shall be accomplished without special electronic skills and training. Operator maintenance shall include; but, not be limited to:

a. General cleaning.

b. Operator checks.

c. Battery replacement.

d. Antenna and minor hardware replacements (i.e. knobs, handsets, cables, battery box, RT, vehicle HF amplifier, vehicle automatic antenna tuner, etc.).

e. Trouble shooting and fault isolation using BIT.

3.19.1.1.2 Electronic Technician: An Organizational technician shall perform all operator maintenance functions, trouble shooting using system schematics, fault isolation to the LRU and SRU levels, and removal/replacement of defective LRUs and SRUs.

3.19.2 Contractor Logistics Support (CLS): The Contractor shall provide maintenance support for all hardware, firmware, and software procured under this contract. This support may use the same structure as is used to provide warranty support. The Contractor shall furnish all qualified labor, supervision, materials, equipment, tools, appliances, and services to repair ISHMRS LRUs and SRUs. Repair shall be performed at the Contractor's facility. The Contractor shall repair or replace any LRU and SRU within thirty (30) calendar days after receipt of a failed LRU and SRU. Serviceable SRUs and LRUs shall be returned to the Government. The base requirement is to maintain the capability to provide all non-warranty maintenance support for all ISHMRS hardware, firmware and software. Each maintenance action shall be recorded and billed at the price established in Section B of this contract. Changes in the extent, scope and duration of the Contractor Depot Level Maintenance Program, including cancellation, shall be effected as a contractual amendment issued by the Contracting Officer. Prices for those modified items and services shall be as specified in accordance with the equitable adjustment procedures prescribed in the clause of the contract entitled "Changes."

a. Contractor repair procedures shall include cleaning, visually inspecting, bench testing, isolating faults, disassembling, repair actions, calibrating, functionally testing, performing acceptance inspection, and preparing for shipment. Where possible, a maintenance float of serviceable items (GFE) will be established at Contractor's repair facilities to replace repairable items sent from the users for repair (for USSOCOM support only).

b. Repairable items are those of a durable nature that, when unserviceable, normally can be restored to a serviceable condition by a repair activity. The Contractor shall estimate the cost to repair a durable item and submit this estimate to the PMC4 LCSM under the Diagnostic Test and Evaluation CLIN in Section B (0014AA in Year One & subsequent year CLINs). This estimate will be based upon the Product Services Rate (CLIN 0014AB in Year One & subsequent year CLINs) and Product Material (CLIN 0014AC in Year One & subsequent year CLINs) as well as Spares and Repair Parts CLINs (0007AA/AB through 0012AA/AB in Year One & subsequent year CLINs) in Section B. Upon approval of estimate, the Contractor will complete repair. If the estimate exceeds 65 % of the cost of a new item, then the contractor shall notify the LCSM to allow coordination with the user to determine if requirement is sufficient to justify the cost of replacing the unserviceable component with a new one. Upon approval, the Contractor shall provide a serviceable equivalent item or component. Each casualty shall be reported on the quarterly maintenance report. Unserviceable items and components may be replaced with an item of a higher revision level. Items and components provided as replacement parts must be compatible with all interfacing components of the existing system.

c. All repairs shall be in accordance with the Contractor's established shop methods and procedures and shall be accomplished with the special tools and test equipment developed for this purpose. All repaired equipment shall comply with the requirements of this contract.

d. The terms "serviceable condition" and "serviceable", as used herein, mean that condition in which an item is capable of meeting all initial operational and functional requirements. Minor cosmetic defects which do not affect the installation and operation of the items do not require correction or repair.

e. Any approved modification to items required by the contract and not previously accomplished shall be done by the Contractor at the time of repair. Each modified item shall meet form, fit, and function of the item for which it was modified or changed and be two-way interchangeable (i.e. unmodified items shall operate in place of modified items and modified items shall operate in place of unmodified items).

f. The Contractor shall be responsible for the initial lay-in of piece parts and for obtaining replenishment units and spare piece parts required for use in the repair of failed items. These parts shall remain the property of the Contractor until incorporated into the failed items at which time they become Government property. All parts removed during repair become the property of the Contractor.

3.19.2.1 Contractor Logistic Support Maintenance Report: The Contractor shall provide a Contractor Logistic Support Maintenance Report. The report shall reflect status of all maintenance actions undertaken by the Contractor during the previous quarter. (DI-ILSS-80965; Data Item Number 0001)

3.19.3 Planned Maintenance System (PMS): The Contractor shall provide the scheduled maintenance procedures deemed necessary by the contractor in the applicable Commercial Off-the-Shelf (COTS) manuals for the equipment that makes up the ISHMRS system.

3.19.4 Subcontractor/Origin 1 Equipment Manufacturer (OEM) Support: The prime Contractor shall be responsible for all repairs made by their subcontractors and original equipment manufacturer's (OEM). The Contractor shall incorporate requirements from this SOW into subcontracts with vendors. The Contractor shall monitor, control, and track all repair actions with vendors from receiving through repairing, testing, certification, and return shipping to a Government facility.

3.20 RESERVED.

3.21 SPECIAL TOOLS AND TEST EQUIPMENT: Special Tools and Test Equipment will be identified and listed in the applicable Commercial Off-the-Shelf (COTS) Manuals provided with the equipment that makes up the ISHMRS system. Special tools and test equipment are any tools and test equipment that are not commercially available and are used to perform a specific operation on a specific piece(s) of material and which are necessary for servicing, testing, adjusting, installing and maintaining the end item.

3.22 TECHNICAL DATA:

3.22.1 Manuals: The Contractor shall provide manuals to facilitate the use and maintenance of all deliverables.

3.22.1.1 Operator's and System Installation/Maintenance Manuals: The Contractor shall provide operator's manuals covering all equipment under this contract, as well as system installation/maintenance manuals for the system. The manuals covered in this subparagraph shall be in Contractor format. In addition to those manuals required based on a delivery order for manuals, the Contractor shall provide one operator's manual with each piece of equipment and shall provide supplements as they are generated, and one system installation manual with each system. Section B allows for the Contractor shall provide an electronic copy of all manuals on a CD ROM.

3.22.1.1.1 The intended user for the operators manual is a HF radio operator. The intended user for the system installation/maintenance manual is a HF radio operator and/or maintenance technician. The intended user for the intermediate maintenance manual is an electronics maintenance technician.

3.22.1.1.2 Overhaul instructions are not required.

3.22.1.1.3 The manual supplements shall be in contractor format.

3.22.1.2 Maintenance Manuals: When required by delivery order, the Contractor shall provide Commercial Off-the-Shelf (COTS) maintenance manuals covering all equipment under this contract. The Contractor shall provide maintenance manuals in the quantities required by individual delivery orders.

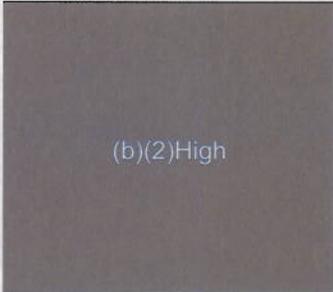
3.23 TRAINING AND TRAINING SUPPORT:

3.23.1 RESERVED

3.23.2 RESERVED.

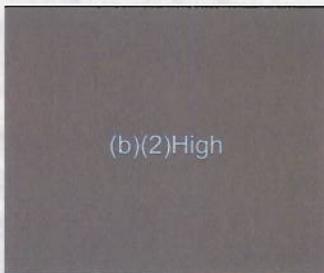
3.23.3 Training Classes/Instructor Services: The Contractor shall propose the below listed operator and maintenance training courses. The Contractor shall provide instructive services as described in SOW paragraphs 3.23.3.1. through 3.23.3.2. and shall provide the training documentation and material outlined in SOW paragraph 3.23.4. The Government will execute delivery orders for classes required to meet its minimum needs. The Government will provide a minimum of 30 days notice for each class and shall not require that more than one course be conducted at any given time. Training classes shall be conducted on any day of the week, to include Saturday and Sunday, as specified by the Government. The days specified for each course should maximize the usefulness of an eight hour training day. Once embedded COMSEC is incorporated into the system, embedded COMSEC training shall be incorporated into the New Equipment Training (NET) Operator's and Intermediate Maintenance Training course.

3.23.3.1 New Equipment Training (NET)/Operators Training Course: The Contractor shall propose a five day New Equipment Training (NET) Operator Training course. This training will provide students with the required skill to operate all ISHMRS systems. Each NET Operator's class shall train up to 24 operator/unit maintainers. One instructor will be provided for a class size of up to 10 students; 2 instructors for class sizes up to 24 students. The training may take place at the Contractor's facility and the Government sites specified below:



At the Government sites, the Government will provide a classroom and radios.

3.23.3.2 Maintenance Training Course: The Contractor shall propose a five day maintenance course. Each class shall train up to 24 maintenance personnel, provide an overview of how the system operates, and isolation of faults down to the module and lowest replaceable unit. . One instructor will be provided for a class size of up to 10 students; 2 instructors for class sizes up to 24 students. After NSA certification of the embedded COMSEC, this course shall also cover the embedded COMSEC portion of the embedded COMSEC radio and shall be sufficient to meet NSA's requirements for maintenance certification on the embedded COMSEC radio. The Course may be conducted at the Contractor's facility and the following Government sites:



At Government sites, the Government will provide a class room, radios, and common communication's TMDE.

3.23.4 Training Documentation and Materials:

3.23.4.1 Training Documentation: If the course is ordered, the contractor shall provide a training syllabus and outline in contractor format for the Net Operator's and Intermediate Maintenance Training Course.

3.23.4.2 Training Materials: The Contractor shall provide Commercial Off-the-Shelf training materials to support each ISHMRS course.

3.24 CERTIFICATION OF TRAINING: Upon completion of the respective training course, the Contractor shall obtain from the Senior Class Member certification that the total course length, and, if applicable, disposition of training materials were in accordance with the terms of the contract. Such certification shall be furnished, by the Contractor, concurrent with the submission of invoices, to the address specified in the clause entitled "INSPECTION AND ACCEPTANCE (DESTINATION).

3.25 NOMENCLATURE, MARKING AND PACKAGING:

3.25.1 RESERVED.

3.25.2 Nameplates and Product Markings: Identification and markings shall be displayed on an externally mounted marking plate. The marking plate shall display the modification and version level of each manpack and vehicle mounted system.

3.25.3 Packaging Marking: Unit packages, intermediate packages and shipping containers shall be marked in accordance with best commercial practices.

3.26 RESERVED.

3.27 ACCEPTANCE TESTING: The Government reserves the right to test any ISHMRS deliverable against any applicable ISHMRS product characteristic prior to acceptance. All products delivered under the contract shall meet the specifications as stated in the contractors' Factory Acceptance Test Procedure .

3.28 RESERVED.

3.29 RESERVED.

3.30 RESERVED.

3.31 CONTRACTOR TECHNICAL SERVICES: The Contractor shall provide personnel in accordance with the conditions and for the purposes stated herein. The basic requirement shall be for a two day trip, providing support for two days, minus the travel time. Additional days of support may be specified in the delivery order. Modifications to the travel conditions not changing or exceeding the dollar amount quoted on the delivery order, are authorized, if agreed to by the Contractor and the Government representative responsible for the service.

3.31.1 Travel Conditions:

3.31.1.1 Each order for Contractor Technical Services will be for a minimum of two days on site.

3.31.1.2 For each additional day, personnel shall be at the work site for approximately 8 hours.

3.31.1.3 Travel tasked under this requirement shall be limited to locations in the Continental U.S.

3.31.2 Technical Services:

3.31.2.1 Engineering Services: The Contractor shall provide on-site engineering support as tasked by the Government. Examples of supported activities include providing assistance with initial Government depot supply and maintenance operations, testing of interoperability with current and new communications systems, installation of ISHMRS on other communications platforms, and tiger teams, e.g. small groups dedicated to rapid problem resolution.

3.31.2.2 Maintenance Services: The Contractor shall provide on-site maintenance support as tasked by the Government. The Contractor shall provide his own maintenance tools and test equipment.

3.31.2.3 Telephonic Product Services: Upon request, the Contractor shall provide technical product services by telephone under the Product Services Rate CLIN (0014AB in Year One & subsequent year CLINs).

3.31.2.4 Vehicle System Installation: As ordered, the Contractor shall provide on-site support to install ISHMRS vehicle systems. Each order shall be based on 1 trip which shall include the cost to install 2 vehicle systems. Additional vehicle installation requirements shall be based on 1 additional day for every 2 systems installed. Vehicle system installation shall be all inclusive, it shall include as a minimum:

- a. Drilling all mounting holes.
- b. Installing all mounts.
- c. Installing all equipment.
- d. Installing all cables.
- e. Safety checks and installation quality checks prior to powering the system up.
- f. Powering the ISHMRS vehicle system up on both vehicle battery power and while the vehicle is running.
- g. System checkout across the band of frequency operation and power outputs.
- h. Testing manpack mount and dismount procedures.
- i. Providing any installation supplies and hardware required.

**ATTACHMENT 4
SPARES AND REPAIR PARTS FOR
AN/PRC-138(V)2 Non Embedded COMSEC Radio**

SEPARATELY PRICED SUB-CLINS

SLIN	PART NUMBER	DESCRIPTION	CLIN 00013AA Year 1 UNIT PRICE	CLIN 0045AA Year 2 UNIT PRICE	CLIN 0075AA Year 3 UNIT PRICE	CLIN 00105AA Year 4 UNIT PRICE	CLIN 00126AA Year 5 UNIT PRICE	CLIN 00147AA Year 6 UNIT PRICE	CLIN 00168AA Year 7 UNIT PRICE	CLIN 0189AA Year 8 UNIT PRICE	CLIN 0210AA Year 9 UNIT PRICE	CLIN 0231AA Year 10 UNIT PRICE
	AN/PRC-138(V)2	138MRS HF MANPACK RADIO										
AB	10530-0100-01	AN/PRC-138(V)2 MANPACK										
AC	10303-2170	MOTHERBOARD										
AD	10303-2200	POWER SUPPLY ASSY										
AE	10303-2280	PWB ASSY, INTERFACE										
AF	10303-2700	SYNTHESIZER ASSY										
AG	10372-1480-01	ANTENNA CPLR ASSY										
AH	10372-3440-01	PWB ASSY, LPC										
AJ	10530-1400-01	PWR AMP/BATT CHG ASSY										
AK	10530-1500-01	FRONT PANEL ASSY										
AL	10530-2500-01	PWB ASSY, SIGNAL PROCESSOR										
AM	10075-1399	RCVR/EXCITER ASSY										
AN	10530-1215-01	HANDSET, MODIFIED H-250										
AP	10530-1250-02	ANTENNA CONNECTOR										
AQ	AT271A/PRC-25	WHIP ADAPTER ASSEMBLY										
AR	10530-1300-02	ANTENNA										
AS	10372-1230	BATTERY CASE ASSEMBLY										
AT	10372-9866-06	"M" ADAPTER ASSY										
AU	10372-1037-01	CABLE ASSY, RADIO REMOTE										
AV	10372-1053-01	CABLE ASSY, RF PA-CPLR										
AW	919-5004-05	CABLE ASSY, RF PA-R/E										
AA		RF-3016-05 CW KEY										
		UNIT PRICE BY CLIN	8,475.57	6,744.37	9,020.83	9,305.03	9,597.81	9,868.90	10,147.92	10,434.73	10,729.91	11,033.56

(b)(4)

**ATTACHMENT 5
SPARES AND RELATED PARTS FOR
AN/VR-102 VEHICULAR SYSTEM**

SLIN	PART NUMBER	DESCRIPTION	CLIN 0016AA Year 1 UNIT PRICE	CLIN 0047AA Year 2 UNIT PRICE	CLIN 0077AA Year 3 UNIT PRICE	CLIN 0107AA Year 4 UNIT PRICE	CLIN 0123AA Year 5 UNIT PRICE	CLIN 0149AA Year 6 UNIT PRICE	CLIN 0170AA Year 7 UNIT PRICE	CLIN 0191AA Year 8 UNIT PRICE	CLIN 0212AA Year 9 UNIT PRICE	CLIN 0231AA Year 10 UNIT PRICE
AB	10225-6132-03	RF-5032PA-125 WATT PA										
AC	10225-1150-01	PA HEAT SINK ASSEMBLY										
AD	10225-3120-01	PA CONTROL PWB ASSEMBLY										
AE	10225-1100	FILTER PWB ASSEMBLY										
AF	10225-1110	REAR PANEL PWB ASSEMBLY										
AG	10225-3510	RCVR PROTECTION PWB										
AH	10225-1050	CABLE ASSEMBLY, SPECIAL										
AJ	10225-1051	CABLE ASSEMBLY, SPECIAL										
AK	10225-1052	CABLE ASSEMBLY, SPECIAL										
	10225-1052-01	CABLE ASSEMBLY, SPECIAL										
	10250-0100-01	AC-DC POWER SUPPLY										
	N/A											
	10321-0100-01	DC-DC CONVERTER TOP LEVEL										
	N/A											
AL	10208-5020	RF-382A-12 AHT COUPLER										
AM	10208-1270	INTERCONNECT ASSY										
AN	10208-1300	CONTROL PWB ASSY										
AO	10208-1600	DISCRIMINATOR ASSY										
AP	10208-3000	POWER SUPPLY ASSY										
AQ	10208-6260	COIL PACK ASSY										
AR	10208-3100	TRANSMITTER INTERFACE ASSY										
AS	10208-5400	RF PWB ASSY										
AT	10208-6300	CONNECTOR ASSEMBLY										
AU	10208-3280	CABLE ASSEMBLY, SPECIAL										
AV	10181-5180-01	SPEAKER										
AW	SBV-16FHD	ANTENNA, 16' WHIP										
AX	E76-0003-001	WHIP END PROTECTOR										
AY	E76-0004-001	INSULATING BOOT										
AZ	E76-0005-001	ANTENNA TIE DOWN KIT										
BA	E76-0006-001	SPRING MOUNT, HIGH VOLTAGE										
	100-5029	VEH WHIP BASE/CLAMP KIT										
BB	10530-0260	CABLE LIST, VEHICLE										
BC	10181-5170-01	CABLE ASSY, CPLR-ANTENNA										
BD	10181-9826-008	CABLE ASSY, DC INPUT										
BE	10181-5172-01	ADAPTER KIT										
BF	10181-5173-08	CABLE ASSY, SPEAKER - POWER										
BG	10181-5171-06	CABLE ASSY, SPEAKER AUDIO										
BH	10181-9821-011	CABLE ASSY, RT/PA COAX										
BI	10181-9822-011	RT - PA CONTROL CABLE ASSY										
BJ	10181-9823-002	PA - CPLR CONTROL CABLE ASSY										
BK	10181-9824-002	PA - CPLR COAX CABLE ASSY										
BL	10181-9831-050	CABLE ASSY, AC INPUT 110V										
BM	10181-9833-002	CABLE ASSY, AC DC										
BN	10181-9833-001	CABLE ASSY, DC POWER - PA										
BP	10261-0042	WIRE ASSEMBLY										
BQ	10372-0700-01	CABLE ASSY, BATTERY CHGR										
AA		UNIT PRICE BY CLIN	\$11,592.58	\$11,865.89	\$12,124.34	\$12,387.24	\$12,680.83	\$12,961.32	\$13,247.71	\$13,540.05	\$13,839.67	\$14,146.37

(b)(4)

ATTN: 6A
 SPARES, REPAIR
 PARTS

FOR 125-WATT VEHICULAR SYSTEM

PART NUMBER	DESCRIPTION	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6		Year 7		Year 8		Year 9		Year 10	
		UNIT PRICE	CLIN 0018AA	UNIT PRICE	CLIN 0048AA	UNIT PRICE	CLIN 0078AA	UNIT PRICE	CLIN 0108AA	UNIT PRICE	CLIN 0128AA	UNIT PRICE	CLIN 0150AA	UNIT PRICE	CLIN 0171AA	UNIT PRICE	CLIN 0192AA	UNIT PRICE	CLIN 0213AA	UNIT PRICE	CLIN 0234AA
RF-5832H-PA001	FALCON II 125W PA																				
10225-1150-03	PA/HEAT SINK ASSEMBLY																				
AC 10225-9120-02	PA CONTROL PWB ASSEMBLY																				
AD 10225-1100	FILTER PWB ASSEMBLY																				
AE 10225-1110	REAR PANEL PWB ASSEMBLY																				
AF 10225-5510	RCVR PROTECTION PWB																				
AG 10225-1080	CABLE ASSEMBLY, SPECIAL																				
AH 10225-1081	CABLE ASSEMBLY, SPECIAL																				
AJ 10225-1052	CABLE ASSEMBLY, SPECIAL																				
AK 10225-1092-01	CABLE ASSEMBLY, SPECIAL																				
10520-0100-02	AC-DC POWER SUPPLY																				
N/A																					
10531-0100-02	DC-DC CONVERTER																				
N/A																					
10208-5025-05	RF-382A-15, CARC GRN ANT CPLR																				
AI 10208-1270	INTERCONNECT ASSY																				
AM 10208-1320-01	CONTROL PWB ASSY																				
AH 10208-1500	DISCRIMINATOR ASSY																				
AP 10208-3000	POWER SUPPLY ASSY																				
AQ 10208-5250	COIL PACK ASSY																				
AR 10208-3100	TRANSCEIVER INTERFACE ASSY																				
AS 10208-5400-01	RF PWB ASSY																				
AT 10208-5300-08	CONNECTOR ASSEMBLY																				
AU 10208-6300-01	50 OHM ANTENNA OPTION																				
AV 10208-5072-02	HIGH VOLTAGE WIRE																				
AW 10208-3280	CABLE ASSEMBLY, SPECIAL																				
AX 10208-1080-01	SWITCH ASSEMBLY, 50 OHM																				
AY 10208-5073-01	HIGH VOLTAGE WIRE																				
AZ 10181-5180-01	SPEAKER																				
5B-V16FHD	ANTENNA, 16' WHIP																				
E7A-0003-001	WHIP END PROTECTOR																				
BB 10209-4200	INSULATING BOOT																				
BC E76-0005-001	ANTENNA TIE DOWN KIT																				
BD E76-0006-001	SPRING MOUNT HIGH VOLTAGE																				
BE 100-5028	VEH WHIP BASE/CLAMP KIT																				
10530-0250-07	CABLE LIST, VEHICLE																				
BF 10181-5171-09	CABLE ASSY, SPEAKER AUDIO																				
BG 10181-5173-09	CABLE ASSY, SPEAKER POWER																				
BH 10181-5182-01	CABLE, MODIFIED																				
BJ 10181-5188-05	WIRE ASSY, C/LR/WAN																				
BK 10181-98271-013	CABLE ASSY, RT/PA																				
BL 10181-9823-002	PA-CPLR CONTROL CABLE ASSY																				
BM 10181-9825-002	PA-CPLR COAX CABLE ASSY																				
BN 10181-9831-050	CABLE ASSY, AC INPUT 110V																				
BP 10181-9833-002	CABLE ASSY, AC DC																				
BQ 10372-0700-01	CABLE ASSY, BATTERY CHGR																				
BR 10373-0030	CABLE ASSY, 12V IN																				
BS 10535-0720-A013	CABLE ASSY, PA RT																				
BT 10535-0760-A008	CABLE ASSY, RMT CON																				
AA	UNIT PRICE BY CLIN	\$19,557.31	\$13,827.28	\$14,109.80	\$14,385.88	\$14,673.60	\$14,967.07	\$15,266.41	\$15,571.74	\$15,883.17	\$16,200.84										

(b)(4)

**ATTACHMENT 5B
SPARES AND REPAIR PARTS
FOR 20-WATT VEHICULAR SYSTEM**

PART NUMBER	DESCRIPTION	CLIN										NON CATALOG ITEMS	
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10		
		UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE
RF-3970H-PA001	20 WATT POWER AMPLIFIER/COUPLER												
AB 10225-6100-01	PAFILTER ASSY												
AC 10225-6100-01	ANTENNA COUPLER ASSY												
AD 10225-6160-03	CONTROL ROLLER FALCON II												
AE 10225-6130-01	PWB ASSY, INTERFACE												
AF 10225-6140-01	PWB ASSY, INTERCONNECT												
AG 10225-6016	COAX ASSY, TRIP INPUT												
AH 10225-6022-01	BNC BULKHEAD ASSY, HV												
AJ 10225-6023-01	HIGH VOLTAGE CONN ASSY												
AK 10181-5180-01	SPEAKER												
AL 58-VJ2PHD	ANTENNA, 32' WHIP												
AM 176-0013-001	WHIP END PROTECTOR												
AN 10309-4200	INSULATING BOOT												
AO 176-0005-001	ANTENNA TIE DOWN KIT												
AP 100-5054-HVFD	SPRING MOUNT HIGH VOLTAGE												
AQ 100-5028	VEH WHIP BASE/CLAMP KIT												
AR E-0167	WHIP EXTENSION SECTION												
AS RF-1800-AT001	WHIP TILT ADAPTER												
AT 10535-0707-A009	CABLE LIST, VEHICLE												
AU 10535-0706-A009	CABLE ASSY, SPEAKER AUDIO												
AV 10181-9021-020	CABLE ASSY, SPEAKER POWER												
AW 10535-0720-A020	CABLE ASSY, COAX												
AX 10181-9027-020	CABLE ASSY, CONTROL												
AA	UNIT PRICE BY CLIN	\$8,718.14	\$9,912.50	\$10,110.75	\$10,312.96	\$10,519.22	\$10,729.61	\$10,944.20	\$11,163.08	\$11,386.35	\$11,614.07		

(b)(4)

ATTACHMENT 6D
SPARES AND REPAIR PARTS
FOR 150-WATT BASE STATION SYSTEM

PART NUMBER	DESCRIPTION	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6		Year 7		Year 8		Year 9		Year 10		NON CATALOG ITEMS	
		CLIN 0019AAA	UNIT PRICE	CLIN 0051AAA	UNIT PRICE	CLIN 0081AAA	UNIT PRICE	CLIN 0111AAA	UNIT PRICE	CLIN 0132AAA	UNIT PRICE	CLIN 0153AAA	UNIT PRICE	CLIN 0174AAA	UNIT PRICE	CLIN 0195AAA	UNIT PRICE	CLIN 0216AAA	UNIT PRICE	CLIN 0237AAA	UNIT PRICE		
RF-5013H-PA001	150 WATT POWER AMPLIFIER																						
AB	CABLE ASSY BNC																						
AC	CABLE ASSY SMB																						
AD	CABLE ASSY SMB																						
AE	CABLE ASSY CRT BR																						
AF	SPEAKER ASSY,CARC COVER ASSY																						
AG	PWB ASSY, CONTROL PA HEATSINK ASSY																						
AH	PWB ASSY, RP INTER FAN ASSY																						
AI	PWB ASSY, RX PROTECT FRONT PANEL ASSY																						
AJ	AUDIO AMP, ASSY																						
AK	25 MHZ LOW PASS FILTER																						
AL	ANTENNA COUPLER INTERCONNECT ASSY																						
AM	CONTROL PWB ASSY																						
AN	DISCRIMINATOR ASSY																						
AO	POWER SUPPLY ASSY																						
AP	COIL PACK ASSY																						
AQ	TRANSCEIVER INTERFACE ASSY																						
AR	RF PWB ASSY																						
AS	CONNECTOR ASSEMBLY 50 OHM ANTENNA OPTION																						
AT	HIGH VOLTAGE WIRE																						
AU	CABLE ASSEMBLY, SPECIAL SWITCH ASSEMBLY, 60 OHM																						
AV	HIGH VOLTAGE WIRE																						
AW	POWER SUPPLY																						
AX	FAN ASSY, 24VDC 48 A																						
AY	CONTROL PWB ASSY																						
AZ	EMI FILTER ASSY																						
BA	SWITCHER/HEATSINK																						
BB	SPEAKER																						
BC	ANTENNA, 32' WHIP																						
BD	WHIP END PROTECTOR																						
BE	INSULATING BOOT																						
BF	ANTENNA TIE DOWN KIT																						
BG	SPRING MOUNT HIGH VOLTAGE VEH WHIP BASE/CLAMP KIT																						
BH	WHIP EXTENSION SECTION																						
BI	WHIP TILT ADAPTER																						
BJ	CABLE LIST, VEHICLE																						
BK	CABLE ASSY, PA (DC PWR)																						
BL	CABLE ASSY, SPEAKER AUDIO																						
BM	CABLE ASSY, SPEAKER POWER																						
BN	PA-CPLR CONTROL CABLE ASSY																						
BO																							
BP																							
BQ																							
BR																							
BS																							
BT																							
BU																							
BV																							

(b)(4)

This sheet is subject to the restriction on the title page of this proposal

Contractor Bid or Proposal Information--See FAR 3.104. Use or disclosure of data

301.xls @ 6/7/01

Attachment_L

**ATTACHMENT 6D
SPARES AND REPAIR PARTS
FOR 160-WATT BASE STATION SYSTEM**

LINE	PART NUMBER	DESCRIPTION	CLIN 0079AA Year 1	CLIN 0061AA Year 2	CLIN 0081AA Year 3	CLIN 0111AA Year 4	CLIN 0132AA Year 5	CLIN 0163AA Year 6	CLIN 0174AA Year 7	CLIN 0195AA Year 8	CLIN 0216AA Year 9	CLIN 0237AA Year 10	NON CATALOG ITEMS
			UNIT PRICE										
BW	10181-9824-025	PA-CPLR COAX CABLE ASSY											
BX	10497-5016-01	CABLE ASSY, COAX											
BY	10497-5035-01	CABLE ASSY, DC POWER INPUT											
BZ	10535-0720-B17	CABLE ASSY, CONTROL											
AA		UNIT PRICE BY CLIN	\$23,115.14	\$23,577.45	\$24,049.00	\$24,529.98	\$25,020.58	\$25,520.99	\$26,031.41	\$26,562.03	\$27,083.08	\$27,624.74	

(b)(4)

**ATTACHMENT 6E
SPARES AND REPAIR PARTS
FOR 400-WATT BASE STATION SYSTEM**

PART NUMBER	DESCRIPTION	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6		Year 7		Year 8		Year 9		Year 10		NON CATALOG ITEMS
		CLIN 0020AA	CLIN 0062AA	CLIN 0082AA	CLIN 0112AA	CLIN 0133AA	CLIN 0154AA	CLIN 0176AA	CLIN 0196AA	CLIN 0217AA	CLIN 0231AA	UNIT PRICE										
RF-5834H-PA001	400 WATT POWER AMPLIFIER																					
AB	FAN																					
AC	CAP. FEED THRU																					
AD	C06-0005-002																					
AE	DIODE, STUD M/T																					
AF	CONN. RECEPTACLE																					
AG	UW2020MA00																					
AH	10286-1115																					
AI	10286-1120																					
AJ	10286-1140																					
AK	10286-1180																					
AL	10286-1230																					
AM	10286-1270-01																					
AN	10286-1290-01																					
AO	10286-1350-02																					
AP	10286-1450																					
AQ	10286-1451																					
AR	10286-1452																					
AS	10286-1453																					
AT	10286-1454																					
AU	10286-1454																					
AV	10286-1620																					
AW	10286-1621																					
AX	10664-1720-05																					
	25 MHz Low Pass Filter																					
AY	RF-3B2A-15																					
AZ	10208-1270																					
BA	10208-1500																					
BB	10208-3000																					
BC	10208-6250																					
BD	10208-3100																					
BE	10208-5400-01																					
BF	10208-6300-08																					
BG	10208-6300-01																					
BH	10208-5072-02																					
BI	10208-3250																					
BJ	10208-1050-01																					
BK	10208-5073-01																					
BL	10208-5073-01																					
	POWER SUPPLY																					
BM	10289-0345																					
BN	10289-0350																					
BP	10289-0360																					
BQ	10289-0360-02																					
	PREPOST SELECTOR																					
BR	10096-0130-02																					
BS	10208-3000-01																					
BT	10323-3200-01																					
BU	10323-5500-01																					
BV	10394-1030-01																					
BW	10394-1040-01																					
BX	10394-1060-01																					

(b)(4)

**ATTACHMENT 5E
SPARES AND REPAIR PARTS
FOR 400-WATT BASE STATION SYSTEM**

CLIN	PART NUMBER	DESCRIPTION	CLIN 0020AA Year 1 UNIT PRICE	CLIN 0052AA Year 2 UNIT PRICE	CLIN 0082AA Year 3 UNIT PRICE	CLIN 0112AA Year 4 UNIT PRICE	CLIN 0133AA Year 5 UNIT PRICE	CLIN 0154AA Year 6 UNIT PRICE	CLIN 0175AA Year 7 UNIT PRICE	CLIN 0196AA Year 8 UNIT PRICE	CLIN 0217AA Year 9 UNIT PRICE	CLIN 0237AA Year 10 UNIT PRICE	NON CATALOG ITEMS
BY	10394-0050-02	PWB ASSY, CONTROL											
BZ	10181-5100-01	SPEAKER											
CA	SB-V32FHD	ANTENNA, 32' WHIP											
CB	E76-0003-001	WHIP END PROTECTOR											
CC	10309-4200	INSULATING BOOT											
CD	E76-0005-001	ANTENNA TIE DOWN KIT											
CE	100-5034-HVPO	SPRING MOUNT HIGH VOLTAGE											
CF	100-5020	VEH WHIP BASE/CLAMP KIT											
CG	E-0157	WHIP EXTENSION SECTION											
CH	RF-1806-A1001	WHIP TILT ADAPTER											
CI													
CJ	10535-0707-A009	CABLE LIST, BASE STATION											
CK	10535-0708-A009	CABLE ASSY, SPEAKER AUDIO											
CL	10181-8821-004	CABLE ASSY, SPEAKER POWER											
CM	10535-0720-A004	CABLE ASSY, COAX											
CN	10181-8834-004	CABLE ASSY, CONTROL											
CO	10181-8831-009	CABLE ASSY, DC POWER											
CP	10181-8823-250	CABLE ASSY, AC POWER INPUT											
CQ	10181-8824-250	PA-OPTR CONTROL CABLE ASSY											
CR	10394-8011-006	CABLE ASSY, DC CONTROL											
CS	10394-8020-006	CABLE ASSY, RF BNC											
CT	10394-8021-008	CABLE ASSY, RF BNC											
CU	10394-8000-006	CABLE ASSY, RF NN											
AA		UNIT PRICE BY CLIN	\$38,965.94	\$39,745.26	\$40,540.17	\$41,350.87	\$42,177.99	\$43,021.55	\$43,881.98	\$44,759.62	\$45,654.81	\$46,567.91	

(b)(4)

**ATTACHMENT 6
AN/PRC-138B(V1) AN/PRC-150(C)
COMMON USAGE SPARES AND REPAIR PARTS**

SEPARATELY PRICED SUB-CLINS

SLIN	EQUIP	PART NUMBER	DESCRIPTION	CLIN 0021AA Year 1 UNIT PRICE	CLIN 0053AA Year 2 UNIT PRICE	CLIN 0083AA Year 3 UNIT PRICE	CLIN 0134AA Year 4 UNIT PRICE	CLIN 0155AA Year 5 UNIT PRICE	CLIN 0176AA Year 6 UNIT PRICE	CLIN 0197AA Year 7 UNIT PRICE	CLIN 0218AA Year 8 UNIT PRICE	CLIN 0239AA Year 9 UNIT PRICE
AB	A	10181-1013	GASKET, COVER									
AC	A	10225-1014	GASKET, HEATSINK									
AD	A	10225-1222	BOOT, RUBBER									
AE	A	F15-0001-016	FUSE 25A, 32V PIC									
AF	A	IN08-0001-005	INSL RUBBER/PLASTIC									
AG	A	M08-0001-051	INSL RUBBER/PLASTIC									
AH	A	MP-4170	SILICONE GREASE									
AJ	A	MS27488-20	PLUG GROMMET, 065D 584									
AK	A	P29-0008-001	ADHESIVE CYANOACRYLAT									
AL	A,C	MS35489-1	GROMMET, RUBBER									
AM	A,C	P25-0002-000	GREASE (DC-6)									
AN	A,G	P60-0001-001	COMPOUND, HEATSINK 340									
AP	C	10012-7177	O-RING, .056ID									
AQ	C	10208-0015	COMPATIBILITY LABEL									
AR	C	10206-1004	GASKET									
AS	C	10208-1006	WARNING LABEL									
AT	C	10208-5031	TS GUIDE, POCKET, RF-382									
AU	C	10251-0043	FIELD INSTRUCTION SHEET									
AV	C	1960-4000	INSULATOR ASSEMBLY									
AW	C	423-0012	GASKET									
AX	C	423-0015	INSULATOR GASKET									
AY	C	F-0016	FUSE, 60A, QA 250V									
AZ	C	MP-1550	EPOXY, 2-PART GEN PURPOSE									
BA	C	MP-4127	O-RING, 114ID									
BB	C	N22-0008-002	LED RED T-1 3/4 RTANG									
BC	C	N25-0005-208	ARRAY LED, RED 8 ELEMENT									
BD	C	P30-0009-080	RETAINING COMPOUND 50ML									
BE	C	Z17-0004-002	BUMPER, RUBBER									
BF	M	10012-2021	KNOB, CONTROL									
BG	M	10012-7186	O-RING, 1.739 ID									
BH	M	10181-0044-01	ATTENTION CARD, PASSWORD									
BJ	M	10243-2021	KNOB, CONTROL									
BK	M	10303-1108	SUPPORT, RUBBER									
BL	M	10303-3023	GASKET, CONDUCTIVE									
BM	M	10372-0006-01	OPERATOR CARD, AN/PRC-138									
BN	M	10372-1023-01	BOOT, RUBBER SEALING									
BP	M	10372-1525-01	BOOT, RUBBER, AMT/PA									
BQ	M	10372-1626-02	BOOT, RUBBER AUDIO									
BR	M	10372-1041-01	HANDLE									
BS	M	10372-1044-01	PAD, ADHESIVE, FR PANEL ASSY									
BT	M	10372-1046-01	GASKET, CASE									

(b)(4)

**ATTACHMENT 6B
COMMON USAGE SPARES AND REPAIR PARTS
20 Watt Vehicular System
SEPARATELY PRICED SUB-CLINS**

EQUIP LEGEND	PART NUMBER	DESCRIPTION	CLIN 0023AA Year 1		CLIN 0086AA Year 3		CLIN 0118AA Year 4		CLIN 0138AA Year 5		CLIN 0167AA Year 6		CLIN 0178AA Year 7		CLIN 0199AA Year 8		CLIN 0220AA Year 9		CLIN 0241AA Year 10		NON CATALOG ITEMS	
			UNIT PRICE	UNIT PRICE	UNIT PRICE																	
AB	A	10225-6017-01																				
AC	A	H05-0003-102																				
AD	A	H05-0003-001																				
AE	A	MS16705-006																				
AF	A	MS36339-136																				
AG	A	MS11657-31																				
AH	A	H32-0004-023																				
AJ	A	SM-B-447-039																				
AK	A	SM-B-447-039																				
AL	A	J98-0005-001																				
AM	A	MS36425-71																				
AN	A	MS36536-139																				
AO	A	ANG600518																				
AP	A	10511-0424-01																				
AQ	M	10511-0424-02																				
AR	M	10511-0424-03																				
AS	M	10511-0424-04**																				
AT	M	10511-0424-05																				
AU	M	10511-2904-01																				
AV	M	10511-2904-01																				
AW	M	10542-2824-01																				
AX	M	MP-4170																				
AZ	M	E46-0005-001																				
BA	M	P30-0019-001																				
BB	M	SM-B-5004-1B																				
BC	A/C	SM-B-5004-1B																				
BD	T	Z61-0034-125																				
BE	M	Z61-0034-125																				
AA		TOTAL	\$212.74	\$216.99	\$221.33	\$225.76	\$230.27	\$234.88	\$239.58	\$244.37	\$249.25	\$254.24	\$259.24	\$264.24								

(b)(4)

** Note 1:
For an ANPRC-1388(V) delivered after May 1, 2000:
* Part number 10511-0424-04 is replaced by part number 10511-0424-05

ATTACHMENT 6C
COMMON USAGE SPARES AND REPAIR PARTS
180 Weft Vehicular System
SEPARATELY PRICED SUB-CLINS

EQUIP PART NUMBER	DISCREPTION	CLIN										NON CATALOG ITEMS	
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10		
		UNIT PRICE	UNIT PRICE										
AB	19012-7177												
AC	19208-0015												
AD	19208-1006												
AE	19251-0043												
AF	19511-0424-01												
AG	19511-0424-02												
AH	19511-0424-03												
AJ	19511-0424-04**												
AK	19511-0424-05												
AL	19511-2904-01												
AM	19511-2903-01												
AN	19512-2924-01												
AP	1990-4000												
AQ	423-0012												
AS	423-0015												
AT	E45-0001-002												
AU	E45-0001-112												
AV	E45-0006-001												
AW	F-404E												
AX	MF-4170												
AY	MS35489-1												
AZ	N21-0032-208												
BA	H22-0006-002												
BB	P25-0002-000												
BC	P30-0006-010												
BD	P30-0009-050												
BE	P30-0013-001												
BF	SM-P-500418												
BG	Z17-0004-002												
BH	Z61-0024-054												
BI	10497-1112-01												
BJ	Z19-0022-001												
BK	Z41-0002-001												
BL	10204-3200-05												
BN	SM-P-447440												
BO	J99-0005-001												
BQ	10284-3200-04												
BR	10284-3200-02												
BS	10284-3200-08												
BT	10487-1120-01												
BU	MS35338-1368												
BV	MS51952-27B												
BW	MS191795-942												
BX	MS35338-136												
BY	1134-0029-010												
AA	TOTAL	\$491.01	\$500.83	\$510.84	\$821.08	\$531.48	\$542.11	\$552.05	\$564.01	\$676.29	\$500.60		

(b)(4)

** Note 1: For an ANIPRC-1989(0) delivered after May 1, 2000:
* Part number 10511-0424-04 is replaced by part number 10511-0424-08

ATTACHMENT 6D
COMMON USAGE SPARES AND REPAIR PARTS
160W Base Station System
SEPARATELY PRICED SUB-CLINS

EQUIP LEGEND	EQUIP PART NUMBER	DESCRIPTION	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6		Year 7		Year 8		Year 9		Year 10		NON CATALOG ITEMS	
			CLIN 0025AA	UNIT PRICE	CLIN 0057AA	UNIT PRICE	CLIN 0087AA	UNIT PRICE	CLIN 0117AA	UNIT PRICE	CLIN 0138AA	UNIT PRICE	CLIN 0159AA	UNIT PRICE	CLIN 0180AA	UNIT PRICE	CLIN 0201AA	UNIT PRICE	CLIN 0222AA	UNIT PRICE	CLIN 0245AA	UNIT PRICE		
AB	C	10012-7177																						
AC	C	10208-0016																						
AD	C	10208-1006																						
AE	C	10251-0043																						
AF	M	10511-0424-01																						
AG	M	10511-0424-02																						
AH	M	10511-0424-03																						
AJ	M	10511-0424-04**																						
AK	M	10511-0424-05																						
AL	M	10511-2904-01																						
AM	M	10512-2924-01																						
AN	M	10512-2924-01																						
AP	C	1980-4000																						
AQ	C	423-0012																						
AR	C	423-0016																						
AS	C	445-0001-002																						
AT	M	E45-0001-112																						
AU	M	E45-0008-001																						
AV	C	F-0016																						
AW	A	MP-4170																						
AX	A	MS34489-1																						
AY	C	R71-0032-208																						
AZ	C	N22-0005-002																						
BA	A	E25-0002-000																						
BB	C	E30-0008-010																						
BC	C	E30-0008-050																						
BD	M	E30-0013-001																						
BE	A	E60-0001-001																						
BF	T	SNB-500118																						
BG	C	Z17-0004-002																						
BH	C	Z17-0004-094																						
BI	A	10492-1116-01																						
BJ	A	10492-1116-01																						
BK	A	Z18-0024-001																						
BL	A	Z17-0002-001																						
BM	A	10284-3200-005																						
BN	A	SM4-447440																						
BO	A	368-0005-001																						
BP	A	10284-3200-014																						
BQ	A	10284-3200-012																						
BR	A	10284-3200-008																						
BS	A	10497-1120-01																						
BT	A	10497-1120-01																						
BU	A	MS31338-1368																						
BV	A	MS15785-542																						
BW	A	MS15785-542																						
BX	A	MS33338-138																						
BY	A	H34-0029-010																						
BZ	PS	F03-0002-005																						
CA	PS	F03-0003-022																						
AA		TOTAL	\$483.76		\$503.88		\$513.73		\$524.00		\$534.48		\$545.30		\$556.21		\$567.33		\$578.65		\$590.25			

(b)(4)

** Note 1: For an AN/PRC-138BV delivered after May 1, 2000:
* Part number 10511-0424-04 is replaced by part number 10511-0424-08

ATTACHMENT D
 COMMON USAGE SPA AND REPAIR PARTS
 400 Watt Base Station
 SEPARATELY PRICED SUB-CLINS

EQUIP LEGEND	PART NUMBER	DESCRIPTION	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6		Year 7		Year 8		Year 9		Year 10		NON CATALOG ITEMS
			CLIN 0028AA	CLIN 0056AA	CLIN 0088AA	CLIN 0118AA	CLIN 0139AA	CLIN 0160AA	CLIN 0181AA	CLIN 0202AA	CLIN 0223AA	CLIN 0244AA	CLIN 0265AA	CLIN 0286AA	CLIN 0307AA	CLIN 0328AA	CLIN 0349AA	CLIN 0370AA	CLIN 0391AA	CLIN 0412AA	CLIN 0433AA	CLIN 0454AA	
AB	C	10012-7177																					
AC	C	10208-0015																					
AD	C	10208-1006																					
AE	C	10251-0043																					
AF	M	10511-0424-01																					
AG	M	10511-0424-02																					
AH	M	10511-0424-03																					
AI	M	10511-0424-04**																					
AJ	M	10511-0424-05																					
AK	M	10511-2904-01																					
AL	M	10511-2904-01																					
AM	M	10512-2024-01																					
AN	M	10512-2024-01																					
AO	C	10512-2024-01																					
AP	C	423-0012																					
AQ	C	423-0012																					
AR	C	423-0012																					
AS	C	545-0001-002																					
AT	M	545-0001-112																					
AU	M	545-0005-001																					
AV	C	F-0016																					
AW	A	AP-1170																					
AX	A	AP-1170																					
AY	C	AP-1170																					
AZ	C	AP-1170																					
BA	M	P25-0002-000																					
BB	C	P30-0005-010																					
BC	C	P30-0005-010																					
BD	M	P30-0013-001																					
BE	A	P60-0001-001																					
BF	T	SM-B-800418																					
BG	C	Z17-0004-002																					
BH	C	Z51-0034-094																					
BI	A	10285-1022																					
BJ	A	10285-1017																					
BK	A	10285-1017																					
BL	A	10285-1017																					
BM	A	10285-1017																					
BN	A	MS3425-70																					
BP	A	MS3425-70																					
BQ	A	MS3533-139																					
BR	A	MS1576-310																					
BS	A	MS1576-310																					
BT	A	MS3533-139B																					
BV	A	MS1587-31B																					
BW	A	MS3533-139																					
BX	A	FE3-0002-012																					
BY	A	10284-1066-02																					
BZ	A	MS15765-505																					
CA	A	MS15937-15																					
CB	A	10075-1208																					
CC	PS	MS-0011-014																					
CD	PS	FD3-0002-005																					
CE	PS	FD3-0002-022																					
CF	PS	FD3-0002-022																					
CG	PS	FD3-0002-022																					
CH	PS	FD3-0002-022																					
CI	PS	FD3-0002-022																					
CL	PS	FD3-0002-022																					
CM	PS	FD3-0002-022																					
CN	PS	FD3-0002-022																					
CO	PS	FD3-0002-022																					
CP	PS	FD3-0002-022																					
CQ	PS	FD3-0002-022																					
CR	PS	FD3-0002-022																					
CS	PS	FD3-0002-022																					
CT	PS	FD3-0002-022																					
CU	PS	FD3-0002-022																					
CV	PS	FD3-0002-022																					
CW	PS	FD3-0002-022																					
CX	PS	FD3-0002-022																					
CY	PS	FD3-0002-022																					
CZ	PS	FD3-0002-022																					
DA	PS	FD3-0002-022																					
DB	PS	FD3-0002-022																					
DC	PS	FD3-0002-022																					
DD	PS	FD3-0002-022																					
DE	PS	FD3-0002-022																					
DF	PS	FD3-0002-022																					
DG	PS	FD3-0002-022																					
DH	PS	FD3-0002-022																					
DI	PS	FD3-0002-022																					
DJ	PS	FD3-0002-022																					
DK	PS	FD3-0002-022																					
DL	PS	FD3-0002-022																					
DM	PS	FD3-0002-022																					
DN	PS	FD3-0002-022																					
DO	PS	FD3-0002-022																					
DP	PS	FD3-0002-022																					
DQ	PS	FD3-0002-022																					
DR	PS	FD3-0002-022																					
DS	PS	FD3-0002-022																					
DT	PS	FD3-0002-022																					
DU	PS	FD3-0002-022																					
DV	PS	FD3-0002-022																					
DW	PS	FD3-0002-022																					
DX	PS	FD3-0002-022					</																

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE: J
PAGE OF PAGES: 1 | 12

2. AMENDMENT/MODIFICATION NO. P00009
3. EFFECTIVE DATE: 2003 SEP 08
4. REQUISITION/PURCHASE REQ. NO.: N/A
5. PROJECT NO. (If applicable): ISHMRS II

6. ISSUED BY: SPECIAL OPERATIONS COMMAND
BLDG 102, 2D FLOOR (SOAL-KB)
7701 TAMPA POINT BLVD
MACDILL AFB, FL 33621-5323
POC: Sandra Smith, 813-281-0560 X 588, smiths1@socom.mil
CODE: USZA22

7. ADMINISTERED BY (If other than Item 6): DCM - BUFFALO
T.J. DULSKI FEDERAL BLDG.
111 WEST HURON, ROOM 1103
BUFFALO NY 14202
POC: (b)(6)
CODE: S2101A

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code): HARRIS CORPORATION
RF COMMUNICATIONS DIV
1680 UNIVERSITY AVENUE
ROCHESTER NY 14610-9983

9A. AMENDMENT OF SOLICITATION NO.
9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO.: USZA22-00-D-0007
10B. DATED (SEE ITEM 13): 9-28-00

CODE: 14304 FACILITY CODE: X

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

- (a) By completing items 8 and 15, and returning ___ 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)

NOT APPLICABLE

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 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 data, 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 FAR 52.243-1 CHANGES - FIXED PRICE
- D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not X is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
See Attached Continuation pages.

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): GEORGE W. JUSKO, CONTRACT MANAGER
16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print): SANDRA L. SMITH, CONTRACTING OFFICER

15B. CONTRACTOR/OFFEROR: [Signature]
15C. DATE SIGNED: [Blank]
16B. UNITED STATES OF AMERICA: [Signature]
16C. DATE SIGNED: [Blank]

Harris Corporation

A. The purpose of this Supplemental Agreement is acknowledge that contractor installation and training services will be performed in a hostile-fire zone and to add the appropriate contract clauses and provisions to safeguard the rights of the parties with respect to said contractor services being performed in a hostile-fire (war) zone. Except for the FAR clauses and performance provisions, the no-cost feature of this modification only applies to delivery orders: 0077, 0079 and 0080. Any future delivery order will be negotiated at the current year travel and per diem rates and will have the applicable Statement of Work included.

B. Add as the following CLINs:

00942A Travel/Per Diem, Overseas Hazardous Duty Training and Support, Year 3, 1 LT, \$TBD
00124A Travel/Per Diem, Overseas Hazardous Duty Training and Support, Year 4, 1 LT, \$TBD
00145A Travel/Per Diem, Overseas Hazardous Duty Training and Support, Year 5, 1 LT, \$TBD
00166A Travel/Per Diem, Overseas Hazardous Duty Training and Support, Year 6, 1 LT, \$TBD
0187A Travel/Per Diem, Overseas Hazardous Duty Training and Support, Year 7, 1 LT, \$TBD
0208A Travel/Per Diem, Overseas Hazardous Duty Training and Support, Year 8, 1 LT, \$TBD
0229A Travel/Per Diem, Overseas Hazardous Duty Training and Support, Year 9, 1 LT, \$TBD
0250A Travel/Per Diem, Overseas Hazardous Duty Training and Support, Year 10, 1 LT, \$TBD

C. The following Provisions are hereby incorporated into the contract Section H, Special Contract Requirements.

1. Continued Performance during Crisis Situations

1.1. The requirements of this delivery order have been identified by the US Government as being essential to the mission and operational readiness of the US Army and allied forces operating within the theater therefore; the contractor may be required to perform this contract during crisis situations including war or a state of emergency subject to the requirements and provisions listed below:

1.2. The contractor shall be responsible for performing all of this contract notwithstanding crisis situations including the existence of any state of war, whether declared or undeclared, or state of emergency, by the United States - commencement of hostilities, internal strife, rioting, civil disturbances, or activities of any type which would endanger the welfare and security of US and/or allied forces. Failure by the contractor to perform may subject the contractor to a termination of this contract by default.

1.3. Crisis situations shall be determined by the overseas theater Commander - or when Defense Readiness Condition (DEFCON) three (3) is declared for that area.

1.4. Continued performance hereunder may require an equitable adjustment; therefore, the contractor shall aggregate and separately identify all costs incurred in the contract performance during war or state of emergency. The contractor shall notify the contracting officer of any increase or decrease in costs within ninety (90) days after continued performance has been directed by the contracting officer, or within any additional period that the contracting officer may approve in writing, but not later than the date of final payment under the contract. The contractor's notice shall include the contractor's proposal for an adjustment and any data supporting the increase or decrease in the form prescribed by the contracting officer. As soon as practicable after receipt of

the contractor's proposal, the parties shall negotiate a price adjustment in the contract price. Failure to agree on any adjustment shall be handled as a dispute under the disputes clause.

1.5. Contractor personnel and dependents will be integrated into Government Contingency Plans and afforded the same rights, privileges, protection and priority as US Government personnel. The Government will provide security, housing and messing facilities for contractor personnel and dependents should conditions warrant.

2. Contractor Support of Deployed Operations.

2.1 Management.

2.1.1. The contractor shall comply with all guidance, instructions, and general orders applicable to U.S. Armed Forces and DoD Civilian applicable to the area of operations.

2.1.2. The contractor and its employees, subcontractors, subcontractor employees, invitees and agents shall comply with Service and Department of Defense directives; policies and procedures; federal statutes; judicial interpretations; and international agreements (e.g. Status of Forces Agreements, Host Nation Support Agreements, etc.) applicable to U.S. Armed Forces or U.S. Citizens in the area of operations. Host Nation Laws and existing Status of Forces Agreements may take precedence over contract requirements.

2.1.3. The contracting officer may direct the contractor, at the contractor's expense, to remove and/or replace any contractor employee failing to adhere to instructions and general orders issued applicable to U.S. Armed Forces and DoD Civilians applicable to the area of operations.

2.1.4. The contractor shall identify their employees having military mobilization recall commitments and have adequate plan for replacing those employee in the even of mobilization, in accordance with the guidelines in DoD Directives 1200.7 and 1352.1.

2.2. Risk Assessment and Mitigation

2.2.1. The contractor shall brief its employees regarding the potential danger, stress, physical hardships and field living conditions.

2.2.2. Contractor employees shall acknowledge in writing that they understand the danger, stress, physical hardships and field living conditions that are possible if the employee deploys in support of military operations. The contractor shall retain the acknowledgements and provide copies to the contracting officer upon request.

2.2.3. The contractor shall provide personnel that are medically, mentally, and physically fit to endure the rigors of the deployment in support of a military operation. If an employee is unable to perform, the contractor shall replace the employee.

2.2.4. If a contractor employee departs an area of operations without permission, the contractor shall ensure continued performance in accordance with the terms and conditions of the contract. If the contractor replaces an employee who departs without permission, the replacement is done at the contractor's expense and must be completed within 72 hours of notification, or as directed by the contracting officer.

Harris Corporation

2.2.5. The Government, where appropriate, shall provide training for civilians on their responsibilities, e.g. standards of conduct, coping skill if they become Prisoners of War, Geneva Conventions, Code of Conduct, Health and Sanitation, Legal Assistance, Customs and Courtesies for the area of deployment, applicable Status of Forces Agreement, Security, Weapons Familiarization, and Operational Security (OPSEC).

2.3 Force Protection.

2.3.1. The Government will provide force protection to contractor employees commensurate with that given to Service/Agency (e.g. Air Force, Army, Marine, and DLA) civilians in the area of operations.

2.3.2. Contractor personnel accompanying U.S. Armed Forces may be subject to hostile actions. If captured, the status of contractor personnel depends on the type of conflict, applicability of any relevant international agreements, and the nature of the hostile force. The full protection s, granted to Prisoners of War (POW) under the Geneva (1949) and Hague (1907) Conventions apply only during international armed conflicts between signatories to the conventions. Therefore, contractor personnel status depends on the specific circumstances of an operation.

2.4. Central Processing and Departure Point.

2.4.1. If travel restrictions require contractor personnel traveling overseas to process through a designated central processing/departure point, the Government will issue a Letter of Authorization to allow contractor personnel to process through a specific designated central processing/departure point. The contractor shall provide the information necessary on each employee required to complete the Letter of Authorization.

2.4.2. Contractor personnel processing through the designated central processing/departure point shall process an Individual Readiness File (IRF). The IRF shall contain two copies of the following required documents: the individual's latest physical examination performed within the last 12 months, copies of eyeglass prescription, dental examinations, Panarex, Emergency Information Cards, etc. One copy will travel with the employee; the other will be retained on file at the designated central processing/departure point. Contractor personnel deploying for less than 30 calendar days at a time must go through the Readiness and Deployment Processing Site at the designated central processing/departure point at least once every 12 months. Employees deploying for 30 calendar days or more must go through the Readiness and Deployment Processing site at the designated central processing/departure point each time they deploy unless the supported commander waives this requirement.

2.4.3 The designated central processing/departure point will screen contractor personnel records, conduct theater specific training, issue theater specific clothing and individual equipment if required, verify that medical requirements (such as immunizations, DNA screening, HIV testing and dental examinations) for deployment have been met and arrange for transportation to the theater of operations. The Government will identify to the contractor all required mission training and the location of the required training. The contractor shall ensure that all deploying personnel receive required mission training and successfully complete that training.

2.4.4. While processing at the designated central processing/departure point, the government will furnish lodging. The government will provide meals for contractor employees at a nominal fee.

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Transportation, travel arrangements and costs to the designated central processing/departure point are the contractor's responsibility.

2.4.5. The government, at its discretion, may provide contractor employees with Chemical Defense Equipment (CDE) familiarization training commensurate with the training provided to DoD civilian employees.

2.4.6. For any contractor employee determined by the government at the deployment-processing site non-deployable for debilitating health problems or failure to have a security clearance when one is required, the contractor shall take action to promptly correct or eliminate the health/clearance problem. If the problem cannot be correct in time for deployment, a replacement having the same required qualifications skills shall be provided in time for the scheduled deployment.

2.4.7. Contractor employees who fail to meet entrance standards set by the command surgeon, or who become unfit through their own actions or negligence (pregnancy, alcohol or drug abuse, etc.) will be removed for the area of operations at the contractor's expense.

2.5 Standard Identification Cards

2.5.1. As part of the processing of contractor personnel, the government will provide the following distinct forms of identification:

2.5.1.1. DD Form 1172-2 (Application for DoD Common Access Card). This card is required for access to facilities and use of privileges afforded to the military, government civilians, and military dependents.

2.5.1.2. DD Form 489, Geneva Conventions Identification Card for Persons who accompany the Armed Forces. This card identifies one's status as a contractor employee accompanying the U.S. Armed Forces. Contractor employees shall carry the DD Form 489 at all times while in the area of operations.

2.5.1.3. International Driver's License/Permit. The contractor may be required to drive military vehicles in the performance of their duties.

2.5.1.6. Personal Identification Tags. These tags shall be worn at all times when in the theater of operations.

2.5.1.7. Other Cards. In addition to the above, the government may issue other identification cards, courier cards, badges, etc., at its discretion.

2.5.2. The government will coordinate issuance of required identification cards and tags for all contractor personnel not processing through a CONUS Replacement Center.

2.5.3. Deploying contractor personnel shall obtain the required identification tags and cards prior to deployment.

2.5.4. Upon redeployment, the contractor shall return all issued controlled identification cards and tags to the government.

2.6. Medical.

2.6.1. The government will provide the contractor with all physical and medical requirements and standards necessary for deployment.

2.6.2. The contractor shall provide employees who meet the physical standards and medical requirements for job performance in the designated theater of operations.

2.6.3. Prior to deployment, the contractor shall provide the following as required:

2.6.3.1. Immunization record of each employee that is going to be deployed. Moreover, the government may require medical screening at the CONU Replacement Center for FDA approved immunizations.

2.6.3.2. Dental Panograph, as required.

2.6.3.3. DNA sampling, as required.

2.6.3.4. HIV testing, as required.

2.6.4. The government will provide to contractor employees deployed in the theater of operations, on a cost reimbursable basis, emergency medical and dental care commensurate with the care provided DoD civilian employees deployed in the theater of operations. The government will not provide these services to local nationals except in unusual circumstances as determined by the government.

2.6.5. Deploying civilian contractor personnel shall carry with them a minimum of a 90-day supply of any medication they require, with 180-days being the preferred quantity, two pairs of eyeglasses, if required (contacts are not recommended in the field) spare hearing aide batteries, sunglasses, insect repellent containing DEET, sunscreen, and any supplies related to their individual physical requirements.

2.6.6. The contractor's employees shall obtain all required immunizations in compliance with the Command Surgeon's list of immunizations and required and recommended for the area of deployment before arrival at the IDS/CRC, if reporting is required. The government may provide injections against biological and chemical warfare to contractor personnel as deemed appropriate by the government.

2.7. Clothing and Equipment Issue.

2.7.1. Contractor personnel shall possess the personal clothing and safety equipment necessary to execute contract performance in the theater of operations. Clothing should be distinctive and unique and not imply that the contractor is a military member, while at the same time not adversely affecting the government's tactical position while in the field.

2.7.2. Contractor personnel shall not wear military clothing unless otherwise authorized by the government.

2.7.3. The government may provide theater specific equipment and military unique Organizational Clothing and Individual Equipment, (OCIE), such as Nuclear, Biological and Chemical Defensive Equipment.

2.7.4. If OCIE is provided to contractor personnel, the government will identify to the contractor the OCIE issue point and issue the items.

2.7.5. The contractor or contractor employee shall sign for all issued OCIE, thus acknowledging receipt and acceptance of responsibility for the proper maintenance and accountability of the issued organizational clothing and individual equipment.

2.7.6. The contractor shall return all OCIE to the government upon redeployment. The contractor shall provide documentation, annotated by the receiving government official, of all OCIE returned.

2.7.7. The contractor shall reimburse the government for OCIE lost or damaged for to contractor employee negligence.

2.8. Vehicle and Equipment Operation.

2.8.1. Contractor deployed personnel operating equipment necessary to perform the contract in the theater of operations in accordance with the statement of work shall possess the required civilian licenses to operate the equipment.

2.8.2. Before operating any military owned or leased equipment, the contractor employee shall provide proof of license (issued by an appropriate governmental agency or authority) to the unit or agency issuing the equipment.

2.8.3. The government, at its discretion, may train and license contractor employees to operate military owned or leased equipment.

2.8.8. All contractor-owned motor vehicles shall meet required vehicle requirements within the area of responsibility and shall be maintained in safe operating condition and good appearance. All contractor owned motor vehicles used for transporting government personnel or property shall be properly equipped and designed to ensure protection of the personnel or property. If directed by the government, the contractor shall conspicuously display the contractor's logo and/or name on both sides of the contractor owned vehicle.

2.9 Passports, Visas, Customs and Travel.

2.9.1. The contractor shall obtain all passports, visas or other documents necessary to enter and exit any area(s) identified by the contracting officer for its contractor employees.

2.9.2. All contractor employees are subject to the customs, processing procedures, laws, and agreements and duties of the country to which they are deploying and the procedures, laws, and duties of the United States Government, upon re-entry.

2.9.3. The government will supply the contractor with the letters of authorization or travel when necessary to perform the contract in a deployed location/situation.

2.10. Reception, Staging, Onward Movement and Integration.

2.10.1. Upon arrival in the area of operations, contractor employees shall received Reception, Staging, onward Movement and Integration, as directed by the government.

2.10.2. The contractor shall ensure all shipped items are packed in a manner to ensure error and damage free shipment to the area of operations by the government vehicle(s) by employing tie-downs on open bed trucks, etc. Labeling instructions will be provided by the government prior to the required shipment date, if applicable.

2.11. Living under filed Conditions.

2.11.1. The government, at its discretion, may provide to contractor personnel deployed in the theater of operations the equivalent field living conditions, subsistence, sanitary facilities, mail delivery, laundry service and other available support afforded to government employees and military personnel in the theater of operations, unless otherwise specified in the contract.

2.12. Morale, Welfare, and Recreation.

2.12.1. The government, at its discretion, may provide to contractor employees (US citizens only) deployed in the theater of operations morale, welfare and recreation services commensurate with that provided to DoD civilians and military personnel deployed in the theater of operations.

2.12.2. The government may deny or suspend administrative privileges to contractor personnel for violating rules for use of the privileges (i.e. suspension of exchange or MWR privileges, etc.) for such conduct as: making, or purchasing for the purpose of making any sale, exchange, transfer, or other disposition of exchange merchandise or services to unauthorized persons, whether or for a profit; using exchange merchandise or services in the conduct of any activity for the production of income; theft of exchange merchandise or other assets by shoplifting; and intentional or repeated presentation of dishonored checks, other worthless instruments, or other indebtedness.

2.13. Status of Forces Agreement (SOFA).

2.13.1. The government will, as part of the processing at the IDS/CRC, brief contractor employees as to their status under SOFA or international agreement applicable to the deployment. If IDS/CRC processing is not used, the contractor shall provide SOFA training to their employees.

2.13.2. Contractor personnel shall be under SOFA protection where permitted by the SOFA for the area of deployment.

2.13.3. The contractor is responsible for obtaining all necessary legal advice concerning the content, meaning, application, etc., of any applicable SOFAs and similar agreements.

2.13.4. The contractor shall adhere to all relevant provisions of the applicable SOFA and other similarly related agreements. In the event of a conflict between the terms of the contract and the SOFA, the terms of the SOFA control and shall be followed by the contractor employees.

2.13.5. The contractor shall provide the required documentation to acquire invited contractor or technical expert status, if required by the SOFA.

2.14. Next of Kin Notification.

2.14.1. Deployed contractor personnel shall complete a DD Form 93, Record Emergency Data Card, and return the completed form to the designated government official.

2.15. Return Procedures.

2.15.1. Upon notification to the contractor of redeployment, the contracting office at his/or her discretions may authorize contractor employee travel from the theater of operations to the designated CONUS Replacement Center (CRC) or individual redeployment site.

2.15.2. The contractor shall return all government-issued clothing and equipment provided to the contractor or the contractor's employees upon completion of the deployment.

2.15.3. The contractor shall provide documentation, annotated by the receiving government official, of all clothing and equipment returns.

2.16. Legal Assistance.

2.16.1. The contractor will ensure its personnel deploying to or in a theater of operations are furnished the opportunity and assisted with making will and other estate planning instruments as well as with any necessary powers of attorney prior to deployment processing and/or deployment.

2.16.2. Contractor personnel processing for deployment at the CRC or deployed in the theater of operations generally will not be eligible to receive legal assistance from military lawyers. Where available, the government may provide legal assistance in accordance with the following conditions and as permissible under Military Department regulations:

2.16.2.1. The legal assistance is in accordance with applicable international or host nation agreements.

2.16.2.2. The legal assistance is limited in nature (e.g. witnessing signatures on documents and providing notary services), legal counseling (to include review and discussion of legal correspondence and documents), and legal documents preparation (limited to powers of attorney and advanced medical directives), and help retaining non-DoD civilian attorneys, on an as available basis.

2.17. Special Legal.

Harris Corporation

2.17.1. Public Law 106-203, Military Extra-Territorial Jurisdiction Act of 2003(METJA), Amended Title 18, USC, to establish Federal Jurisdiction over certain criminal offenses committed outside the United States by persons employed by or accompanying the Armed Forces, or by members of the Armed Forces who are released or separated from active duty prior to being identified and prosecuted for the commission of such offenses, and for other purposes, applies to contractor employees deployed overseas. The contractor is responsible for ensuring his employees are briefed that they are potentially subject to the criminal jurisdiction of the United States under the METJA.

2.18. Media.

2.18.1. The contractor shall request guidance from the government media operations center if, and when, reporters seeking interviews or information on their participation in the mission/operation approach them.

2.19. Other.

2.19.1. The government will provide cultural awareness training for the theater if it is being provided to military personnel.

2.19.2. DoD Instruction Number 3020.37 is hereby incorporated in its entirety by reference.

2.19.3. The contractor shall provide deploying contractor personnel information on contractor-employee benefits due to war exigencies, under 33 U.S.C. ss901 and 42 U.S.C. ss1651 and ss1702.

2.19.4. Contractor employees shall not possess any weapon of any type including, but not limited to:

2.19.4.1. Handguns, knives, brass knuckles, pepper spray, mace, and ammunition (live or dummy).

2.19.4.2. These prohibition also apply to re-deployment from the theater of operations

2.19.5. Contractor employees shall not attempt to collect, own, possess any type of war-relic, souvenir, or spoilage and shall not attempt to redeploy with these items.

2.20. Performance of Services during Crisis Declared by the National Command Authority or Overseas Combatant.

2.20.1. DoDI 3020, Continuation of Essential DoD Contractor Services during Crises, is mandatory for contracts containing mission-essential tasks. DoDI 3020.37 defines essential contractor services as: "A service provided by a firm or an individual under contract to the DoD to support vital systems or operate in support of activities including installation garrison and base support services considered of utmost importance to the U.S. mobilization and wartime mission." Contractors providing services designated as essential by a DoD Component are expected to use all means at their disposal to continue to provide such services, in accordance with the terms and conditions of the contract during periods of crisis, until appropriately released or evacuated by military authority.

D. The following FAR clauses are hereby incorporated into Contract Section I, Contract Clauses, by reference but have the same force and effect as if set forth in full text. The full text version of these clauses may be obtained at the following web site:

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

1. FAR 52.228-03 Workers' Compensation Insurance (Defense Base Act).
2. FAR 52.228-04 Workers' Compensation and War-Hazard Insurance Overseas.
3. FAR 52.229-06 Taxes -- Foreign Fixed-Price Contracts.
4. FAR 52.245-02 Government Property (Fixed-Price Contracts). (Alternate D)
5. DFARS 252.209-7001 Disclosure of Ownership Control by the Government of a Terrorist Country.
6. DFARS 252.225-7043 Antiterrorism/Force Protection for Defense Contractors outside the United States.
7. DFARS 252.228-7000 Reimbursement for War-Hazard Losses.
8. DFARS 228-7003 Capture and Detention.

E. The changes described herein constitute a no-cost change to the delivery orders listed above. All other contract terms and conditions remain unchanged.