AWARD/CONTRACT

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)	RATING	PAGE OF PAGES
	DO-A7	1 | 106

2. CONTRACT *(Proc. Inst. Ident.)* NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQUEST/PROJECT NO.
N65236-04-D-6844	13 Sep 2004	

5. ISSUED BY CODE N65236	6. ADMINISTERED BY *(If other than Item 5)* CODE S2101A
SPAWAR SYSTEMS CENTER CHARLESTON PO BOX 190022 J. SHIREY 843-218-5940 SHIREYJ@SPAWAR.NAVY.MIL NORTH CHARLESTON SC 29419-9022	DCMA MARYLAND 217 EAST REDWOOD STREET SUITE 1800 BALTIMORE MD 21202-5299 SCD: C

7. NAME AND ADDRESS OF CONTRACTOR *(No., street, city, county, state and zip code)*	8. DELIVERY [ ] FOB ORIGIN [X] OTHER *(See below)*
EAGAN, MCALLISTER ASSOCIATES INC GOVERNMENT REPRESENTATIVE 47332 EAGAN MCALLISTER LANE PO BOX 986 LEXINGTON PARK MD 20653	9. DISCOUNT FOR PROMPT PAYMENT
	10. SUBMIT INVOICES *(4 copies unless otherwise specified)* TO THE ADDRESS SHOWN IN: — ITEM
CODE 5Z575 FACILITY CODE	

11. SHIP TO/MARK FOR CODE	12. PAYMENT WILL BE MADE BY CODE HQ0338
SEE SCHEDULE	DFAS-COLUMBUS CENTER DFAS-COLUMBUS CTR; SOUTH ENTITLEMENT DIVISION P. O. BOX 182264 EFT:T COLUMBUS OH 43218-2264

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:	14. ACCOUNTING AND APPROPRIATION DATA
[ ] 10 U.S.C. 2304(c)( ) [ ] 41 U.S.C. 253(c)( )	

15A. ITEM NO.	15B. SUPPLIES/ SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
	SEE SCHEDULE				

15G. TOTAL AMOUNT OF CONTRACT **$35,616,123.40**

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CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. [ ] CONTRACTOR'S NEGOTIATED AGREEMENT	18. [X] AWARD
Contractor is required to sign this document and return copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any,and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)	(Contractor is not required to sign this document.) Your offer on Solicitation Number N65236-03-R-0431-0001 including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

19A. NAME AND TITLE OF SIGNER *(Type or print)*	20A. NAME AND TITLE OF CONTRACTING OFFICER
	DONNA J. MURPHY / CONTRACT SPECIALIST

19B. NAME OF CONTRACTOR	19C. DATE SIGNED	20B. UNITED STATES OF AMERICA	20C. DATE SIGNED
BY _____ *(Signature of person authorized to sign)*		BY _____ *(Signature of Contracting Officer)*	13-Sep-2004

SECTION B Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	EST QUANTITY	UNIT
0001	Systems Engineering and Technical Support CPFF - Systems Engineering and Technical Support for the C4ISR Requirements/Programs in accordance with the Statement of Work.		

ESTIMATED COST _____

FIXED FEE _____

TOTAL ESTIMATED COST PLUS FIXED FEE $35,616,123.40

ITEM NO	SUPPLIES/SERVICES	EST QUANTITY	UNIT
0002	CPFF - Contract Data Requirements List in accordance with attached DD Form 1423 (Exhibit A)		NSP

ITEM NO	SUPPLIES/SERVICES	EST QUANTITY	UNIT
0003	Systems Engineering and Technical Support CPFF - Systems Engineering and Technical Support for the C4ISR Requirements/Programs in accordance with the Statement of Work.		

ESTIMATED COST _____

FIXED FEE _____

TOTAL ESTIMATED COST PLUS FIXED FEE $37,843,088.78

ITEM NO	SUPPLIES/SERVICES	EST QUANTITY	UNIT
0004	CPFF - Contract Data Requirements List in accordance with attached DD Form 1423 (Exhibit A)		NSP

ITEM NO	SUPPLIES/SERVICES	EST QUANTITY	UNIT
0005	Systems Engineering and Technical Support CPFF - Systems Engineering and Technical Support for the C4ISR Requirements/Programs in accordance with the Statement of Work.		

ESTIMATED COST _____

FIXED FEE _____

TOTAL ESTIMATED COST PLUS FIXED FEE $39,109,623.07

ITEM NO	SUPPLIES/SERVICES	EST QUANTITY	UNIT	
0006	CPFF - Contract Data Requirements List in accordance with attached DD Form 1423 (Exhibit A)			NSP

ITEM NO	SUPPLIES/SERVICES	EST QUANTITY	UNIT
0007	Systems Engineering and Technical Support CPFF - Systems Engineering and Technical Support for the C4ISR Requirements/Programs in accordance with the Statement of Work.		

ESTIMATED COST _____

FIXED FEE _____

TOTAL ESTIMATED COST PLUS FIXED FEE $40,426,999.25

ITEM NO	SUPPLIES/SERVICES	EST QUANTITY	UNIT	
0008	CPFF - Contract Data Requirements List in accordance with attached DD Form 1423 (Exhibit A)			NSP

ITEM NO	SUPPLIES/SERVICES	EST QUANTITY	UNIT
0009	Systems Engineering and Technical Support CPFF - Systems Engineering and Technical Support for the C4ISR Requirements/Programs in accordance with the Statement of Work.		

ESTIMATED COST	
FIXED FEE	
TOTAL ESTIMATED COST PLUS FIXED FEE	$41,797,791.68

ITEM NO	SUPPLIES/SERVICES	EST QUANTITY	UNIT
0010	CPFF - Contract Data Requirements List in accordance with attached DD Form 1423 (Exhibit A)		NSP

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NOTES:

The period of performance is 13 September 2004 through 12 September 2005. Lots II – IV are subject to option provisions contained herein.

The estimated amount of the contract is based on Lot I.

Subcontractor Approvals. Authorization/Consent is hereby granted to subcontract with

in accordance with EMA's offer dated 14 May 2004. All other subcontracts are subject to FAR clause 52.244-2 of this contract entitled "Subcontracts".

Small Business Subcontracting Plan. Pursuant to FAR 52.219-9, the subcontracting plan for this contract is set forth in attachment 3.

Representations/Certifications. Section K is incorporated into the contract by reference.

Fixed Fee/Withholding. The withholding requirement of FAR 52.216-8 "Fixed Fee" and clause B-309 VAR "Fee Determination and Payment (Indefinite Delivery Type Contract) Variation" of the contract is hereby waived.

B-309 VAR FEE DETERMINATION AND PAYMENT (INDEFINITE DELIVERY TYPE CONTRACT) VARIATION

(a) Types of Delivery or Task Orders.

Both level-of-effort and completion type orders may be issued under this contract. The Request for Quotation issued for each delivery or task order will set forth the type of order deemed appropriate by the Government. If the Contractor disagrees with the Government's assessment, the Ordering Officer and the contractor shall attempt to resolve the matter through the negotiation process. Failing this, the matter will be referred to the Contracting Officer. If necessary, a final decision shall be made in accordance with the FAR 52.233-1 "Disputes" clause. The Contracting Officer's determination will govern the type of order, pending an appeal pursuant to the "Disputes" clause. The contractor will use his best efforts to work on the order until the dispute is resolved.

(b) Fixed Fee Pool.

The fixed fee pool consists of the total fixed fee of the contract AND includes the total fee to be paid to the prime contractor and all subcontractors. SUBCONTRACTOR FEE WILL NOT BE BILLED AS A SEPARATE DIRECT COST ON THE VOUCHER SUBMITTED BY THE CONTRACTOR TO THE GOVERNMENT, BUT WILL BE PAID TO THE SUBCONTRACTOR BY THE PRIME CONTRACTOR FROM THE FEE BILLED FROM THE FIXED FEE POOL.

(c) Computation of Fee.

The percentage of the fee applicable to orders will be the same as the percentage of the fee established in the contract. However the total fee paid under the contract for a year of performance will not exceed the total fixed fee amount for the current year of performance.

(d) Fee on Modifications to Term Type (Level-of-Effort) Delivery or Task Orders.

If the hours for a particular delivery or task order are insufficient to complete performance under the order, the government may elect to increase the hours by written modification. This increase in cost associated with the increase in hours will be fee bearing at the same percentage of fee established in the basic contract. If the hours prove to be in excess of that necessary to complete performance under this order, the government shall decrease the hours by written modification. The fee associated with the decrease in hours will be reduced by the percentage of fee established in the basic contract.

Estimated cost will be increased/decreased as applicable.

(e) Fee on Modifications to Completion Type Delivery or Task Orders.

If the task(s) required under a particular delivery or task order cannot be completed within the negotiated estimated cost (an overrun situation), the government may elect to increase the estimated cost to complete the effort with no additional fee allocation.

If the task(s) required under the order is completed and the cost is less than that negotiated (underrun), the contractor shall be entitled to full payment of the fixed fee specified in the order. Excess costs shall be deobligated by modification to the delivery order prior to contract closeout.

(f) Modifications to the Basic Contract.

If the contracting officer determines, for any reason, to adjust the contract amount or the estimated total hours, such adjustments shall be made by contract modification. Any increase will be fee bearing, except cost overruns on completion type orders, at the percentage of fee established in the basic contract.

The estimated cost of the contract may be increased by written modification, if required, due to cost overruns. This increase in cost is not fee bearing and no additional hours will be added to the total estimated hours under the contract.

(g) Payment of Fee.

The Government shall pay fixed fee to the contractor on each delivery order at the percentage rate of fee established in the basic contract subject to the contract's "Fixed Fee" clause, provided that the total of all such payments shall not exceed eighty-five percent (85%) of the fixed fee specified under each applicable delivery order, unless waived. In accordance with the provisions of paragraphs (d) and (e) of this clause, any balance of fixed fee shall be paid to the contractor, or any overpayment of fixed fee shall be repaid by the contractor, at the time of final payment.

Nothing herein shall be construed to alter or waive any of the rights or obligations of either party pursuant to the FAR 52.232-20 "Limitation of Cost" or FAR 52.232-22 "Limitation of Funds" clauses, either of which is incorporated herein by reference, shall apply to all individual delivery or task orders issued under this contract.

(h) Closeout.

Delivery or task orders will be closed out on an individual basis, upon agreement of final indirect rates for the period of performance of the applicable delivery or task order. The contractor shall forward the final voucher directly to the cognizant DCAA for final audit. DCAA will forward the voucher and the final audit to the cognizant ACO (see block 6 of the basic contract), who will process it for final payment and submit it to the paying office.

B-312 MINIMUM AND MAXIMUM QUANTITIES

As referred to in paragraph (b) of the "Indefinite Quantity" clause of this contract, the contract minimum quantity is a total of $50,000.00 worth of orders at the contract unit price(s). The maximum quantity is the total estimated amount of the contract. The maximum quantity is not to be exceeded without prior approval of the Procuring Contracting Officer.

SECTION C Descriptions and Specifications

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5252.237-9401 PERSONNEL QUALIFICATIONS (MINIMUM) (JAN 1992)

(a) Personnel assigned to or utilized by the Contractor in the performance of this contract shall, as a minimum, meet the experience, educational, or other background requirements set forth below and shall be fully capable of performing in an efficient, reliable, and professional manner.

(b) If the Ordering Officer questions the qualifications or competence of any persons performing under the contract, the burden of proof to sustain that the person is qualified as prescribed herein shall be upon the contractor.

(c) The Contractor must have personnel, organization, and administrative control necessary to ensure that the services performed meet all requirements specified in delivery orders. The work history of each Contractor employee shall contain experience directly related to the tasks and functions to be assigned. The Ordering Officer reserves the right to determine if a given work history contains necessary and sufficiently detailed, related experience to reasonably ensure the ability for effective and efficient performance.

Minimum Labor Category Requirements:

All Labor Categories require US Citizenship and eligibility for at least DOD SECRET Clearance. Key personnel (which require resume submission prior to performance under the contract) are designated by an asterisk (*). Contractor must demonstrate on resumes that the proposed key personnel either possess a DOD SECRET clearance, or will be able to obtain a DOD TOP SECRET clearance. Work under this contract will range from UNCLASSIFIED to TOP SECRET. Contractor personnel assigned to tasks that require a clearance shall hold the appropriate clearance. Security clearance requirements will be identified in each task order. Interim clearance will be acceptable if the contractor shows evidence to the Government that the required clearance is being pursued and shall be obtained within 90 days barring delays caused by the Government.

a. Each employee who is directly charged to a labor category under this contract shall meet each of the following minimum qualification requirements for that labor category.

b. Each employee shall be fully capable of performing assigned functions in an efficient, reliable and professional manner.

c. An employee's experience may be credited to meet both Progressive and Specific Experience minimum qualification requirements provided it meets each of the minimum qualification requirements of each.

d. In order to be credited to meet Specific Experience minimum qualification requirements (if any) for a particular labor category, an employee's experience must have been obtained in the field of endeavor indicated by the labor category title.

e. Progressive Experience is defined as work on increasingly diverse systems and equipment of more complexity and difficulty.

f. Experience levels shall have been obtained from full time employment in the respective field of endeavor.

g. U.S. active duty military experience can be applied toward Progressive experience, if such experience was gained in the field of Tactical Mobile, RMAST, PAC3T, US Marine Corps related project such: CAC2S, UOC TEG, IAS FOS, IOS, IOW, DACT, JSTARS, MSBL, C2PC, and FMS systems and related C^4ISR systems. To obtain credit for active duty experience, it must be directly related to C^4ISR.

h. Appropriate Academic Discipline (AAD) refers to the fields of Engineering, Physics, Mathematics, or Engineering Technology. The applicable degree shall be from an accredited school of higher education that is accredited in the specified discipline in which the degree was attained. A school shall be considered accredited if it is listed as such by the Accreditation Board for Engineering and Technology (ABET).

i. Engineering experience will not be credited unless it was gained after award of the required engineering degree.

1. * Program Manager:

a. Education: Must have at least a Bachelor of Science Degree in Electrical/ Electronics Engineering, Physics, Computer Science, Mathematics or Management from an accredited College or University. An advanced degree in management, or a related field is desirable.

b. Progressive Experience: Must have at least 10 years of experience in a management position dealing with Tactical Mobile, USMC, FMS or C^4ISR related systems.

c. Specific Experience: Must have at least five (5) years of the last seven (7) years of experience in Engineering Management and supervision of multiple projects performing systems engineering of P-3C, Tactical Mobile, GCCS-M, USMC C^4I systems, FMS and C^4ISR or related design, development and/or test and evaluation projects. Additionally, this position requires at least four (4) years of the last five (5) years of demonstrated experience in supervising, directing, reviewing and coordinating work performed by other contractor staff while maintaining effective liaison with Government technical and contracting personnel.

2. * Lead Project Engineer:

a. Education**:** Must have at least a Bachelor of Science Degree in Electrical/ Electronic/ Computer /Software Engineering, Physics, or Computer Science from an accredited College or University. An advanced degree in engineering is desirable.

b. Progressive Experience: Must have at least ten (10) years experience in systems engineering, development, production, or test and evaluation in the area of communications and systems engineering on various C^4ISR requirements, programs and/or projects such as, but not limited to: Navy ASW Aircraft, Tactical Mobile, FTAS, RMAST, PAC3T, TEG, UOC, TCO, IAS FOS, GCCS-M Video Systems, or related USMC C^4I systems, FMS, and C^4I systems or subsystems or related projects. Must have worked at least three (3) years in a small, medium, or large organization under multiple layers of management in support of one or more specific engineering tasks.

c. Specific Experience: Must have at least four (4) years of the last six (6) years of experience associated with the development, testing, and analyses on various C^4ISR requirements, programs and/or projects such as, but not limited to: P-3C, TSC, JMAST, RMAST, PAC3T, TEG, IAS FOS, or related USMC C^4I systems, FMS or C^3 systems and subsystems. Additionally, the position requires demonstrated experience in conducting independent analyses and development of detailed testing and support requirements for TSC, Tactical Mobile, USMC and/or C^4ISR systems. Additionally, this position requires at least three (3) years of the last (4) years of demonstrated experience in directing, reviewing and coordinating work performed by other contractor staff while maintaining effective liaison with Government technical and contracting personnel.

3. *Senior Computer Scientist:

a. Education: Must have at least a Masters Degree in Computer Science in addition to a Bachelor of Science Degree in Electrical/Electronics/Software Engineering, Physics, Computer Science or Mathematics.

b. Progressive Experience: Must have at least ten (10) years of practical experience in the design, development, and test and evaluation on various C^4ISR requirements, programs and/or projects such as, but not limited to: P-3C ASW Aircraft, Tactical Mobile, RMAST, PAC3T, FTAS, UOC, TCO, TEG IAS FOS, FMS, or related interface system computer hardware and software.

c. Specific Experience: Must have at least six (6) years of the last (8) years of experience in the design, development and test and evaluation on various C^4ISR requirements, programs and/or projects such as, but not limited to: P-3C, S-3A/B, TSC, MOCC, TEG, IAS FOS, USMC C^4I Systems or related computer systems, equipment and software including test and evaluation of operational program software written in C, C++, Java, UNIX, Visual Basic and Window NT. Must have demonstrable specific experience in designing, developing or testing systems or system components dealing with the technology, disciplines and standards:

1. Object-oriented analysis, design and programming in C or C++ languages
2. Client/server model architecture
3. TCP/IP network programming
4. X Window graphical interface programming
5. Programming and scripting in a UNIX environment
6. Programming and scripting specifically for the Windows NT/2000 Operating System
7. Programming and scripting in a Real Time OS Environment such as: Solaris , LINUX, Windows NTor Hewlett Packard UNIX.
8. Computer assisted software engineering (CASE)
9. IEEE/EIA 12207 or the cancelled MIL-STD-498

4. *Senior Electronics Engineer:

a. Education: Must have at least a Bachelor of Science Degree in Electrical/Electronics/ Computer Engineering, Computer Science or Physics. An advanced degree in engineering is desirable.

b. Progressive Experience. Must have at least ten (10) years experience in systems engineering, development, production, or test and evaluation on various C^4ISR requirements, programs and/or projects such as, but not limited to: P-3C ASW Aircraft, Tactical Mobile, UOC, CAC2S, TEG, IAS FOS, DACT, FMS, or related C^4I computer/electronic systems, or related projects.

c. Specific Experience. Must have four (4) of the six (6) years experience must be associated with the development/operational testing and analyses of TSC or MOCC systems and subsystems, especially in the area of command and control. Additionally, the position requires three (3) years of the last four (4) years of demonstrated experience in conducting independent analyses and development of detailed testing and support requirements for state-of-the-art P-3C ASW Aircraft, TEG, IAS FOS, CAC2S, or related C^4I systems.

5. *Senior Communications Engineer:

a. Education: Must have at least a Bachelor of Science Degree in Electrical/Electronics/ Computer Engineering, Physics, Computer Science.

b. Progressive Experience. Must have at least ten (10) years experience in systems engineering, development, production, or test and evaluation in the area of communications and systems engineering on various C^4ISR requirements, programs and/or projects such as, but not limited to:

P-3C ASW Aircraft, Tactical Mobile, FMS, USMC C^4I systems or related C^4I computer/electronic systems, or related projects.

c. Specific Experience: Must have at least four (4) years of the last six (6) years of experience associated with the development/operational testing and analyses of Tactical Mobile, TEG, IAS FOS, or USMC C^4I systems and subsystems, especially in the area of command and control. Additionally, the position requires three (3) years of the last four (4) years of demonstrated experience in conducting independent analyses and development of detailed testing and support requirements for state-of-the-art P-3C ASW Aircraft, TSC, MOCC, USMC C^4I systems or related C^4I systems.

6. ***Communications Engineer:**

a. Education: Must have at least a Bachelor of Science Degree in Electrical/ Electronics/Computer Engineering, Physics, or Computer Science.

b. Progressive Experience: Must have at least six (6) years experience in the development, production or test and evaluation of communications and systems engineering of Tactical Mobile, TEG, IAS FOS communications suites or related USMC C^4I systems, C3 or C^4ISR systems or subsystems.

c. Specific Experience: Must have at least three (3) years of the last six (6) years of experience associated with TSC, JMAST, MOCC, TEG, UOC, USMC C^4I systems or related C^4ISR systems and subsystems, especially in the area of communications.

7. ***Senior System Engineer:**

a. Education: Must have at least a Bachelor of Science Degree in Electrical/Electronics/ Computer Engineering, Physics, Systems Engineering or Computer Science.

b. Progressive Experience: Must have at least nine (9) years experience in the systems engineering, development, production, or test and evaluation of systems engineering for Tactical Mobile, TEG, IAS FOS, IOW, IOS, USMC C^4I systems or related C^4ISR systems/subsystems.

c. Specific Experience: Must have at least three (3) years of the last five (5) years of experience associated with the development, testing, and analysis of TSC, MOCC, GCCS, USMC C^4I systems or related C^4ISR systems/subsystems, specially in the area of command, control, communication and computers. Additionally, the position requires demonstrated experience in conducting independent analyses and development of detailed testing and support requirements of JMAST, MOCC, TEG, IAS FOS or related C^4ISR Systems.

8. ***System Engineer:**

a. Education: Must have at least a Bachelor of Science Degree in Electrical/Electronics/ Computer Engineering, Physics, Systems Engineering or Computer Science.

b. Progressive Experience: Must have at least five (5) years experience in the development, production or test systems engineering of Tactical Mobile, TEG, IAS FOS, GCCS, IOS, IOW, MSBL, or related USMC C^4I systems or related C^4ISR systems/subsystems.

c. Specific Experience: Must have at least two (2) years of the last three (3) years of experience associated with the development, testing, and analysis of TSC, JMAST, TEG, GCCS, USMC C^4I systems or related C^4ISR systems/subsystems, specially in the area of command, control, communication and computers.

9. *Engineer:

a. Education: Must have at least a Bachelor of Science Degree in Electrical/Electronics/Software Engineering, Computer Engineering, Physics, Systems Engineering or Computer Science.

b. Progressive Experience: Must have at least four (4) years experience in the development, production or test and evaluation of Navy aircraft ASW, Tactical Mobile, TEG, IAS FOS, MSBL related USMC C4ISR systems or related C^4ISR computer/electronic systems.

c. Specific Experience: Must have at least two (2) years of experience associated with the development/operational testing and analysis of TSC, JMAST, TEG, IAS FOS or related C^4ISR systems/subsystems.

10. Junior Engineer:

a. Education: Must have at least a Bachelor of Science Degree in Electrical/Electronics Engineering, Mechanical Engineering, Industrial Engineering, Computer Engineering, Physics, Computer Science or Mathematics.

b. Progressive Experience: Must have at least two (2) years of general engineering experience.

c. Specific Experience. Must have at least one (1) year of experience associated with the development/operational testing and analysis of Tactical Mobile and USMC or related C^4ISR systems/subsystems.

11. Entry Engineer:

a. Education: Must have at least a Bachelor of Science Degree in Electrical/Electronics Engineering, Computer Engineering, Mechanical Engineering, Industrial Engineering, Physics, Computer Science or Mathematics.

b. Progressive Experience: none

c. Specific Experience: none

12. *Senior Project Analyst:

a. Education: Must have at least a Bachelor of Science Degree in Electrical/Electronics/Software Engineering, Computer Engineering, Physics, Computer Science, Mathematics or Information Technology.

b. Progressive Experience: Must have at least five (5) years of progressive experience in C^4ISR IT equipment, software or computer of Tactical Mobile, USMC C^4I systems or related C^4ISR systems or subsystems.

c. Specific Experience: Must have at least two (2) years of the last five (5) years of experience on the analyst experience in design, development or test and evaluation of P-3C, Tactical Mobile, PAC3T, TEG, GCCS, UOC, IAS FOS, MSBL or related C^4ISR IT equipment, software and computers.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least an associate degree in an appropriate academic discipline from an accredited school.

b. Progressive Experience: Must have at least nine (9) years experience with analysis techniques, test and evaluation procedures or of P-3C, Tactical Mobile, USMC C^4I systems or related C^4ISR systems or subsystems

c. Specific Experience: Must have at least five (5) years of the last eight (8) years of experience with analysis techniques, test and evaluation procedures or support requirements for MOCC, JMAST, TEG, GCCS, TCO, UOC, IAS FOS, or related C^4ISR systems.

OR EQUIVALENT AS FOLLOWS (B):

a. Education. Must have at least a High School Diploma.

b. Progressive Experience. Must have at least (15) years experience with analysis techniques, test and evaluation procedures or support requirements for P-3C ASW Aircraft, Tactical Mobile, TEG, IAS FOS, IOW, USMC C^4I or related C^4ISR systems or subsystems.

c. Specific Experience: Must have at least eight (8) years of the last fifteen (15) years of experience on the training of TSC, MOCC, TEG, GCCS, IAS FOS or related C^4ISR systems.

13. *Project Analyst:

a. Education: Must have at least an Associate's Degree in related technical discipline.

b. Progressive Experience: Must have at least eight (8) years of practical experience in logical analysis, test, and evaluation in support of Navy ASW Aircraft, Tactical Mobile, TEG, IAS FOS, IOS, IOW, DACT, MSBL, GCCS or related C^4I SR systems development or production programs.

c. Specific Experience: Must have at least four (4) years of the last six (6) years of experience with analysis techniques, test and evaluation procedures or test support requirements for P-3C, TSC, MOCC, C3, or related USMC or other Service C^4ISR systems.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least twelve (12) years of practical experience in logical analysis, test, and evaluation in support of Navy ASW Aircraft, Tactical Mobile, TEG, IAS FOS, GCCS, ^{or} related C^4ISR systems development or production programs.

c. Specific Experience: Must have at least eight (8) years of the last ten (10) years of experience with analysis techniques, test and evaluation procedures or test support requirements for P-3C, TSC, MOCC, C3, USMC C^4I systems or related C^4ISR systems.

14. *Project Communications Analyst:

a. Education: Must have at least an Associate's Degree in an appropriate academic discipline.

b. Progressive Experience: Must have at least five (5) years of practical experience in support of Navy ASW Aircraft, TSC, TCOMM, MOCC, TEG, UOC, IAS FOS, USMC C^4I systems or related C^4I systems development or production programs.

c. Specific Experience: Must have at least two (2) years of the last five (5) years of experience with analysis techniques, test and evaluation procedures or test support requirements for P-3C ASW

Aircraft, TSC, MOCC, USMC C^4I systems or related C^4I and C^3 Communications systems, to include USMC C4I systems.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least ten (10) years of practical experience in support of Navy ASW Aircraft, Tactical Mobile, TEG, IAS FOS, USMC C^4I systems or related C^4ISR systems development or production programs.

c. Specific Experience: Must have at least five (5) years of the last eight (8) years of experience with analysis techniques, test and evaluation procedures or test support requirements for P-3C ASW Aircraft, TSC, MOCC, USMC C^4I systems or related C^4ISR and C^3 Communications systems.

15. *Systems Analyst II: (Equivalent to SCA# 03102)

a. Education: Must have at least a Bachelor of Science Degree in Electrical/Electronics/Software Engineering, Computer Science, Mathematics or Physics.

b. Progressive Experience: Must have at least five (5) years of progress experience of systems analyst experience relative to P-3C Navy ASW Aircraft, Tactical Mobile, TEG, UOC, IAS FOS, TCO, USMC C^4I systems or related C^4ISR systems or subsystems; design, development test and evaluation.

c. Specific Experience: Must have at least two (2) years of the last three (3) years of experience in TSC, MOCC, JMAST, RMAST, TEG, UOC, TCO, USMC C^4I systems or related C^4ISR systems or subsystems; design, development test and evaluation.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least an Associate Degree in an appropriate academic discipline from an accredited school.

b. Progressive Experience: Must have at least ten (10) years systems analyst experience relative to P-3C Navy ASW Aircraft, Tactical Mobile, TEG, UOC, IAS FOS, TCO, USMC C^4I systems or related C^4ISR systems or subsystems; design, development test and evaluation.

c. Specific Experience: Must have at least five (5) years of the last seven (7) years of experience in TSC, MOCC, JMAST, RMAST, TEG, TCO, UOC, USMC C^4I systems or related C^4ISR systems or subsystems; design, development test and evaluation.

OR EQUIVALENT AS FOLLOWS (B):

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least fifteen (15) years of experience with system analyst techniques, test and evaluation procedures or support requirements for 3C Navy ASW Aircraft, Tactical Mobile, TEG, UOC, IAS FOS, USMC C^4I systems or related C^4ISR systems or subsystems.

c. Specific Experience: Must have at least seven (7) years of the last ten (10) years experience with system analyst techniques, test and evaluation procedures or support requirements TSC, MOCC,

JMAST, RMAST, TEG, UOC, USMC C^4I systems or related C^4ISR systems or subsystems; design, development test and evaluation.

16. Systems Analyst I: (Equivalent to SCA# 03101)

a. Education: Must have at least a Bachelor of Science Degree in Electrical/Electronics/Software Engineering, Computer Engineering, Computer Science, Physics, Mathematics or Information Systems Technology.

b. Progressive Experience: Must have at least two (2) years experience in engineering, development, or test and evaluation of P-3C Navy ASW Aircraft Systems, Tactical Mobile, TEG, IAS FOS, TCO, UOC, CAC2S, FMS, USMC C^4I systems or related C^4ISR systems.

c. Specific Experience: None.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least eight (8) years of systems analyst experience in design, development, or test and evaluation of P-3C ASW Aircraft Systems, Tactical Mobile, TEG, IAS FOS, TCO, UOC, CAC2S, FMS, USMC C^4I systems or related C^4ISR systems.

c. Specific Experience: None.

17. *Senior Computer Programmer:

a. Education: Must have at least a Bachelor of Science Degree in Electrical/ Electronics/Software Computer Engineering, Physics, Computer Science.

b. Progressive Experience. Must have at least six (6) years of practical experience in the design, development, and test and evaluation of systems or subsystems for the Tactical Mobile USMC C^4I Systems or related C^4ISR and C^3 systems software written in C, C++, Java, Visual Basic knowledge of C language under UNIX OS and, Window NT are mandatory.

c. Specific Experience: Must demonstrate at least three (3) years of the last six (6) years of experience in developing and maintaining software for the DCCS/NAVMACS II system. Also must have three (3) years of demonstrated experience in the design and software integration of computer and devices for TSC, MOCC, and USMC C^4I Systems or related C^4ISR in accordance with IEEE/EIA-12207 or canceled MIL-STD-498.

18. *Computer Programmer II: (SCA# 03072)

a. Education: Must have at least an Associate Degree in Computer Science Technology whose curriculum dealt directly with the programming of: digital computers, microprocessors or peripheral/interface equipment.

b. Progressive Experience: Must have at least six (6) years of practical experience in programming of digital computers, microprocessors, peripherals, or interface equipment; experience in coding, developing and testing in the following software languages: UNIX, C, C++, Java, Window NT, VMS, and Visual Basic

c. Specific Experience: Must have at least two (2) years of the last four (4) years of experience in programming the following software languages: UNIX, UNIX X-Windows, as well as the Windows NT Document Object Model (DOM) and Windows API environment. In addition, the contractor must have experience on HTML, XML and VBScript.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least a High School Diploma plus satisfactory completion of a Trade school or Navy Automatic Data Processing school.

b. Progressive Experience: Must have at least fifteen (15) years of practical experience in programming of digital computers, microprocessors, peripherals, or interface equipment; experience in coding, developing and testing in the following software languages: C, C++, Java, Window NT, VMS, and Visual Basic.

c. Specific Experience: Must have at least four (4) years of the last six (6) years of experience in the following software languages: UNIX, UNIX X-Windows, as well as the Windows NT Document Object Model (DOM) and Windows API environment. In addition, the contractor must have experience on HTML, XML, UNIX, C, and Window NT.

19. *Test Engineer III:

a. Education: Must have at least a Bachelor of Science Degree in Electrical/Electronics/Software Computer Engineering, Physics, Computer Science.

b. Progressive Experience: Must have at least six (6) years experience in evaluating, recommending, and implementing strategies for Tactical Mobile, USMC C4ISR and related C4ISR systems and subsystems. Develops, maintains, and upgrades automated test scripts, test tools and architectures for application products. Develops T&E plans, cases, and procedures for system testing from component level through system end-to-end level execution. Performs analysis of test data / results and data reduction for development of test reports. Familiarity with a variety of the field's concepts, practices, policies and procedures to include DoD level acquisition T&E.

c. Specific Experience*:* Must have at least three (3) years of the last five (5) years experience with test and evaluation or support requirements for TSC, MOCC, JMAST, RMAST, TEG, IAS FOS, TCO, USMC C^4I systems or related C^4ISR systems or subsystems; design, development, or test and evaluation.

20. *Test Engineer II:

a. Education: Must have at least a Bachelor of Science Degree in Electrical/ Electronics/Software Computer Engineering, Physics, Computer Science.

b. Progressive Experience: Must have at least three (3) years of experience in evaluates, recommends, and implements automated test tools and strategies for Tactical Mobile, USMC C4ISR and related C4ISR systems and subsystems. Develops, maintains, and upgrades automated test scripts and architectures for application products. Also writes, implements, and reports status for system test cases for testing. Analyzes test cases and provides regular progress reports Familiarity with a variety of the field's concepts, practices, policies and procedures to include DoD level acquisition T&E.

c. Specific Experience*:* Must have at least one (1) years of the last two (2) years experience with test and evaluation procedures or support requirements for TSC, JMAST, MOCC, TEG, IAS FOS,

USMC C^4I systems or related C^4ISR systems or subsystems; design, development test and evaluation.

21. ***Network Engineer:**

a. Education: Must have at least a Bachelor of Science Degree in Computer Science, Electronics/Electrical/Software Engineering or related engineering disciplines. The successful candidate should have a good grasp of TCP/IPv4, TCP/IPv6, Gigabit Ethernet and ATM networking concepts and the convergence of voice, video, and data. Education should include operating systems, networking, and systems programming. Formal education should include systems, networking, and systems programming. Working knowledge of protocol suites such TCP/IPv4 and TCP/IPv6, C programming, UNIX, and support Novel NT, and/or UNIX (Solaris) network. Formal certification from Microsoft NT, and /Sun is highly desirable. Training from such sources as Bay Networks, Cisco, or 3Com will also be very helpful. Handle LANs, WANs, back-up comm. server, Email and Internet access products.

b. Progressive Experience: Must have at least five (5) years of network operating systems, simulation packages and multi-protocols.

c. Specific Experience: Must have at least three (3) years of last five (5) years of experience in NT, LAN/WAN, and Internet access and switching, routing skill and work with network simulation packages such as OPNET and COMNET III will be helpful.

22. ***Network Security Systems Manager:**

a. Education: Must have at least a Bachelor of Science Degree in Computer Science, Electronics/Electrical/Software Engineering or related engineering disciplines.

b. Progressive Experience: Must have at least five (5) years of experience managing all network security systems for LAN/WAN, telecommunications, and voice systems. Leads network security administration staff and be familiarized with a variety of the field's concepts, practices, and procedures.

c. Specific Experience: Must have at least three (3) years of experience with SPAWAR Computer Security Acquisition Management Guidelines for tactical systems and NAVDAC Publications for non-tactical systems.

23. **Network Administrator:**

a. Education: Must have at least a Bachelor of Science Degree in an appropriate academic discipline.

b. Progressive Experience: Must have at least five (5) years experience in computer related field at least three (3) of which are in providing day-to-day supervision and operation of the functional activities of a network. Technical experience must include network design and administration, experience with various networking systems and a working knowledge of various commercial software packages. Functional Responsibility: Provides day-to-day supervision of network operation and administration. Maintains data files and controls network procedures. Supervises the creation and assigning of addresses, aliases, access to public directories, assignment of passwords and special accesses. Compiles and maintains reports relating to the network performance.

b. Specific Experience: None.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least Associates Degree or Certificate in Network Administration, Certified NetWare Administrator or equivalent training.

b. Progressive Experience: Must have at least eight (8) years experience in computer related field at least three (5) of which are in providing day-to-day supervision and operation of the functional activities of a network. Technical experience must include network design and administration, experience with various networking systems and a working knowledge of various commercial software packages. Functional Responsibility: Provides day-to-day supervision of network operation and administration. Maintains data files and controls network procedures. Supervises the creation and assigning of addresses, aliases, access to public directories, assignment of passwords and special accesses. Compiles and maintains reports relating to the network performance.

c. Specific Experience: None.

24. LAN Support II: (Equivalent to SCA# 03045)

a. Education: Must have at least an Associates of Science Degree in Computer Science, Mathematics or related discipline.

b. Progressive Experience: Must have at least four (4) years of experience in supports, monitors, tests, and troubleshoots hardware and software problems pertaining to LAN. Recommends and schedules repairs. Provides end users support for all LAN based applications. Installs and configures workstations. Familiar with standard concepts, practices, and procedures within a particular field.

c. Specific Experience: None.

25. Database Administrator: (Equivalent to SCA# 03072)

a. Education: Must have at least an Associates degree or Equivalent technical training in computer Science, Software Development in Certified School.

b. Progressive Experience: Must have at least 3 years of experience in administers, maintains, develops and implements policies and procedures for ensuring the security and integrity of the company database. Implements data models and database designs, data access and table maintenance codes; resolves database performance issues, database capacity issues, replication, and other distributed data issues. Familiar with standard concepts, practices, and procedures within a particular field.

c. Specific Experience: None.

26. Security Administrator:

a. Education: Must have at least Bachelor Degree in related Security field.

b. Progressive Experience: Must have at least five (5) years of experience in troubleshooting network access problems and implements network security policies and procedures. Ensures network (LAN/WAN, telecommunications, and voice) security access and protects against unauthorized access, modification, or destruction. Be familiarized with a variety of the field's concepts, practices, and procedures. Relies on extensive experience and judgment to plan and accomplish goals. Performs a variety of tasks.

c. Specific Experience: None.

27. * Modeling and Simulation (M&S) Engineer:

a. Education: Must have at least a Bachelor of Science Degree in Computer Science, Electrical/Software Engineering, Physics, or related disciplines. Applying knowledge of evolving modeling and simulation (M&S) technologies and systems engineering expertise support simulation based acquisition, assessment, and training. Knowledge of the process by which M&S related capabilities is applied operational to a system. Working in the definition and refinement of user M&S related requirement, development, and evaluation of solution alternatives, and general systems engineering support for relevant acquisitions.

b. Progressive Experience: Must have at least seven (7) years of experience in modeling and simulation or relatable analysis of Software engineering field. Knowledge of advance distributed simulation, Distributed Interactive Simulation (DIS) and High Level Architecture (HLA).

c. Specific Experience. None.

28. *Security Engineer:

a. Education: Must have at least a Bachelor of Science Degree in Computer Science, Electronics/Electrical/Software Engineering or related engineering disciplines. The successful candidate should have a working knowledge of networking, databases and operating systems concepts, design, implementation and administration. Must have a working knowledge of the disciplines of Information Security, multilevel security and security architectures to include hardware and software security and control, and DOD computer and Communications Security standards and directives. Good grasp of TCP/IPv4, TCP/IPv6 protocol suite, and networking essential like routing and switching

b. Progressive Experience: Must have at least four (4) years of direct experience in managing or configuring firewall, integateways and network security devices/applications

c. Specific Experience: Must have at least three (2) years of last five (4) years of experience in Check point Firewall-1, Virtual Network and network intrusion detection. Must have knowledge of operating system security (Solaris and Windows)

29. Graphical User Interface (GUI) Programmer I:

a. Education: Must have at least a Bachelor's degree in an appropriate academic discipline.

b. Progressive Experience: Must have at least two (2) years of direct experience in designing and developing web applications using a number of visual components such as Java AWT or Swing. May participate in testing Java GUI components and testing improvements of Java GUI components. Has knowledge of commonly used concepts, practices, and procedures within a particular field (i.e., C, C++ language programming, XMotif programming interfaces and GUI API packages). Relies on instructions and pre-established guidelines to perform the functions of the job.

c. Specific Experience: None.

30. *Electronics Technician III: (Equivalent to SCA# 29083)

a. Education: Must have at least an Associates Degree in Computer Science, Electronics Technology. Curriculum must have dealt directly with the maintenance, troubleshooting, or repair of the

following: digital computers, computer peripheral/interface equipment, VME based systems, digital multiplexes, switches, radio frequency transmitters, receivers, antennas, and modems.

b. Progressive Experience: Must have at least ten (10) years of practical hands-on experience in the maintenance, troubleshooting, or repair of digital computers, computer peripheral/interface equipment, VME based systems, digital multiplexes, switches, radio frequency transmitters, receivers, antennas, and modems. Must have worked at least four (4) years as a Technician II, accomplishing System Operation and Verification or QA testing or component repair on Military electronics systems.

c. Specific Experience: Must have at least six (6) years of last eight (8) years of experience in the maintenance and repair of P-3C Navy ASW Aircraft system, Tactical Mobile, TCO, TEG, IAS FOS, UOC, USMC C^4I systems, or related C^4ISR systems, subsystems and/or related equipment.

OR EQUIVALENT AS FOLLOWS (A):

a. Education. Must have at least a High School Diploma plus satisfactory completion of an electronic trade school or Navy Electronics school.

b. Progressive Experience. Must have at least of fifteen (15) years of practical hands-on experience in the maintenance, troubleshooting, or repair of digital computers, computer peripheral/interface equipment, VME based systems, digital multiplexes, switches, radio frequency transmitters, receivers, antennas, and modems. Must have worked at least four (4) years as a Technician II, accomplishing System Operation and Verification or QA testing, or component repair on Military electronics systems.

c . Specific Experience: Must have at least eight (8) years of last ten (10) years, which must be in the maintenance and repair of P-3C Navy ASW Aircraft system, Tactical Mobile, TCO, TEG, IAS FOS, UOC, USMC C^4I systems or related C^4ISR systems, subsystems and equipment.

31. Electronics Technician II: (Equivalent to SCA# 29082)

a. Education: Must have at least an Associate Degree in Electronics Technology.

b. Progressive Experience: Must have at least eight (8) years of practical experience in the maintenance, troubleshooting, or repair of digital computers, computer peripheral/interface equipment, VME based systems, digital, switches, radio frequency transmitters, receivers, antennas, and modems.

c. Specific Experience: Must have at least four (4) years of the last five (5) years of experience in the maintenance and repair P-3C Navy ASW Aircraft system, TSC, MOCC, JMAST, RMAST, TEG, IAS FOS, UOC, USMC C^4I systems and/or related C^4ISR systems and C^3 electronics systems.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least a High School Diploma plus satisfactory completion of an electronic trade school or Navy Electronics School.

b. Progressive Experience: Must have at least ten (10 years appropriate experience in the maintenance, troubleshooting, or repair of digital computers, computer peripheral/interface equipment, VME based systems, digital, switches, radio frequency transmitters, receivers, antennas, and modems.

c. Specific Experience: Must have at least six (6) years of the last ten (10) years of experience in the maintenance and repair of TSC, MOCC, JMAST, RMAST, TEG, IAS FOS, UOC, MOCC, GCCS-M Tactical/Mobile, USMC C^4I systems and/or related C^4ISR systems and C^3 electronics systems.

32. Electronics Technician I: (Equivalent to SCA# 29081)

a. Education: Must have at least an Associates Degree in Electronics Technology.

b. Progressive Experience: Must have at least four (4) years of practical experience in electronics, troubleshooting, repair equipment, computer or communications technician courses may be substituted for education requirements.

c. Specific Experience: Must have at least two (2) years of practical experience in the maintenance troubleshooting, installation or repair Navy ASW Aircraft, TSC, TCOMM, MOCC, TEG, IAS FOS, UOC, USMC C^4I systems and/or C^3 or/and related C^4ISR systems.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least a High School Diploma plus satisfactory completion of an electronic trade school or Navy Electronics School.

b. Progressive Experience: Must have at least six (6) years appropriate experience in electronics, troubleshooting, equipment repair, computer or communications technician courses may be substituted for the Education and Specific Experience.

c. Specific Experience: None.

33. Electronics Assembler/Laborer: (Equivalent to SCA# 23470)

a. Education: Must have least a High School Diploma plus satisfactory completion of an electronic trade school or Navy Electronics School.

b. Progressive Experience: Must have at least one-year experience working with an electrical or electronics firm. Must be capable of reading electrical/electronic schematics and drawings and assembling complex equipment with sufficient supervision.

c. Specific Experience: None.

34. *Senior Logistics Technician:

a. Education: Must have at least a Bachelor 's Degree in Engineering, Mathematics, Science, Management or a related field

b. Progressive Experience: Must have at least eight (8) years of logistics experience on Navy or USMC programs involving the acquisition of logistics elements for system support, and logistics planning to include establishment of maintenance and material management systems and equipment provisioning. At least two (2) years of management experience, directing a group of logistics oriented personnel, is required.

c. Specific Experience: Must have at least four (4) years of the last six (6) years of experience in the following ILS elements: Test Equipment Support; Technical Data; Training and Training Support; Computer Resources Support; and Packaging, Handling, Storage and Transportation. Also, must have an in-depth knowledge of the Navy Supply System, and integrated logistics support planning

and implementation for Navy ASW Aircraft, Tactical Mobile, TEG, IAS FOS, UOC, USMC C^4I systems and/or related C^4ISR systems or subsystems.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least a High School Diploma or Trade School with USN or USMC training centering on supply Support.

b. Progressive Experience: Must have at least fifteen (15) years of logistics experience on Navy programs involving the acquisition of logistics elements for system support, logistics planning to include establishment of maintenance and material management systems and equipment provisioning. At least four (4) years of management experience, directing a group of logistics oriented personnel, is required.

c. Specific Experience: Must have at least eight (8) years of the last ten (10) years of experience in the following ILS elements: Test Equipment Support; Technical Data; Training and Training Support; Computer Resources Support; and Packaging, Handling, Storage and Transportation. Also, must have an in-depth knowledge of the Navy Supply System, and integrated logistics support planning and implementation for Navy ASW Aircraft, Tactical Mobile, TEG, IAS FOS, USMC C^4I and/or related C^4I SR systems or subsystems.

35. *Logistics Technician II:

a. Education: Must have at least an Associates Degree

b. Progressive Experience: Must have at least five (5) years of general and practical experience in progressively responsible technical duties which include: providing maintenance, inventory storage, cataloging, property use and material coordination through technical supply management, provisioning, data analysis, report preparation and integrated logistic support.

c. Specific Experience: Must be a certified Reliability Center Maintenance Level II (RCM) Technician. Must have at least three (3) years experience in providing maintenance, inventory storage, cataloging, property use and material coordination through technical supply management, provisioning, data analysis, and report preparation for Navy ASW Aircraft, Tactical Mobile, USMC, FMS, TEG, IAS FOS, IOS, IOW, DACT, MSBL, and/or C^4ISR related systems and two (2) years of experience in integrated logistic support with USN or USMC C^4I systems.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least High School Diploma.

b. Progressive Experience: Must have at least seven (7) years of general and practical experience in progressively responsible technical duties which include: providing maintenance, inventory storage, cataloging, property use and material coordination through technical supply management, provisioning, data analysis, report preparation and integrated logistic support.

c. Specific Experience: Must be a certified Reliability Center Maintenance Level II (RCM) Technician. Must have at least four (4) years experience in providing maintenance, inventory storage, cataloging, property use and material coordination through technical supply management, provisioning, data analysis, and report preparation for Navy ASW Aircraft, Tactical mobile, USMC, FMS, TEG, IAS FOS, IOS, IOW, DACT, MSBL, and/or C^4ISR related systems and two (2) years of experience in integrated logistic support with USN or USMC C^4I systems.

36. Supply Technician: (SCA# 01400)

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least five (5) years experience in logistics support of tasks or projects involving electronic/electrical repair and installation. Logistics support is intended to include acquisition. Management, distribution of material, equipment, and resources necessary for the coordinated and timely of projects. An ability to perform limited aspects of technical supply management work (e.g., inventory management, storage management, cataloging, property utilization) related to depot, local, or other supply activities.

c. Specific Experience: Must have at least one (1) year of the last three (3) years of experience with DoD and Naval Supply System. Must have two (2) years experience interacting with SPAWAR procuring and shipping personnel.

37. Warehouse Specialist: (SCA# 20400)

a Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least two (2) year of experience of operating a warehouse complex and performing related duties including inventory, staging, packing, storage and shipping of electronic equipment and related material. Requires operating motor vehicles and material handling equipment.

c. Specific Experience: Must have utilized a computer-based inventory and bar coding system for entry, identification and tracking of material.

38. Warehouse Supervisor: (Equivalent to SCA# 21020)

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least four (4) years of experience in the field supervising the receiving, storing, packing, and shipping of merchandise or materials. Maintains stock records and schedules. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals.

c. Specific Experience: Must have at least three (3) of the last four (4) years of experience with DOD and Naval Supply System and interacting with SPAWAR procuring and shipping personnel.

39. Dispatcher: (Equivalent to SCA# 21100)

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least two (2) years of experience assembles orders and prepares goods for shipment. Records shipment data, including weight, charges, and space availability. Receives and unpacks materials and supplies. Reports damages and discrepancies for accounting, reimbursement and record-keeping purposes. Completes shipping and receiving reports. Has knowledge of commonly used concepts, practices, and procedures within a particular field.

c. Specific Experience: None.

40. Material Handling Laborer: (SCA# 21040)

a. Education: Must have at least a High School Diploma or equivalent.

b. Progressive Experience: Must have at least four (4) years of experience loading and uploading material within a warehouse or storage facility. Utilizes hand trucks, forklifts, hoists, conveyors, or other handling equipment. Has knowledge of standard practices and procedures within the military field.

c. Specific Experience: None.

41. Material Expeditor: (SCA# 21030)

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least two (2) to four (4) years of experience in the field or in a related area. Facilitates and expedites the flow of materials to and from various departments. Deals directly with vendors to ensure prompt and accurate delivery of goods to appropriate locations. Inspects goods upon delivery to verify delivered goods match order specifications. Handles any delivery inconsistencies or delays. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. Performs a variety of tasks. A certain degree of creativity and latitude is required.

c. Specific Experience: None.

42. Computer Data Librarian: (SCA# 03010)

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least three (3) years military or civilian experience using standard library techniques including: listing/ cataloging, filing, researching incoming and currently held library material, updating documents/publications and supplements, establishing and maintaining an inventory/check-out control system for library documentation, and ordering documents, publications and reference materials.

c. Specific Experience: Must have specific experience utilizing duplication media such as CD-RW or DDS tape drives. Must be capable of using Windows NT or UNIX based duplication software and utilities.

43. *Quality Assurance Engineer III:

a. Education: Must have at least a Bachelor of Science Degree in Electrical/ Electronics/Software Computer Engineering, Physics, Computer Science.

b. Progressive Experience: Must have at least six (6) of experience in performing inspections and sets quality assurance testing models for analysis of raw materials, materials in process, and finished products on Navy/USMC C^4I SR system, subsystem and/or related IT software programs. Must be familiarized with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals.

c. Specific Experience: Must have at least four (4) years of the last six (6) years of experience in quality assurance/quality control programs. Experience must also include four (4) years on various Navy/USMC programs involving state-of the-art electronic systems; subsystems or computer software and three (3) years of P-3C, Tactical Mobile, C^3, USMC C^4I and/or C^4ISR related systems experience.

44. Quality Assurance/Control Specialist: (Equivalent to SCA# 23050)

a. Education: Must have at least an Associate Degree in Electronic Technology or related discipline.

b. Progressive Experience: Must have a least eight (8) with specialized training in quality assurance/quality control programs and two (2) years of quality assurance/quality control experience an various Navy electronic system, subsystem or computer software programs

c. Specific Experience: Must have least four (4) years of the last six (6) years of experience in quality assurance/quality control programs. Must have in-depth knowledge of UNIX and Windows computer operating systems and their operation and configuration. Experience must include two (2) years on various Navy programs involving state-of the-art communication systems, electronic systems, and subsystems or computer software. Must have at least two (2) years of experience of quality assurance/quality control involving state-of the-art electronic systems; subsystems or computer software and two (2) years of P-3C, Tactical Mobile, C^3, USMC C^4I and/or C^4ISR related systems experience.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least twelve (12) years appropriate experience in quality assurance/quality control programs an various Navy electronic system, subsystem or computer software programs may be substituted for the Education and Specific Experience requirements above.

c. Specific Experience: Must have in-depth knowledge of UNIX and Windows computer operating systems and their operation and configuration. Must have at least five (5) years of the last eight (8) years, which must be quality assurance / quality control of P-3C, Tactical Mobile, C^3, USMC C^4I and/or C^4ISR related systems experience.

45. *Illustrator III: (SCA# 13043)

a. Education: Must have at least an Associated Degree in Electronic Technology or related field.

b. Progressive Experience: Must have at least eight (8) years of drafting experience and complete familiarity with official drawing guidelines, specifications, and procedures.

c. Specific Experience: Must have at least six (6) years of experience utilizing AutoCAD 2000 or later Computer Aided Design (CAD) software. At least six (6) years experience developing Military specific drawing packages including: Shore Installation Drawings, Ships Installation Drawings (SIDs), Ship Alterations (ShipAlts), Temporary Alterations (TempAlts), Installation Control Drawings (ICDs), Installation Design Packages (IDPs), Basic Electronic Systems Engineering Plans (BESEP's) or As-Built drawings.

46. Illustrator II: (SCA# 13042)

a. Education: Must have at least an Associate Degree in Electronic Technology or related discipline.

b. Progressive Experience: Must have at least four (4) years practical experience in graphic arts and a demonstrated knowledge of graphic production equipment.

c. Specific Experience: Must have at least one (1) year of the last two (2) years of experience in preparing electrical/electronics drawings in support of engineering functions using AUTOCAD 2000 or higher software tools.

47. Illustrator I: (SCA# 13041)

a. Education: Must have at least an Associate Degree in Electronic Technology or related discipline.

b. Progressive Experience: Must have at least two (2) years practical experience in graphic arts and a demonstrated knowledge of graphic production equipment.

c. Specific Experience: Must have generated electrical / electronic drawings and diagrams utilizing AutoCAD 2000 or higher.

48. Word Processor III: (SCA# 01613)

a. Education. Must have at least a High School Diploma, with clerical or business preparatory courses including: Typing, English, Business, Mathematics, Office Methods and Office Machinery.

b. Progressive Experience: Must have at least eight (8) years experience in preparing word processing documents with extensive tabular statistical information, template proficiency, create/manipulate spread sheets. Requires both a comprehensive knowledge of word processing software applications and office practices and a high degree of skill in applying software functions to prepare complex and detailed documents.

c. Specific Experience: Must have at least five (5) years of practical experience in the preparation of manuscript copy. This experience must included: familiarity with scientific and technical terminology, engineering drawings and documents various cold-type processes and reproduction equipment. Ability to use automated typing equipment in the preparation of manuscript copy at a speed of at least fifty (50) WPM. Ability to type in final and draft format from rough notes, technical papers, reports, rough drafts and other similar source material without intermediate rough drafts. Uses either different word processing packages or many different style macros or special command functions.

49. Word Processor II: (SCA# 01612)

a. Education. Must have at least a High School Diploma, with clerical or business preparatory courses including: Typing, English, Business, Mathematics, Office Methods and Office Machinery.

b. Progressive Experience: Must have at least five (5) years experience in preparing word processing documents with extensive tabular statistical information, template proficiency, create/manipulate spread sheets.

c. Specific Experience: Must have at least three (3) years of practical experience in the preparation of manuscript copy. This experience must included: familiarity with scientific and technical terminology, engineering drawings and documents various cold-type processes and reproduction equipment. Ability to use automated typing equipment in the preparation of manuscript copy at a speed of at least fifty (50) WPM. Ability to type in final and draft format from rough notes, technical papers, reports, rough drafts and other similar source material without intermediate rough drafts.

50. Word Processor I: (SCA# 01611)

a. Education: Must have at least a High School Diploma, or equivalent, including two (2) years of training in typing and a good knowledge of English.

b. Progressive Experience: Must have at least two (2) years of training in typing and a good knowledge of English. Ability to perform routine typing at 40 words per minute without error, ability to compile provided data and prepares routine reports as required. Ability or organize and manage filing operations. Ability to perform minor tasks involving arithmetic operations such as

counting and recording events occurring in forms, reports, and other documents. Ability to assist in the performance of minor logical tasks under supervision.

c. Specific Experience: None.

51. *Technical Writer/Editor III:

a. Education: Must have at least a Bachelor's degree in English, Journalism or Technical Writing.

b. Progressive Experience: Must have at least five (5) years of experience in the actual writing and editing of technical documentation dealing with Technical Manuals, Development, Test and Evaluation or Integrated Logistics Support of Navy ASW Aircraft, Tactical Mobile, USMC C^4I systems or related C^4ISR systems. Writes a variety of technical articles, reports, brochures, and/or manuals for documentation for a wide range of uses. May be responsible for coordinating the display of graphics and the production of the document.

c. Specific Experience: Must have significant experience utilizing software tools including Microsoft Word, Adobe Frame maker, AutoCAD 2000, Visio 2000, or similar editing and illustrating tools. Must have significant experience utilizing electronic document scanners and digital cameras, and transfer of captured information to electronic media. Must have at least three (3) years of experience in the actual writing and editing of technical documentation dealing with Technical Manuals, Development, Test and Evaluation or Integrated Logistics Support of the following systems: Tactical Mobile, FMS, USMC C^4I, IAS FOS, TEG, UOC or related C^4ISR systems or associated interface systems.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least an Associates Degree in English, Journalism or Technical Writing.

b. Progressive Experience: Must have at least ten (10) years of technical writing experience relative to the Navy ASW Aircraft, Tactical Mobile, FMS, USMC C^4I or related C^4I systems or associated interface systems engineering. Writes a variety of technical articles, reports, brochures, and/or manuals for documentation for a wide range of uses. May be responsible for coordinating the display of graphics and the production of the document.

c. Specific Experience: Must have significant experience utilizing software tools including Microsoft Word, Adobe Frame maker, AutoCAD 2000, Visio 2000, or similar editing and illustrating tools. Must have significant experience utilizing electronic document scanners and digital cameras, and transfer of captured information to electronic media. Must have at least six (6) years of the last eight (8) years of experience in the actual writing and editing of technical documentation dealing with Development, Test and Evaluation or Integrated Logistics Support of Navy ASW, Tactical Mobile, FMS, USMC C^4ISR, IAS FOS, TEG, UOC or related C^4ISR systems or associated interface systems.

52. Technical Writer/Editor II: (Equivalent to SCA# 29480)

a. Education: Must have at least a Bachelor's degree in English, Journalism or Technical Writing.

b. Progressive Experience: Must have significant experience utilizing software tools including Microsoft Word, Adobe Frame maker, AutoCAD 2000, Visio 2000, or similar editing and illustrating tools. Must have significant experience utilizing electronic document scanners and digital cameras, and transfer of captured information to electronic media. Must have at least three (3) years of experience in the actual writing and editing of technical documentation dealing with Technical Manuals, Development, Test and Evaluation or Integrated Logistics Support of Navy ASW Aircraft, Tactical Mobile, USMC C4I systems or related C^4ISR systems. Writes a variety of

technical articles, reports, brochures, and/or manuals for documentation for a wide range of uses. May be responsible for coordinating the display of graphics and the production of the document.

c. Specific Experience: None.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least an Associates Degree in English, Journalism or Technical Writing.

b. Progressive Experience: Must have at least six (6) years of technical writing experience relative to the Navy ASW Aircraft, TSC, or related C^4I systems or associated interface systems engineering. Writes a variety of technical articles, reports, brochures, and/or manuals for documentation for a wide range of uses. May be responsible for coordinating the display of graphics and the production of the document.

c. Specific Experience: Must have significant experience utilizing software tools including Microsoft Word, Adobe Frame maker, AutoCAD 2000, Visio 2000, or similar editing and illustrating tools. Must have significant experience utilizing electronic document scanners and digital cameras, transfer of captured information to electronic media. Must have at least four (4) years of the last six (6) years of experience in the actual writing and editing of technical documentation dealing with Development, Test and Evaluation or Integrated Logistics Support of Navy ASW Tactical/Mobile, USMC C^4ISR or related C^4ISR systems or associated interface systems may be substituted for the Education and Specific Experience requirements above.

53. Financial Analyst II:

a. Education: Must have at least a Bachelor Degree in finance, economics or related field, including successful completion of business/financial preparatory classes including accounting, office methods, and financial management.

b. Progressive Experience: Must have at least five (5) years providing and conducting financial analysis, financial reporting for large IDIQ contracts. This five years of experience must include preparing financial progress reports, contractor status and man-hour expenditure reports, and program status reports; developing cost estimates and project budgets; supporting contract reviews; and providing financial tracking support and special statistical studies.

c. Specific Experience: Must have at least two (2) of the last five (5) years of experience working with SPAWAR-related IDIQ contracts with both domestics and FMS components.

OR EQUIVALENT AS FOLLOWS (A):

a. Education: Must have at least a high school diploma, including successful completion of business/financial preparatory classes including accounting, office methods, and financial management.

b. Progressive Experience: Must have at least five (5) years providing financial reporting for large IDIQ contracts. This five years of experience must include preparing financial progress reports, contractor status and man-hour expenditure reports, and program status reports; developing cost estimates and project budgets; supporting contract reviews; and providing financial tracking support and special statistical studies.

c. Specific Experience: Must have at least two (2) of the last five (5) years of experience working with Department of the Navy-related IDIQ contracts with both domestics and FMS components.

54. Financial Analyst I: (Equivalent to SCA# 01014)

a. Education: Must have at least an Associates Degree in finance, economics or related field, including successful completion of business/financial preparatory classes including accounting, office methods, and financial management.

b. Progressive Experience: Must have at least three (3) years of experience providing and conducting financial analysis, financial reporting for large IDIQ contracts. This five years of experience must include preparing financial progress reports, contractor status and man-hour expenditure reports, and program status reports; developing cost estimates and project budgets; supporting contract reviews; and providing financial tracking support and special statistical studies.

c. Specific Experience: None.

55. Key Entry Operator II: (SCA# 01132)

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least three (3) years of experience operating a data entry device to record or verify a variety of standard and/or complex coded or encoded business and statistical source data into a computer. Be familiarized with standard concepts, practices, and procedures within a particular field.

c. Specific Experience: None

56. Shipping and Receiving Clerk: (SCA # 21100)

a. Education: Must have at least a High School Diploma.

b. Progressive Experience: Must have at least two (2) years of experience assembles orders and prepares goods for shipment. Records shipment data, including weight, charges, and space availability. Receives and unpacks materials and supplies. Reports damages and discrepancies for accounting, reimbursement and record-keeping purposes. Completes shipping and receiving reports. Has knowledge of commonly used concepts, practices, and procedures within a particular field.

c. Specific Experience: None.

C-302 SPECIFICATIONS/STATEMENT OF WORK

The work under this contract shall be performed in accordance with the following statement of work:

1.0 INTRODUCTION.

The Command Control Communication and Intelligence (C^4I) System Division is tasked by the Space and Naval Warfare Systems Command (SPAWAR) to provide system engineering, software development, configuration management, test, fleet introduction, product improvement, quality assurance, logistic, and life cycle management support for various C^4ISR requirements, programs, and projects, as tasked by multiple Department of Defense (DOD) and other Federal Agencies, during critical periods from system conception through system operation. As a full spectrum solution provider to the DOD community it is necessary to provide for evolutionary integration of numerous current and previous C^4I SR systems in order to support multiple war fighting, manpower, and logistics missions for commanders at all echelons, in all Naval

environments, and for Joint, coalition, and allied forces. Some of the present requirements of the C4I division are as follows: the Tactical Mobile which consist of: [Tactical Support Center (TSC), Mobile Operational Command Center (MOCC), Joint Mobile Ashore Support Terminal (JMAST) and TSC Communications Module (TCOMM)], Reserve Mobile Ashore Support Terminal (RMAST), Mobile Integrated Command Facility (MICFAC), Portable Allied Command, Control and Communications Terminal (PAC3T), C4I related systems and associated interface systems, Global Command and Control System (GCCS), GCCS-Maritime (GCCS-M) Tactical Imagery Systems; and other Mobile and fixed site C4ISR systems and related Foreign Military Sales (FMS) programs such as Royal Saudi Navy Force (RSNF), Maritime Air Support Center (MASC), Maritime Support Center (MSC), and NATO projects such as Multi-Mission Maritime Support Center (MMSC) and NATO Maritime Air Support Center (formally MAOC).

Additional United States Marine Corps Programs requiring support are, but not limited to: Unit Operations Center (UOC), Common Air Command and Control Systems (CAC2S), the Intelligence Analysis System Family of Systems (IAS FOS) which includes the MEF IAS, Intelligence Operations Servers (IOS V-1 and IOS V-2), Mounted and Dismounted Digital Automated Communications Terminals (M-DACT and D-DACT), Intelligence Operations WorkStation (IOW), Tactical Exploitation Group (TEG), Manpack Secondary Imagery Dissemination System (MSIDS), Tactical Photo System (TACPHOTO), Enhanced Position Location Reporting System – Network Management System (ENM), Tactical Combat Operations (TCO), JSTARS Ground Stations, Marine Air Ground Task Force (MAGTF) Integrated Systems Training Centers (MISTCs), Advanced Amphibious Assault Vehicle (AAAV) Command and Control Variant, Advanced Field Artillery Tactical Data System (AFATDS), Marine Air Command and Control System (MACCS), Imagery Product Library (IPL), Joint Tactical Radio System (JTRS), Command And Control Personal Computer (C2PC), Blue Force Tracker (BFT) and the MAGTF Software Baseline (MSBL).

This task also includes Data Base Management support to the Federal Bureau of Investigation (FBI).

1.1 Purpose. This contract is to provide the C4I Division with the necessary engineering and technical support services required to augment C4I Division program/project managers and engineers in fulfilling SPAWAR, U S Marine Corps, FBI, US Air Force and other Federal Agencies' tasking for the development, test and evaluation, and life cycle support of C4I, C4I-related interface systems, subsystems and equipment, and associated FMS programs and projects.

1.2 Scope. The contractor may provide engineering and technical support services to the C4I Division, on various C4ISR requirements, programs and/or projects such as, but not limited to: Tactical Mobile, RMAST, PAC3T, USMC C4ISR such as TCO, UOC, GCCS, CAC2S, TEG, IAS FOS, IOS, IOW, DACT, IPL, JSTARS, ENM, MSIDs, TACPHOTO, MISTC, AFATDS, AAAV, BFT, C2PC, MSBL, C4I, and other Mobile and fixed site C4ISR systems, FMS and related interface systems development, procurement, fleet introduction, product improvement, test and evaluation, life cycle management and FMS programs, both present and future. The C4I programs are comprised of a number of communications, command and control systems and equipment consisting of hardware and software elements, each in various stages of development. This support shall consist of the application of approved scientific and technical procedures in the conduct of system engineering, configuration management, quality assurance, logistics and program management functions relative to assigned tasking.

1.3 Background. SPAWAR, which has cognizance over all Tactical Mobile (TACMOBILE) programs and related FMS Programs and the Marine Corps Systems Command (MARCORSYSOM) have designated SPAWAR Systems Center, Charleston as the primary activity for providing C4ISR systems engineering, system integration, test and evaluation, configuration management, quality assurance, logistics and training support to various C4ISR requirements, programs and/or projects.

2.0 APPLICABLE DOCUMENTS.

2.1 Specification and Standards. The Specifications and Standards listed in this Statement of Work (SOW) are supplied for a purpose of Guidance ONLY**.** Note: Reference to these documents elsewhere within the body of the SOW shall be by their basic number only: Unless otherwise specified, the revision level and

date for each specification or standard cited within this solicitation/contract (including any specification or standards cited in any drawing, handbook or any referenced specification or standard contained within this solicitation) shall be listed in the Department of Defense of Specifications and Standards (DODISS) dated 1 July 1997.

SPECIFICATIONS	**TITLE**
MIL-DTL-24784/14B	Manual, Experimental Electronic and Interior Communication (IC) Equipment Requirements
MIL-P-24534A Not 1	Planned Maintenance System; Development of Maintenance Requirement Cards, Maintenance Index Pages, and Associated Documentation,
MIL-M-85337A	Manuals, Technical: Quality Assurance Program: Requirements for
MIL-PRF-49506	Logistics Management Information
MIL-PRF-29612B	Training Data Products
MIL-PRF-29612/2A	Instructional Systems Development/Systems Approach to Training and Education (Part 2 of 4)
MIL-S-901	Shock Tests H.I. (High-Impact) Shipboard Machinery, Equipment, and Systems, Requirements For
MIL-D-23140D	Drawing, Installation Control, For Electronic Equipment
MIL-DTL-24784 B	Manuals, Technical: General Acquisition and Development Requirements
MIL-DTL-24784/4B	Commercial Off the-shelf (COTS) Equipment Manual Requirements

STANDARDS	
ASME Y14.100	Engineering Drawing Practices
ASME-Y14.24	Drawings Types and Applications of Engineering Drawings
MIL-STD-498 DIDs	Software Development and Document (Data Item Descriptions)
IEEE/EIA 12207.0	Software Life Cycle Processes
IEEE/EIA 12207.1	Software Life Cycle Processes -Life Cycle Data
IEEE/EIA 12207.2	Software Life Cycle Processes -Implementation Considerations
DoD-STD-5200.28-STD	Security Requirements for Automated Information Systems
EIA/IS-649	National Consensus Standards for Configuration
MIL-STD-1472F	Human Engineering
ISO 9000 (Series)	Quality Management and Quality Assurance Standards
MIL-STD-961D (1)	Defense Specification
ANSI-239.18	Scientific & Technical Reports-Elements, Organization & Design
MIL-PRF-49506	Logistics Management Information
DI-MGMT-80033	Site Preparation Requirement and Installation Plan
DI-QCIC-80154A	Installation and Acceptance Test Plan (JATP)
MCO 1510.34A	Individual Training Standards Systems
MCO 1553.1B	The Marine Corps Training and Education Systems (outlines the Systems Approach to Training (SAT) process) www.doctrine.usmc.mil
MCO 1553. w/ch 1	Management for Marine Corps Formal School Training Centers
MCO 1553.3	Marine Corps Unit training Management
MCO 3500.27 A	Operational Risk Management

HANDBOOKS	
MIL-HDBK-29612	Military Training Programs Other Publications
MIL-PRF-29612B	Training Data Products
MIL-HDBK-61A	Configuration Management Guidance
MIL-HDBK-472 (1)	Maintainability Prediction
MIL-HDBK-502	Acquisitions Logistics

MIL-HDBK-454A	General Requirements for Electronics Equipment
MIL-HDBK-217 F (2)	Reliability Prediction of Electronics Equipment
MIL-HDBK-29612-2	Instructural Systems Development/Systems Approach to Training and Education
MIL-HDBK-470A	Designing & Developing Maintainable Products Systems Vol. 1& II
MIL-HDBK-470B	Maintainability Program for Systems and Equipment
MIL-HDBK-1221	Manual, Evaluation of Commercial off-the-shelf (COTS)
MIL-HDBK-454A	General Requirements for Electronics Equipment
MIL-HDBK-2036	Electronic Equipment Specifications, Preparation of

OTHER PUBLICATIONS

NATO-STANAG-4283	Maritime Operation Center Interoperability
DOD Directive 5000.1	Defense Acquisition
DOD Instruction 5000.2	Operation of the Defense Acquisition System
DOD 5000.2-R	Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs
DOD Directive 8500.1	Information Assurance (IA)
NAVAIRINST 5100.3C	Naval Aviation Systems Safety Program
OPNAVINST 4790.4C	Ships 3M Manual
OPNAVINST 5239.1B	Navy Information Assurance Program
NAVEDTRA 130A	Task Based Curriculum Development Manual
NAVEDTRA 131A	Personnel Performance Profile Based Curriculum Development Manual
NAVEDTRA 134	Navy Instructor Manual
NAVEDTRA 135B	Navy School Management Manual

SPAWAR Instruction 4000.10A (Series) Integrated Logistics Support Plans (ILSPs) and Operational Logistics Support Summary (OLSS)

Shore Installations Process Handbook, September 1999

2.2 Availability of Documents. Military Specifications may be obtained from the US Naval Publications and Forms Center. C^4I documents may be obtained from the procuring activity. Commercial documents may be obtained from the organization issuing those documents.

2.3 Precedence of Documents. When the requirements of the contract, this SOW or applicable subsidiary specification are in conflict, the following precedence shall apply.

2.3.1 Contract. The contract shall have precedence over any specification.

2.3.2 Statement of Work. This SOW shall have precedence over all applicable subsidiary specifications. Any deviation from this SOW or from subsidiary specifications, where applicable, shall be specifically approved in writing by the contracting officer.

2.3.3 Referenced Specifications. Any referenced specification shall have precedence over any subsidiary specifications referenced therein. All referenced specifications shall apply to the extent specified.

2.4 Security Requirements: All personnel performing classified tasks (Intelligence or Communications) on this project shall be cleared to up to TOP SECRET. Request for visit authorization shall be submitted in accordance with DOD 5220.22m (Industrial Security Manual for Safeguarding Classified Information) no later than (1) one week prior to visit.

3.0 TECHNICAL REQUIREMENTS.

3.1 General. The contractor shall provide engineering and technical support in the following: system engineering, software engineering, security engineering, test and evaluation, installation maintenance and site support, configuration management, quality assurance, logistics, material control, training, and program management. Successful performance of this support will require knowledge of and experience with the following areas, systems, subsystems program and architectures including but not limited to:

Tactical Support Center (TSC)
TSC Communications (TCOMM)
Mobile Operational Command Center (MOCC)
Joint Mobile Ashore Support Terminal (JMAST)
Mobile Ashore Support Terminal (MAST)
Reserve Mobile Ashore Support Terminal (RMAST)
Fast Time Analysis System (FTAS)
Portable Command, Control & Communication Terminal (PAC3T)
Global Command & Control System (GCCS)
AUTODIN, NIPRNET, SIPRNET, DMS Interface
Circuit Exchange Terminal and Interface Remote Modules
SATCOM-OTCIXS/TADIXS A, TADIXS B, Voice, CUDIXS, FLEET BROACAST and TACTICAL DMS
UHF/SHF/EHF SATCOM
LINK-11 (HF-UHF), LINK-16 (UHF, AIP TCDL
Satellite Communications Transceivers (VICS, SHF Triband (C, X, KU), INMARSAT B etc.)
RF Propagation and Analysis
LAN (Ethernet, Token-Ring, FDDI), MAN and WAN (ISDN, ATM, PPP, frame-Relay) Protocols and applicable technologies)
Mobile power generation, grounding and power loading for systems such as MOCC, JMAST, RMAST, MEFIAS and TEG.
GCCS-Maritime(GCCS-M), GCCS-I3 &GCCS- Joint (GCCS-J)
Defense Information Infrastructure (DII) Communications Channel Server (DCCS) NAVMACS II/Single Messaging Solution (SMS)
COMSEC Devices (KG-40, KG-58, ANDVT, KIV-7, KY-65, KG-84A/C, Indicator or other Embedded COMSEC Requirement) and Applications
P-3 Aircraft Improvement Program (AIP) Interface
P-3 Block Modernization Upgrade Interface (BMUP)
P3/S-3 Aircraft Interface to systems such as, AIMS, AN/USQ 78/A/B, ALE-95, ALE-47, ASQ-222/227 OASIS
DOD 5000 series and DOD Acquisition Process
Operating Systems (Windows NT, UNIX, LINUX, Solaris)
Tactical Combat Operations (TCO)
Unit Operational center (UOC)
Common Air Command and Control Systems (CAC2S)
Mounted Data Automated Communications Terminal (M-DACT) & Dismounted DACT (D-DACT)
Unmanned aerial Vehicle (UAV)
Intelligence Analysis System Family of Systems (IAS FOS)
Marine Expeditionary Force Intelligence Analysis (MEFIAS)
Intelligence Operators Systems (IOS)
Intelligence Operations Workstation (IOW)
Tactical Exploitation Group (TEG)
Joint Surveillance Target Attack Radar System (JSTARS)
Command and Control Personal Computer (C2PC) software
MAGTF Software Baseline (MSBL)
Tactical Photo System (TACPHOTO)
Advanced Amphibious Assault Vehicle (AAAV)

Joint Tactical Radio System (JTRS)
Advanced Field Artillery Tactical Data Systems (AFATDS)
Enhanced Position Location Reporting System – Network Management System (ENM)
Defense Information Infrastructure Common Operating Environment DII-COE
Joint Vision 2010/2020
Information Technology –21
Naval Virtual Internet and Virtual Information Systems
Joint Technical Architecture (JTA)
Routers, Switches, Bridges, Hubs and associated Modules
Routed Protocols (TCP/IP, IPX/SPX)
Routing Protocols (RIP, OSPF, IGRP, EIGRP, BGP)
TCP/IPv4 Networking and TCP/IPv6 Networking
Asynchronous Transfer Mode (ATM)
Web site creation and maintenance Modeling & Simulation
Real Time, Near Real Time, and Non-real Time Databases
Real Time, Near Real Time, and Non-real time Operating System
Tactical Data Insertion (TDI)
Human Machine Interface
Video teleconference (VTC) Technology
9TV-AN/SXQ-8 SCCTV
23TV- Integrated Video Switch (IVS)
Shipboard Video Distribution System (SVDS)
Videowall Management System (VMS)
Force Protection Surveillance System
Combat Assessment Workstation (CAWS)
Digital Video System (DVS)
NTCS-A 30x20 Video Switch

3.1.1 Task Management Plan. The contractor shall accomplish the tasks specified in paragraphs 3.2 through 3.12 when tasked, through the issuance of a task order, by the contracting officer.

3.1.2 Deliverable Product. The contractor shall develop and/or review the following supporting documents, as defined by the Task order, SOW and CDRL Items as indicated.

DESCRIPTION	**CDRL ITEM**
Task Management Plan	A010

3.2 Task A: Systems Engineering Support.

3.2.1 Scope. The contractor shall provide system engineering support to C^{4}I Division, SPAWAR Systems Center, Charleston in the support of various C^{4}ISR requirements, programs and projects such as but, not limited to: Tactical Mobile, RMAST, TCO, IAS, TEG, UOC, CAC2S, GCCS, LINK-11, LINK-16, MSBL, USMC C^{4}I systems, Video Systems; FMS, and other Mobile and fixed site C^{4}ISR systems, and associated interface systems in the areas of Development, Test and Evaluation and Life Cycle Support to maintain the optimum communication capability of those systems or programs. This shall include performance of scientific analytical and engineering efforts necessary to transform operational needs into unique system performance parameters for evolution into improved system capabilities. Efforts include functions such as program planning, concept exploration, requirements definition, risk reduction activity, design development, modeling and simulation, test and evaluation, system integration, site installation and maintaining the optimum capabilities in those systems.

3.2.1.1 Engineering Analysis. The contractor shall provide engineering analyses including requirements analysis, feasibility analysis, development analysis, technical analysis, design/development analysis, design impact,

and market research and evaluation. All work shall be accomplished in accordance with the guidance for MIL-HDBK-2036, MIL-HDBK-454A and OPNAVINST 4790.4C.

a. Requirements Analysis. The contractor shall include examination of existing new requirements for existing or new systems. Requirement analyses shall be conducted as outlined below. They are intended to determine and study boundary conditions by which a particular system will be judged. In some cases, the validity of stated requirements and their applicability to a given system or component needs to be analyzed. The requirement analysis can only be performed successfully if the contractor is knowledgeable of the equipment, systems, procedures, architecture, and concepts of the systems and components listed in paragraph 3.1. The requirement analysis shall include the following elements:

(1) Adequacy of existing or developmental equipment/systems in terms of current, as well as future requirements with normal growth considered.
(2) Operability in intended environment.
(3) Reliability in intended environment.
(4) Maintainability by qualified fleet personnel.
(5) Interoperability with USN, USMC and Joint Service C4I systems, including voice and data communications.
(6) Life cycle cost effectiveness.
(7) Operator Interfaces
(8) Security
(9) Mobility/transportability

b. Operational Requirements Analysis. The contractor shall assist in the identification, refinement and documentation of the operational requirements for C^4I systems implementation.

c. Functional Requirements Analysis. The contractor shall support the identification, refinement, and documentation of the functional requirements for C^4I systems for implementation. The functional requirements for C^4I systems shall be defined in terms of content and relationship of the inputs, processes, and outputs required to satisfy the operational requirements.

Deliverable Products. The deliverable products include, but not limited, to the following:
(a) Draft Operational Requirements Document (ORD)
(b) Draft Mission Need Statement (MNS)
(c) Draft Concept of Operations
(d) Functional Requirements
(e) Functional Description (FD)

d. Feasibility Analysis. The contractor shall include the performance of technical studies and analyses to ascertain the cost and feasibility implementing C^4ISR systems engineering concepts. Additionally, these analyses shall include evaluating engineering based on the following elements:
(1) Technical Feasibility - analysis to determine if a solution may reasonably be implemented given the current level of technical and technological capability.
(2) Interoperability - analysis to determine if a solution can reasonably interface with all applicable C^4ISR and communications systems.
(3) Schedule adherence - analysis to determine if a proposed solution can be implemented within the needed time frame, the proposed solution.
(4) Manpower Availability - analysis to determine if sufficient manpower, currently available throughout the industrial/military community, is sufficient to implement the proposed solution.
(5) Logistic Supportability - analysis to determine if a proposed solution can be logistically supported over its given life span
(6) Cost - analysis of the expected cost of the system or component from design to implementation.

e. Development Analysis. The contractor shall develop, update and review program planning technical documentation such as Program Management Plans (PMPs), Test and Evaluation Master Plans (TEMPs), Command, Control Communications, Computer and Intelligence Supports Plans (C^4ISP) and hardware, software, and systems design, test, and other relevant documents as defined by the task order. The contractor shall provide the appropriate documentation, review comments and recommendation to the C^4I Division program/project manager.

f. Technical Analysis. The contractor shall provide technical analysis and support services during the system concept development and shall conduct in-depth analyses of proposed system enhancements, hardware and software trouble reports, associated system modification, hardware and software change requests, and changes to relate interface systems for potential impact on various C^4ISR requirements, programs and projects and associated interface systems, subsystems, equipment, and software. Efforts shall include:

(1) Review and evaluation of trouble reports and change requests for system, equipment and associated documentation and provide recommendations relative to feasibility and potential impact.

(2) Evaluate and develop interfaces to tactical systems such as Maritime Patrol Aircraft (MPA), Unmanned Air Vehicles (UAV) and other tactical systems requiring Tactical Mobile C^4ISR support.

(3) Development and evolution of virtual system representations for technical analysis at varying levels of fidelity. Development and analysis of procedures and strategies to test virtual system representations to include formal DOD Verification, Validation, and Accreditation (VV&A) procedures.

(4) Review and analyze current and future system operational and functional requirements.

(5) Evaluate existing systems and equipment relative to the capability to support these requirements and identify shortfalls.

(6) Evaluate system operability, reliability, and maintainability in the intended operational environment.

(7) Evaluate system interoperability with other C^4ISR systems or associated interface systems, equipment and software.

(8) Evaluate system interoperability with other C^4ISR systems and associated interface systems equipment and software.

(9) Evaluate the maintenance support philosophy and requirements.

(10) Draft and update preliminary System Level Design and Development Specifications.

(11) Develop alternative engineering solution to these requirements taking into account technical, hardware, software, firmware, operational requirements, and constraints. As a result of research and analysis, the contractor shall rank the order of proposed alternative solutions, with complete justification.

g. Design/Development Analysis. The contractor shall include technical design and software analyses in support of the development of various C^4ISR requirements, programs or projects. These analyses shall consist of but are not limited to:

(1) A technical record outlining the historical development of the system design.

(2) Development and evaluation of interface devices and systems based on approved Interface Design Document (IDD) or Interface Design Specification (IDS).

(3) Design and fabrication of test aids for use in test and evaluation of systems or equipment. This may include existing (commercial or Government) test tools or software, which is appropriate for use, or may be re-configured to accomplish the specified purpose.

(4) Identify and document design inadequacies and alternatives.

(5) Specific evaluation results and an explanation of the implications of these results.

(6) Design improvement alternative(s). (The analysis shall address trade-offs and shall provide a recommended approach).

(7) System capabilities to meet design goals in the intended operational environment. This shall include identification of high-risk and of low-performance areas, definition of alternate design methods, and recommendation of design modifications.

(8) System capability to operate interactively with both existing and forth coming systems.
(9) The contractor shall identify risks, alternatives, and modification recommendations
(10) The contractor shall obtain competition on technical design and software analyses to the maximum practicable extent.

Design Impact. The contractor's assessment shall include in-depth technical investigations of proposed changes, user problems, or other directed efforts that impact various C^4ISR requirements, programs, or projects. These investigations shall address realistic engineering to satisfy the requested change, project implementation and support costs, and shall recommend the best overall solution to satisfy the desired capability. Investigations should include supporting performance and cost models and simulation results of alternatives for government evaluation.

Market Research and Evaluation. The contractor shall conduct market searches and perform evaluations/trade studies of commercial and/or military products (hardware or software) for use within the support of various C^4ISR requirements, programs and projects or associated interface programs. The contractor shall prepare a technical report in accordance with CDRL Item A013. The report shall accomplish the following:

1. Identification - identify existing commercial and military products that accomplish the desired function, or may be made to accomplish the function, with additional work.
2. Analysis - provide analysis of each candidate's abilities to meet system requirements.
3. Comparison- provide comparative analysis of each candidate and weigh systems pro's and con's.
4. Documentation- identify and define the product's salient technical and physical features, possible operational applications within C^4ISR systems, existing hardware/software or system impacts, estimated implementation costs, similar products available from other sources, and the recommended use of the product and/or alternative approaches.

3.2.1.2 Requirements Analysis. The contractor shall research, identify, define, model and simulate, evaluate, and document current and future C^4ISR systems or program, and FMS associated interface systems and technical requirements for potential system enhancements. This effort will include, but not be limited to the following:

a. US ASW/Maritime Patrol Aircraft Interfaces specifically P-3C AIP, BMUP, CDU.

b. Non-US ASW/Maritime Patrol Aircraft interfaces to the extent of compliance to STANAG 4283 Edition 4.

c. Acoustic and Non-acoustic Data Processing Systems and Subsystems including: Fast Time Analyzer System (FTAS), Acoustic Aircraft Tape Operations System (ATOS), acoustic digital recorder to support the AQH-13, and RDSS, DASD, OASIS, TDI GMR, SAR, EO, ESM, and ISAR.

d. Interoperable C^3 Tactical Command and Control, i.e., Tactical Common Data Link, Link 11, Link 16.

e. Overall $C^2/C^3/C^4$ISR.

f. Automated and Non-automated Data Interfaces with Other Shore/Sea-based Systems/Activities; using WEB technology.

g. Operator Interfaces; Quantity and Type.

h. Security.

i. Mobility.

Any other C4I system or interface as directed in the specific delivery order.

The contractor shall develop alternative engineering solutions to these requirements taking into account technical, hardware, software, firmware, operational requirements, and constraints. As a result of research and analysis, the contractor shall rank order, with complete justification, recommended alternatives.

3.2.1.3 Impact Assessments. The contractor shall participate in the product improvement program by conducting in-depth engineering/technical investigations of proposed changes, user problems or other directed efforts, which impact the various C^4ISR requirements, programs or systems and associated interface systems. These investigations shall address realistic engineering alternatives to satisfy the requested change, project implementation, and support costs, and shall recommend the best overall solution to satisfy the desired capability. Investigations should include supporting performance and cost models and simulation results of alternatives for government evaluation.

3.2.1.4 Technical Specification Development. The contractor shall review, analyze, prepare and revise SPAWAR Systems Center, Charleston specifications and technical standards. The contractor shall update hardware, software and system requirement specifications, and/or provide a review report to the government in the accordance with the following applicable CDRLs as defined by the task order. Additionally, the contractor shall develop and update technical standards for installation, maintenance, and certification of C^4I systems.

3.2.1.5 Interoperability/Integration Studies. The contractor shall conduct Intra-DOD, and Inter-Government, and International interoperability studies as well as multi-platform integration studies of various C^4ISR requirements, programs, or systems and associated interface systems. The results of this effort shall be reported in draft technical position paper, technical descriptions, and technical analyses. Investigations should include supporting performance and cost models and simulation results of alternatives for government evaluation.

3.2.1.6 System Design Reviews. The contractor shall provide technical comments and recommendations to C^4I Division program and project manager at Program Design Reviews, Status Reviews, management Reviews and adhoc Program Technical Meetings such as:

a. Preliminary Design Review (PDR)
b. System Requirements Review (SRR)

c. Critical Design Review (CDR)
d. Test Readiness Reviews (TRR)
e. Technical Meetings
f. Program/Project Status Review Meetings
g. Modeling and Simulation Report

3.2.1.7 Data Reviews. The contractor shall review all technical, logistic, programs, and other data delivered under this prime contract when development of various C^4ISR requirements, programs or systems and associated interface system necessitates an equipment contractor. As part of the data review, the contractor shall conduct market surveys in order to assess and recommend based on what is available in the market. Evaluate equipment contract deliverables relative to the equipment contractual requirements both as to format and technical substance. Provide a report of this evaluation, including a list of deficiencies and recommendations to designated Government personnel. The contractor shall also review equipment contractor deliverables for overall program effectiveness.

3.2.1.8 Prototype Development. The contractor shall develop hardware prototypes such as aircraft interface devices, mobile equipment chassis, and aircraft sensor analysis and storage devices, and integrated systems as directed in the specific task order. The Prototype development shall include engineering drawings and schematics.

3.2.1.9 Deliverable Products. The contractor shall develop, provide, and/or review the following supporting documents, as defined by the Task Order, SOW and CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Presentation Material	A003
b.	Technical Reports	A002
c.	Informal Technical Information	A011
d.	Test Reports	A009
e.	Technical Specifications	A004
f.	Test Plans	A007
g.	Installation Design Engineering Plans	A033
h.	Program Master Plan (PMP)	A010
i.	Test and Evaluation Master Plan (TEMP)	A007
j.	Hardware Requirements Specification (HRS)	A001
k.	Technical Report, Documentation Review	A002
l.	Interface Requirements Specification (IRS)	A035
m.	Modeling & Simulation Report	A028

3.2.2 Design Development Engineering. The contractor shall perform the scientific, technical, and engineering functions necessary to transfer a system operational and/or functional need into a system enhancement through design modification or new design of the systems hardware and/or software.

This includes all engineering activities relative to the design, development, fabrication, and integration of hardware and software configuration items being developed by the C^4I Division, as specified by the task order, with respect to new systems under development or existing systems undergoing modification. These include efforts relative to any tasked C^4ISR system and associated interface. The contractor shall also analyze emergent new technology system/equipment designs for potential application. Efforts shall include:

a. Review of requirement documents and specifications to ascertain design goals and objectives established during system concept formulation.

b. Evaluation of the system capability to meet the design goals and objectives in an operational environment.

c. Evaluation of the systems interoperability capabilities with current and future system, subsystems, equipment and software.

d. Analyzing design specifications to identify areas requiring improvement.

e. Performing laboratory test on various C^4ISR requirements, systems, or associated interface system equipment and software.

f. Design, develop, fabricate and test hardware and/or software items including coding, debugging, unit testing and integration of software patches, modules and programs.

g. Review of work performed by contractors under other government contracts, hardware and software development efforts, and documentation.

h. Providing technical and engineering expertise to the Government program/project technical representatives at design reviews, conferences, and technical meetings.

3.2.2.1 Hardware Design Development and Integration. The contractor shall provide hardware engineering and technical support in the design, development, fabrication, assembly, integration, and test and evaluation of system, hardware and components for C^4I systems, and related interface systems applications.

3.2.2.1.1 Deliverable Products. The contractor shall develop and/or review the following supporting documents, as defined by the Task Order, SOW and CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Hardware Design Development & Integration	A001
b.	Interface Design Specification (IDS)	A035
c.	Top Level Design Document (TLDD)	A005
d.	Development Plan (DP)	A010
e.	Quality Program Plan (QPP)	A041
f.	Configuration Management Plan (CMP)	A037
g.	Technical Report, Documentation Review	A002
h.	System/Subsystem Specification (SSS)	A025

3.2.3 Engineering Drawings. The contractor shall generate, or support the generation of detailed Engineering Drawings. Examples of standard engineering drawing format and content may be found in ASME Y14.100 and MIL-D-23140D. These drawings may contain system level information such as in Installation Control Drawings (ICD's), or more detailed component level information. Drawings generated will be in conformance with standards referenced herein, or alternate standards, as provided by the Government sponsor. Drawings generated will be in a format compatible with, or convertible to, AutoCAD 2000. Drawings generated on behalf of the Government shall become the property of the government activity for which the service was provided.

3.2.3.1 Deliverable Products. Any products generated during any work of Task A shall become the property of the government activity for which the service was provided. The contractor shall develop, provide, and/or review the following supporting documents, as defined by the task/delivery order, SOW and CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Technical Reports	A012
b.	Engineering Drawings	A065

c.	Operational and Maintenance Instructions	A064
d.	Parts Data List	A030
e.	Test Plans	A007
f.	Test Reports	A009

3.3 Task B: Software Engineering. The contractor shall analyze, design, develop, test, evaluate, verify, validate, and deliver software related to secure and non-secure tactical, non-tactical, simulation, embedded computer systems, and networks. The contractor shall follow the Net Centric Enterprise Services (NCES) and Defense Information Infrastructure (DII) Common Operating Environment (COE) guidelines for their software development efforts. The programming languages and operating systems that must be addressed in this effort shall include but are not limited to UNIX, C, C++, JAVA, Visual Basis, Delphi and Windows NT.

3.3.1 Software Design, Development and Integration. The contractor shall have demonstrated expertise in multiple different languages including, but not limited to, the following software languages: UNIX, C, C++, Windows NT, Delphi, Java, Visual Basic, Visual Basic Scripting (VBScript), CMS-2Y, Pascal Fortran, Hypertext Markup Language (HTML), Extensible Markup Language (XML), ORACLE and Pearl. The contractor shall provide software engineering and technical support in the design, development, integration, and test and evaluation of various existing and future C^4ISR systems and associated interface systems, subsystem, equipment, and software in accordance with IEEE/EIA 12207, the active DIDs of MIL-STD-498, or the applicable task order. The contractor shall have experience in operating in a real-time environment on real-time operating systems.

3.3.1.1 IT System Analysis. Through IT system analysis the contractor shall define the following: the purpose, background, and intent of the system and its functional requirements; the dependencies among functions and tasks, and logical or mathematical descriptions of each function or both. Define the user's needs, including timing of development, data types and processing needs, communication requirements, report formats, level of user friendliness, response time, off-the-shelf software requirements, security requirements, and system constrains. A recommended Plan of Action and Milestones (POA&M) outlining the tasks to be accomplished shall be provided as well as plans for the system, and a detailed cost-benefit analysis of the hardware, software, personnel, leased lines, and maintenance costs. Provide technical report and installation engineering plan summarizing the research of the tasks above.

3.3.1.2 System Software Design and Maintenance. The contractor shall participate in system software design in which each system's functional and performance requirements, as it relates to specific mission oriented functional requirements, shall be defined. Develop preliminary systems design, and evaluate system capability to meet design goals and to integrate with existing or planned systems. Audit trails, transaction logging and recovery, definition of failure and error recovery requirements and capabilities, and a cost benefit analysis shall be conducted. The overall software system specifications shall include a detailed functional summary for each module, data input, screen formats for each input function, input data sources, processing requirements, outputs, interface requirements, data flow, and proposed programming languages. The system database specifications shall include: organization of the database by record structure, field tables, storage requirements, and record linkages. The system program specifications shall include: a description of the functions and purposes of each module, accuracy and validity requirements, timing, flexibility, interface, and security requirements, and inputs and outputs. The contractor shall participate in the design review meetings, technical reviews, and conferences and presentations to provide system design expertise. Provide IT system specifications, technical reports, and hardware and software documentation following the standards referenced in summarizing the research. In addition, maintain software of deployed systems by analyzing trouble reports, developing, and testing software to correct problems.
The Contractor shall manage COTS Software licensing tasks, as directed by the government in the task order.

3.3.1.2.1 Software Test Services. The contractor shall perform software test services in which informal testing shall be conducted and test plans and procedures for formal testing shall be developed. Organizational responsibilities for conducting and coordinating the test including contractor, government, and other

agency requirements shall be identified, and individuals other than those who developed the software or system shall conduct formal tests. Provide test plans/procedures and test reports summarizing the research of the tasks, as described above.

3.3.1.2.2 Independent Verification and Validation (IV&V). The contractor shall provide Independent Verification and Validation (IV&V) of software, software documentation, software products, and work performed by contractors under other government contracts software quality assurance programs. Review, analyze, test and evaluate the results of third party contractor for IV&V activities and provide a detailed report relative to their effectiveness.

3.3.1.3 Software System Implementation Support. The contractor shall provide a detailed installation-engineering plan including the accumulation of all data, and hardware/software system to implement the system. The operational status of the system shall be evaluated monthly for six months and semi-annually thereafter. Provide a curriculum and plans for formal user Training, both initial OJT and follow-on schoolhouse. Provide training documentation and a systems implementation plan in a technical report summarizing the research of the tasks above as required.

3.3.1.4 Network Planning Services. Assess network requirements and planning analysis in which the contractor will be required to perform feasibility studies to define the purpose and objectives of the proposed network, the scope of the applications systems involved, the geographical locations that will be interconnected, and the associated costs of and recommendations on the overall feasibility of the network. Provide network maps identifying the geographic scope of the network and all application systems at each location, and the required protocols, traffic volumes, and response times. Establish security control requirements and back-up procedures to protect against errors, disruptions, and breaches of security. Provide technical reports defining the purpose and objectives of the proposed network.

3.3.1.5 Software System Management. The contractor shall provide technical comments and recommendations for software system management of processing, database, file, and network system including suggestions for enhancements, report generation, data entry, and program support. Provide technical support for the evaluation, procurement, installation, and testing of all systems. Computer-aided design and engineering services as well as computer graphics generation support shall also be provided. Provide technical reports summarizing the research of the tasks above.

3.3.1.6 Network Design Services. The contractor shall furnish network design engineering services and identify alternate network configuration. Evaluate each configuration to determine the required line controls and modes of operation and develop a cost and benefit analysis. Analyze software and protocol requirements taking into consideration any current configuration constraints, the host computer, software, database management systems, other software programs in the network, and software diagnostics and maintenance parameters. Study the network hardware requirements using analysis methods such as computer modeling and simulation with network design tools such as OPNET to support the modeling of existing and proposed networks. Provide technical reports summarizing the research of the tasks above.

3.3.1.7 Communications and Protocols. . The contractor shall provide services to analyze, test, develop and document communications interfaces to a system or sub-system. As such, services to develop an Interface Requirements Specification (IRS), following the guidelines of CDRL A035, shall be provided. In performing software development, specify and allocate the user's requirements to interface the existing and planned host end user computer equipment with the following communications protocols:

Record Message Traffic

a. AUTODIN
- Mode 1 interfaces to MDT, NOVA, and legacy systems
- RIXT interfaces to LDMX, PCMT, and legacy systems
- CUDIXS (and fleet broadcast) for mobile systems
- Asynchronous interfaces (XON/XOFF) to the above systems

- Interfaces to backsides, including AMP (Ethernet), asynchronous TTY, Kermit, and direct file transfer methods (such as NFS, FTP, HTML, XML)

b. DMS
- X.400 series protocols
- X.500 series protocols and directory services
- DOD-specific protocols for extending X.400 networks to mobile systems
- Understand the relationship between DMS message formats and transmission media
- Interfaces to backside delivery systems (DMS components and legacy AMHS)

c. Tactical Message Traffic
- Broadcast networks
- IDS-8648 network (OTCIXS, TADIXS-A, SSIXS) protocols
- HF/UHF VP Broadcast implementation
- Point-to-point networks
- LAN protocols
- TTY (JOTS and order wire) implementations
- HF/UHF CRATT protocols

d. Network Infrastructure
- TCP/IP networks
- HDLC-based networks
- X.25-based networks
- Routing protocols and
- ISDN dialup networks
-T-1, and other "dedicated" networks
- ATM networks
- Emerging network technologies
- VTC Protocols - Ethernet
- IPV-6
- Voice and Video over IP
- High Resolution Video Encoding
- Simple Mail Transfer Protocol (SMTP)
- COTS based email or message systems
- HP Openview and OpNet

3.3.1.8 SI Development Plan. Define Software Item (SI) formally called as Computer Software Configuration Items (CSCI) based in the system functional requirements. A set of software requirement specifications to be reviewed by the Government will establish a baseline for the software development process. A software development plan shall be developed for the Government review including availability of non-developmental software items applicable to the system. The plan will include a description of the software testing activities and use of a software development library for the control of all sources codes and associated documentation.

3.3.1.9 SI Design. The contractor shall design, construct, test, and integrate the SI with adequate documentation to include their interfaces with hardware items (HIs) and other system software as defined in IEEE/EIA 12207.

3.3.1.10 SI Reports. The contractor shall maintain cost and schedule forecasts, analyses, and report to at least the SI level. These reports shall indicate the predicted versus actual progress and include budgeted versus actual expenditures.

3.3.1.11 Communications Circuit Card. The contractor shall analyze the processing resources of the software-driven circuit card assembly and the host end user computer equipment to assure the proper end-to-end data transmission, link control, security, and synchronization of the communication protocol interface ports.

3.3.1.12 System Testing. The contractor shall perform overall testing of the system prior to installation at a fleet site. Included in this effort shall be assembling the system configuration representative of planned fleet installation and the external communications lines necessary to exercise the system in a realistic environment. Testing for the system shall be performed in a phased approach according to the following categories.

a. Interim release evaluation of software prior to overall testing for familiarization and independent assessment.

b. Interim documentation shall be reviewed and analyzed for accuracy, consistency, completeness, and ease of use.

c. System requirements implementation shall be reviewed based on analysis of contractor interpretation of the functionality.

d. Contractor test monitoring shall be conducted to provide independent assessment and familiarization for final test and evaluation.

e. System integration and test of fleet representative configuration prior to overall tests shall be conducted including external communications. (OTCIXS, TADIXS A/B, TTY, CUDIXS, TACO-2, and AUTODIN).

f. Overall system test of the system for government acceptance, fleet utility, and certification.

3.3.1.13 Deliverable Products. The contractor shall develop and/or review the following supporting documents, as defined by the task order, this SOW and CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Interface Requirements Specification (IRS)	A035
b.	Software Requirements Specification (SRS)	A019
c.	Interface Design Specification (IDS)	A035
d.	Software Design Description (SDD)	A026
e.	Software Development Plan (SDP)	A020
f.	Software Quality Program Plan (SQPP)	A041
g.	Software Configuration Management Plan (SCMP)	A020
h.	Data Base Design Description (DBDD)	A021
i.	Software Version Description (SVD)	A026
j.	Software User Manual (SUM)	A022
k.	Software Requirements Review (SRR)	A029
l.	Requirements Analysis	A029
m.	Presentation Material	A003
n.	Test Plans/Procedures	A007
o.	Installation Engineering Plans	A033
p.	Technical Reports/Operational Status	A028
q.	Operational Concept Description (ODC)	A063
r.	System/Subsystem Design Description (SSDD)	A025
s.	Software Product Specification (SPS)	A024
t.	Software Test Report (STR)	A009
u.	Computer Operation Manual (COM)	A023
v.	Computer Programming Manual (CPM)	A023
w.	Firmware Support Manual (FSM)	A027
x.	Engineering Change Proposal (ECP)	A006
y.	Engineering Change Proposal Analysis	A008

z.	Specification Change Notice (SCN)	A018
aa.	Contractor Field Representative Report	A014
bb.	Market Research and Evaluation Report	A013
cc.	Software Test Description (STD)	A062
dd.	Computer System Operator's Manual (CSOM)	A023
ee.	Detailed Design Review/Document	A002

3.3.2 System Integration Support. The contractor shall perform systems hardware and software integration and testing to ensure total operational and functional compatibility with interfacing/interacting systems, subsystems, equipment, and computer programs. Efforts, which may be required, include:

a. Review of system and associated interface requirements specifications for potential impact. Especially to P-3/S-3B and allied MPA.

b. Review of system hardware and software performance characteristics.

c. Development and update detailed system integration plans, procedures, design drawings, schematics, diagrams, and interface definitions.

d. Preparation of fabrication drawings.

e. Installation and checkout of system hardware and/or software.

f. Draft, review, and update of system installation and checkout procedures.

3.4 Task C: Security Engineering.

3.4.1 Scope. The contractor shall address and provide assessments computer security issues from initial concept development throughout the system life cycle. The contractor shall follow guidelines set forth in the SPAWAR Computer Security Acquisition Management Guidebook (tactical systems) and (non-tactical systems).

3.4.1.1 Computer Security Requirements Analyses. The contractor shall provide inputs to the Computer Security Accreditation Plan (CSAP). The CSAP shall outline the system certification and accreditation plan using the guidelines of DOD Directive 8500.1, and it shall contain an analysis of the expected operational risks. Develop a Certification Test and Evaluation (CT&E) Plan and Test Report that traces security-related requirements from the initial specifications to system and network implementation. All classes of network systems require a formal design model and systems designated B2 or higher require a separate verification plan. Develop detailed Contingency Plans that identify alternative operational plans for each system and network for which disruption of service would have a critical impact on mission accomplishment. Provide inputs to Certification and Accreditation Packages. Provide System Security Operating Procedures (SSOPs). Provide technical reports summarizing the research of the tasks stated above IAW CDRL A012. These deliverables comprise the whole of the security certification and accreditation packages for a single system/program. More than one system/program is required to be supported.

3.4.1.2 Network Security Requirements Analyses. The contractor shall review the network system architecture, concept of operations, and security environment to identify system vulnerabilities. Estimate the level of trust required by the network system. Based on this estimation, identify specific security features required by the network system to achieve the estimated level of trust and to offset known vulnerabilities. Test the final system security features and countermeasures against all applicable security checklists, such as the DII Security Checklist. Provide technical reports summarizing the research of the tasks above. Results of the checklist testing are to be provided in the CT&E Test Report and other documents, where applicable. Other documentation deliverables may include a Vulnerability Analysis and inputs to the CSAP. Analysis supporting model and simulation results shall be available for government review.

3.4.1.3 Risk Management Services. The contractor shall provide technical services to include Methods I and II Risk Assessments, Security Test and Evaluations (ST&Es), and computer security reviews for secure and non-secure, tactical and non-tactical computer systems and networks. Risk Assessments shall identify and validate threats, risks, and additional countermeasures required. Examples of Risk Assessments may be found in OPNAVINST 5239.1A. Prepare technical reports summarizing the results of the above efforts IAW CDRL A001. Final on-site operational Risk Assessments are required as part of the ST&E Report. The contractor shall use an automated risk assessment tool. However, a copy of the tool shall become the property of the activity for which the service requiring use of the tool was provided.

3.4.1.4 Security Test and Evaluations. The contractor shall provide technical services to support the development of ST&E Plans IAW CDRL A005 and Test Reports IAW CDRL A006. Conduct on-site operational surveys. Identify network system vulnerabilities and associated in-place countermeasures from risk assessments and site-specific documentation. Develop comprehensive plan to reduce or protect against vulnerability and develop specific pass/fail criteria for each effectiveness test. The contractor shall use automated ST&E tools. However, a copy of the tool shall become the property of the activity for which the service requiring use of the tool was provided. Documentation deliverables may include ST&E Plans and ST&E Reports for more than one site. Analysis supporting models and simulation results shall be available for government review.

3.4.2 Deliverables and Schedules. The contractor shall submit technical reports (CDRL Item A004) related to Task C. The contractor shall submit required certification and accreditation documentation for each system/program related to Task C.

3.5 Task D: Test and Evaluation.

3.5.1 Scope. The contractor shall provide the necessary engineering and technical expertise to conduct a thorough test and evaluation of all operational and functional aspects of newly designed or modified systems, equipment or computer software. The contractor shall participate in test and evaluation program by preparing or reviewing test and evaluation plans and procedures or both. Tests program support services shall include the witnessing of specified in-plant tests and evaluation of test data. The contractor shall conduct laboratory and field test at SPAWAR Systems Center, Charleston and SPAWAR Systems Center Charleston Office located at NAWC-AD Patuxent River as required, at other designated government facilities, FMS sites and aboard ship. This effort may require the development of installation plans, the design and fabrication of test fixtures, and installing and maintenance of the equipment during the testing process. Upon completion of test, the contractor shall remove the equipment from the test facility and provide a report or analysis. Other efforts, which may be required include:

a. Draft, review, and update Test and Evaluation Master Plans (TEMPs).

b. Define system test and evaluation requirements.

c. Develop, review, and update program/project test plans, test specifications, and test procedures documentation.

d. Provide technical support to C^4I Division program/project engineers at T&E technical reviews, test readiness reviews (TRRs), and technical meetings.

Conduct system testing in accordance with approved system test procedures and provide a detailed Report of Test Results (RTR) upon completion.

Modeling and Simulation Report.

3.5.2 Test Specifications. The contractor shall develop and/or review system/equipment inspection and acceptance test plans, procedures and specifications; prepare test requirements documentation for various C^4ISR requirements, programs and projects and systems, subsystems, equipment and software to ensure comprehensive verification or salient and inherent capabilities; review test plans, procedures and

specification, to ensure compliance with necessary requirements; and review vendor supplied test plans, procedures and specifications for technical accuracy, adequacy and report findings. The following criteria shall be the minimum requirements for all technical specifications developed by the contractor. The specifications shall invoke, in whole or in part, MIL-STD-1472 F, MIL-STD-810F, IEEE/EIA 12207, and such other standards and specification, commercial or military that are identified by the C4I Division as being critical to the development of the specification.

3.5.2.1 Test Plans/Procedures. The contractor shall prepare in accordance with (CDRL Item A007) the test plans/procedures for testing and evaluating the specified various C4ISR project, program and systems, subsystem, equipment and software. The test procedures shall clearly define the objectives of the test, the procedures that must be carried out by the test team to meet these objectives, and the pass/fail criteria for the test. Test procedures documentation shall include:

a. Test title
b. Test objectives
c. Unit(s)/Systems to be tested
d. Test equipment required
e. Fleet and outside services required (if any)
f. Personnel required
g. Test duration
h. Number of times each test is to be performed
i. Detailed test procedures and pass/fail criteria
j. Test data sheets
k. Modeling and Simulation requirements
References

3.5.2.2 Technical Inputs to Test and Evaluation Plans. The contractor shall provide technical inputs to Test and Evaluations Master Plans (TEMPs) for various C4ISR project and systems subsystems, equipment, and software. The contractor shall collect technical information from applicable SPAWAR codes, Operational Test and Evaluations Activities, and appropriate laboratories and field activities. The contractor shall integrate this information with comments and recommendations provided during the internal SPAWAR review cycle of the initial draft and/or revision. The contractor shall further integrate comments and recommendations resulting from the formal OPEVAL and/or CNO review and shall prepare documentation to be submitted for review.

3.5.2.3 On-line Test Support. The contractor shall provide technical support to the C4I Division program/project engineers in performing various C4ISR systems and associated interface systems and equipment on-line factory, acceptance, development, and operational testing, and provide a report of test results. The contractor shall conduct an in-depth analysis of system, subsystem, equipment and software deficiencies and provide recommendation for corrective actions via NCR, SCR, PTR, FCB and/or ECP.

3.5.2.4 Engineering and Technical Support. The contractor shall provide engineering and technical support to C4I Division program/project engineers in the test and evaluation of various Tactical Mobile and USMC C4ISR project, program, or systems and associated interface systems, subsystems, equipment or software following approved test plans and procedures. Specifically, the contractor shall:

a. Install the system, equipment or software at the C4I Division Laboratory for various C4ISR systems such as, but not limited to: Tactical Mobile, PAC3T, RMAST, TCO, UOC, CAC2S, DACT, IOW IOS, IAS - to include the MEF IAS and all IAS subsystems, client and workstations, TEG, JSTARS Ground Station, MSBL and related USMC C4I systems, GCCS, FMS systems such as RSNF, DIAC, MASC and NASS and C4I sites throughout the world, as specified by the task order for the purpose of conducting Test and Evaluation.

b. Conduct test in accordance with the applicable approved Test Plan and Procedures.

c. Design and fabricate test aids as necessary for use in testing and evaluation the specified system, or equipment.

3.5.2.5 Test Bed Design and Development Services. The contractor shall provide support to the evaluation of various Tactical Mobile, USMC and FMS C^4ISR projects, programs or and related C^4I systems that require advance development model and system, laboratory test efforts to evaluate alternate design considerations, or to provide data upon which to base a decision. The emphasis will be on providing a test facility to evaluate system/subsystem performance as well as conduct of overall system, integration testing of proposed development models. The contractor shall prepare and maintain (update) test bed and implementation plans that shall include task definition and schedules for design, developments, fabrication, equipment installation, and test efforts associated with the test bed. The contractor shall provide services to support the C^4I Division in preparing the following:

Lists of equipment and material with associated space and weight characteristics representing.

b. Facility requirements definition documents.

c. Installation drawings.

d. General test plans.

e. Conduct S/W acceptance testing for SPAWAR, which ensures that Vendor delivered S/W, does function as required by Fleet operators and system administrators.

3.5.2.6 Test Reports. The contractor shall prepare detailed test reports, documenting the test and evaluation activities conducted to verify the military utility, safety, effectiveness, and suitability (including compatibility, interoperability, reliability, maintainability, and ILS requirements) for specified systems, equipment and/or software. These reports shall include all data collected during the performance of T&E efforts relative to the measurement and analysis of system and/or equipment design compliance with government specification for technical and operational performance. Test reports shall be prepared in sufficient depth to permit technical risk assessment, determination of program progress, early identification of technological and engineering deficiencies, and (where applicable) to support the certification of system/equipment readiness for operation evaluation or direct fleet introduction.

3.5.2.7 Deliverable Products. The contractor shall develop and/or review the following supporting documents, as defined by the task order, this SOW and CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Technical Report	A012
b.	Test Plan/Procedures	A007
c.	Test Specification	A007
d.	C^4I Change Request (C^4ICR)	A031
e.	Software Change Request (SCR)	A031
f.	Program Trouble Report (PTR)	A016
g.	Equipment Change Request (ECR)	A031
h.	Technical Report, Impact Assessment	A004
i.	Technical Report, Software Review	A029
j.	Modeling and Simulation Report	A028

3.6 Task E: Installation, Maintenance and Site Support.

3.6.1 Scope. The C^4I Division, Code 61, maintains a permanent Tactical Mobile, USMC and FMS C^4I laboratory test bed utilized for hardware and software test and evaluation, new technology analyses, and the evaluation of integration efforts. The contractor shall support the C^4I Division in the integration of completely tested and validated equipment and components for various C^4ISR programs, projects and/or, systems such as those listed in paragraph 3.1 in accordance with the system integration and test plan CDRL Item A007. The contractor shall prepare system integration and test plans for government approval. Plans shall document all requirements for integration and test facilities, support systems, instrumentation and

logistic support. The contractor shall provide technical and engineering services to install equipment; conduct integration testing; resolve interface problems; analyze other technical problems discovered during testing; correct deficiencies in hardware, software and documentation; and ensure the continuous updating of configuration baseline. In addition, the contractor shall:

3.6.2 Installation Support. The contractor shall provide hardware and software installation and integration support to the C4I Division for various Tactical Mobile, USMC and FMS C4ISR projects, program or systems, subsystem and equipment programs. The contractor shall develop installation and integration plans, drawings, and procedures in accordance with DI-MGMT-80033, DI-QCIC-80154A and/or SPAWAR Shore Installation Process Handbook, and shall conduct installation and integration testing in accordance with Government approved plans and procedures.

3.6.2.1 Installation Planning. The contractor shall provide installation-planning support for SPAWAR Systems Center C4I Division Laboratory Tactical Mobile, USMC and FMS C4ISR mobile and fixed sites located throughout the world. The contractor shall review/develop applicable facility and equipment drawings and specification, perform site surveys, and develop installation plans, specification and procedures in accordance with SPAWAR Shore Installations Process Handbook.

3.6.2.2 Technical/Operational Transition Support. The contractor shall provide transition support to various Tactical Mobile, USMC and FMS C4ISR project, program or systems and related systems, subsystems, and equipment. This support shall include the development and/or review of operational plans and procedures, development of contingency plans and procedures, technical conversion of software and hardware, and development of unique interface requirements. The contractor shall ensure that system requirements are operationally, functionally and physically consistent with the systems, equipment, software and facilities with which it interfaces. The contractor shall review all inter and intra-data transfers relating to Tactical and GENSER communications (e.g., Link 11, OTH-Gold, AUTODIN, and Broadcasts as well as Tactical Order wire Circuits as applicable) to ensure total system compatibility and the systems ability to accurately send and/or receive data.

3.6.2.3 Installation Technical Support. The contractor shall provide engineering and technical support services associated with the maintenance, fabrication, installation, and integration to various C4ISR project, program or systems and associated interface systems, subsystems, equipment and software.

3.6.2.3.1 Site Installation. The contractor shall provide engineering and technical support to C4I Division program/project engineers in performing system installation and checkout at the SPAWAR Systems Center C4I Division Laboratory, and C4ISR mobile and fixed sites located throughout the world. These efforts shall include:

a. Conduct of site surveys.
b. Development/review of site installation design plans (IDP) and schedules.
c. Review/development of site Base Electronic System Engineering Plans (BESEP).
d. Performing system installation and checkouts.
e. Preparing SOVT or any required reports at completion of installation.

3.6.2.3.2 Maintenance. The contractor shall provide the personnel resources, equipment, and materials necessary to maintain and repair of various C4ISR systems and associated interface systems, subsystems, equipment and software during system/equipment/software installation at the SPAWAR Systems Center C4I Laboratory and Tactical Mobile, USMC, Joint, US Departments and FMS or related C4I sites throughout the world, as directed by the applicable task order.

3.6.2.3.3 Integration and Installation Support. The contractor shall provide engineering and technical support in the installation and integration, test, and evaluation, and checkout of various Tactical Mobile, USMC and FMS C4ISR systems and associated interface systems hardware, software, subsystems, and/or related systems and equipment at the C4I Laboratory, and Fleet sites as directed by the task order. This support shall include:

a. Development and review of site installation design plans (IDP), schedules and specifications.
b. Develop and review Site Base Electronic Systems Engineering Plans (BESEP).
c. Equipment testing, packing/unpacking, movement and emplacement.
d. Design, fabrication, installation, and testing of interface intercommunication, e.g., cable construction, etc.
e. Provide materials in support of this effort when tasked in writing by COR under emergency conditions.
f. Design and construct, test and install unique cable harnesses.
g. Install, checkout and conduct SOVT or acceptance testing of various systems, software and/or related components at Fleet sites.
h. Preparing as built or modification plans/drawings
i. Preparing report of site installation results

3.6.2.4 Technical Change Notices. The contractor shall design engineering changes and provide TSC, C^4I, and associated interface systems Field Change Bulletins (FCBs), Document Change Notices (DCNs), Technical Change Notices (TCNs), Base Electronic System Engineering Plans (BESEPs), System Operational Verification Tests (SOVT) and prototype field change kits. Upon tasking by the COR, the contractor shall develop and/or review Engineering Change Proposals (ECPs). These efforts will encompass all Tactical Mobile, USMC and FMS C^4ISR and associated interface systems, present and future. Equipment addressed by this contract shall include but not limited to:

a. TSC, JMAST, MOCC, RMAST, PAC3T

b. Fast Time Analyzer System (FTAS)

c. Tactical Support Center Communication Systems (TSCCOMMS)

d. TSC Aircraft Tape Operating System (ATOS)

e. Tactical Exploitation Group (TEG)

f. Intelligence Analysis System Family of Systems (IAS FOS)

g. EO Workstation

h. Tactical Combat Operations (TCO)

i. Global Command and Control System (GCCS)

j. Unit Operational Command (UOC)

k. Common Air Command and Control Systems (CAC2S)

3.6.2.4.1 Field Changes Kits. The contractor shall build prototype field change kits and production field change kits to enhance performance or correct deficiencies of various C^4ISR requirements, programs or projects and associated systems as specified by the task order. The contractor shall provide all material required for the fabrication and assembly of both prototype and production field change kits upon written approval by the COR/project engineer. The contractor shall submit Field Change Orders (FCO's), Design Change Notices (DCN's) and Engineering Change Proposal (ECP's) in accordance with the CDRL items identified in paragraph 3.9.2.1. The reports shall be delivered as specified by the task order after COR and Contracting Officer approval with appropriate allowance made by the Government for larger or more extensive efforts.

The contractor shall build USMC Modification Kits, with appropriate Instruction Packages as directed by the Government.

3.6.2.4.2 Site Support. The contractor shall provide engineering and technical support in performing system installation and checkout testing at SPAWAR Systems Center C^4I Division laboratory, for various C^4ISR requirements, programs and projects located throughout the world, as directed by the task order. These efforts shall include the performance of system installation, checkout, and formal SOVTs.

3.6.2.4.3 Site Support Liaison. The contractor shall maintain a 1-800 help desk for the support of C^4I Division. The help desk shall be manned from 7:00 a. m. - 5:00 p.m. (EST) during normal workdays. In addition, the contractor will maintain a 24 hour 7 day a week phone watch for support after normal working hours and check the system daily. The contractor shall respond to all site calls in a timely manner, and they must maintain a log of all telephone conversations in the REMEDY system.

Contractor personnel providing site liaison shall have a working knowledge of specific equipment within the Tactical Mobile, USMC and FMS systems, and shall make every effort to solve problems over the phone, either by suggesting a repair actions, or by talking the site personnel through test procedures found in vendor publications. If the problem cannot be solved the matter will be brought to the attention of the C^4I Logistics Group for technical assistance or training assistance.

3.6.2.4.4 Site Support Maintenance. The contractor shall provide the personnel, resources, equipment, and material necessary to maintain and repair Tactical Mobile, USMC and FMS for C^3, and C^4ISR or related hardware and software systems, subsystems and equipment during installation and at SPAWAR Systems Center Charleston laboratories and at Tactical Mobile, USMC, US Government Agency and FMS sites throughout the world. The contractor shall support directed USMC mobile C^4I sites world wide, as directed.

3.6.2.4.5 Deliverable Products. The contractor shall submit FCBs, DCNs, TN, and ECPs in accordance with the following CDRL Items:

	DESCRIPTION	**CDRL ITEM**
a.	Trip/Technical Report	A012
b.	System Integration and Test Plan	A007
c.	Base Electronic System Engineering Plan (BESEP)	A036
d.	Field Change Orders (FCO)	A031
e.	Design Change Notice (DCN)	A018
f.	Engineering Change Proposal (ECP)	A006
g.	Technical Change Notice (TCN)	A018
h.	Installation Design Plan (IDP)	A034
i.	Formal SOVT	A007

The reports shall be delivered as specified by the Task order after COR and Contracting Officer approval with appropriate allowance made by the Government for larger or more extensive efforts.

3.7 Task F: Configuration Management Support

3.7.1 Scope. The contractor shall provide CM support to C^4I Division on various C^4ISR requirements, programs and/or projects such as, but not limited to: Tactical Mobile, PAC3T, RMAST, GCCS, USMC C^4I systems such as but not limited to: TEG, TCO, UOC, CAC2S, IAS FOS, IOW, IOS, MSBL, JSTARS, DACT, and FMS and associated interface systems programs. This support shall include all activities related to CM planning, baseline management, configuration identification, configuration audits, formal qualification review (FQRs), engineering changes, and configuration management records and reports. Plans and procedures shall be developed and maintained in accordance with MIL-HDBK-61A (SE). The contractor

shall use SPAWAR Systems Center approved software to maintain CM. Also the contractor shall be familiar with automated CM tools such as CMPRO.

3.7.2 CM Planning. The contractor shall provide support to various C^4ISR requirements, programs and projects and associated interface system configuration management planning support to the SPAWAR Systems Center C^4I Division. The contractor shall review/develop applicable CM planning documentation and configuration management data.

3.7.3 CM Program. The contractor shall provide CM program engineering, technical and analytical support to C^4I Division programs and projects in accordance with a government approved Configuration Management Plan, CDRL A037 which includes an organization structure with configuration control methods, configuration audits and configuration status accounting procedures for hardware and software. Efforts shall also include the review and evaluation of development/prime contractor configuration management programs and providing recommendation/comments to C^4I Division CM managers.

3.7.4 Baseline Management. The contractor shall monitor and maintain accurate records reflecting the current Configuration baselines of the various C^4ISR requirements, program, systems and/or projects and associated interface systems, subsystems, equipment, and software under- going development, enhancement, test and evaluation, and shall include the functional, allocated, development, and product baselines.

3.7.5 Configuration Identification. The contractor shall develop, review, update and maintain configuration identification records for all C^4I Division, for various C^4ISR requirements, programs and/or projects and associated interface systems, equipment and software which include listing of unique hardware and software configuration items (CIs).

3.7.6 Configuration Accounting. The contractor shall ensure that the functional and physical characteristic of each various C^4ISR requirements, programs and/or projects, or associated interface system configuration items (CIs) match the characteristic specified by the applicable configuration identification. The contractor shall be familiar with CM tools such as CM Pro.

3.7.7 Configuration Audits and Review. The contractor shall provide engineering, technical and analytical support to C^4I Division's project engineers in performance/conduct of program/project configuration audits and review.

3.7.8 Engineering Changes. The contractor shall evaluate all Engineering Change Proposals (ECPs) for potential system and/or equipment CM impact. Upon approval of an ECP, the contractor shall incorporate engineering change data into the system configuration management data records.

3.7.9 Configuration Management Records and Reports. The contractor shall establish, update, maintain, and review C^4I Division CM records and generate the required CM reports (CDRL A028). The contractor shall be familiar with CM tools such as CM Pro.

3.7.9.1 Configuration Status Records. The contractor shall maintain configuration status records (which will include tracking of FCBs, TNs, DCNs, CKs, and 2Ks) on various C^4ISR requirements, programs and/or projects. The records shall be available for periodic reviews by the Government.

3.7.9.2 Master Site Inventory (MSI). The contractor shall develop, update and maintain site inventory listing and shortage items lists for each site. The master site inventory listings be provided and reflect an accurate indication of all items actually received by the site. The contractor shall maintain the MSI via WEB/SIPRNET or other means as identified by SPAWAR.

3.7.10 Deliverable Product. The contractor shall develop and/or review the following supporting documents, as defined by the task order, this SOW and CDRL Items as indicated:

	DESCRIPTION	CDRL ITEM
a.	Configuration Status Records/Reports	A038
b.	Technical Report, Audit	A002
c.	Configuration Management Plan (CMP)	A037
d.	Technical Report, Document Review	A002
e.	Technical Report, Formal Qualification Review (FQR)	A029
f.	Master Site Inventory List	A039
g.	Site Shortage Item Report	A032

3.8 Task G: Quality Assurance (QA) Support.

3.8.1 Scope. The contractor shall provide engineering technical and analytic support to the Contracting Officer's Representative (COR). This support shall include quality assurance planning, verification and validation, and acceptance testing. The contractor shall submit a Quality Program Plan (QPP) upon request, which shall be specific with respect to work required in the statement of work, but may include generic contractor procedures.

3.8.2 Quality Assurance Planning. The contractor shall provide to various C^4ISR requirements, programs and/or projects such as, but not limited to: Tactical Mobile, RMAST, PAC3T, TCO, UOC, CAC2S TEG, GCCS, GCCS-M, DACT, C2PC, IAS FOS, IOS, IOW, ENM and related C^4I systems, FMS, and associated interface systems quality management plans (QMP) in accordance with ISO 9001:2000 standards. The contractor shall maintain an ISO 9001:2000 Project Plan for each unique Task Order.

3.8.3 Internal Inspection Plan. The contractor shall maintain for government approval an Internal Inspection System Plan. The inspection plan may include generic contractor procedures, but shall be specific with respect to the work required in the statement of work.

3.8.4 Procedures. The contractor shall provide all procedures used to fabricate, assemble, modify, install, and test products and must be documented and kept current. These written work instructions will be made available to the employees required to perform the specific task.

3.8.5 Inspection System. The contractor shall establish and maintain a quality assurance inspection system to ensure adequate control of material, workmanship, and testing procedures. Systems, subsystems, equipment and software shall be subject to in-process reviews, approval and test by the Government to determine operability, maintainability, reliability, and conformance with all applicable requirements and specifications, including:

a. Preliminary Design Reviews (PDRs)
b. Critical Design Reviews (CDRs)
c. Product Approval Reviews
d. Production Qualification Test and Evaluation (PQT&E)
e. Factory Acceptance Tests (FATs)
f. Government Acceptance Tests

3.8.6 Acceptance Testing. The contractor shall provide system, subsystem, equipment and software acceptance testing support, including the development, review, and evaluation of acceptance test plans and procedures, technical specifications, and Requirements Documentation. The contractor shall participate as a member of the government's acceptance test team and when specified in the task order, shall provide test personnel for conduct of acceptance testing.

3.8.7 Software Quality Assurance. The contractor shall provide software quality assurance support to the C^4I Division Quality Assurance Manager in accordance with contractor best practice and shall provide software

quality assurance monitoring, testing, review, and documentation. The contractor shall critically review all software design documentation and products against IEEE/EIA 12207 and the following criteria:

a. Contractual Requirements

b. Interface Requirements

c. Overall System Operational Effectiveness, and/or

d. Applicable Specifications and Standards.

3.8.7.1 Independent Verification and Validation. The contractor shall provide independent verification and validation (IV&V) of software, software documentation, software products, and prime contractor software quality assurance programs. The contractor shall independently review and analyze the results of third party contractor IV&V activities and provide a detailed report relative to their effectiveness.

3.8.7.2 Deliverable Product. The contractor shall develop and/or review the following supporting documents, as defined by the task order, this SOW and CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Quality Program Plan (QPP)	A041
b.	Technical Report, Review	A002
c.	Technical Report, IV&V	A002
d.	Acceptance Test Plan	A040
e.	Acceptance Test Report	A009

3.9 Task H: Logistic Support.

3.9.1 Scope. The contractor shall provide engineering, technical, and analytical support to C4I Division on various C4ISR requirements, programs and/or projects such as, but not limited to: Tactical Mobile, RMAST, PAC3T, TCO, TEG, UOC, CAC2S, IAS FOS, IOW, IOS, MSBL, GCCS, FMS, USMC C4I systems, C4I and associated interface systems logistic support efforts. This support shall include the analysis, development, review, maintenance, and tracking of system and equipment logistics support planning, maintenance, and training data and documentation.

3.9.2 Logistics Planning Support. The contractor shall provide engineering, technical and analytical support all Integrated Logistic Support (ILS) elements and disciplines, specifically the following:

a. Computer Resources Support
b. Configuration Management
c. Design Interfaces
d. Maintenance Facility Support
e. ILS Planning
f. Maintenance and Support Planning
g. Training Planning Process Methodology (TRPPM)
h. Packaging, Handling, Storage, Warehousing, and Transportation
i. Quality Assurance
j. Reliability and Maintainability
k. Safety
l. Test, Measurement, Handling, and Support Equipment
m. Supply Support
n. Technical Data
o. Training and Training Support

3.9.2.1 Deliverable Product. The contractor shall develop and/or review the following supporting documents, as defined by the task order, this SOW and CDRL Items as indicated.

	DESCRIPTION	CDRL ITEM
a.	Validation Completion Report	A052
b.	Integrated Logistic Support Plan	A049
c.	Supportability Assessment Plan	A053
d.	Logistic Support Analysis Plan	A049
e.	OLSS Operational Logistics Support	A049

3.9.3 Provisioning Support. The contractor shall develop, review, update, and maintain Provisioning Technical Documentation (PTD) packages resulting from hardware procurement, Design Change Notices (DCN), Engineering Change Proposals (ECPs), field changes or from related fleet activities. PTD and updates will be prepared for the purpose of obtaining Material Support Dates (MSD) for new items provisioned and in the case of updates, revision of existing Allowance Parts Lists (APL).

3.9.3.1 Logistic System Support Data. The contractor shall collect, compile and provide system support technical data in accordance with MIL-HDBK-502, which shall be used to update and enhance logistics procedures involving facilities maintenance, communications and space utilization.

3.9.3.2 Provisioning Technical Documentation Updates. The contractor shall develop, update, and maintain complete provisioning technical documentation (PTD) packages in accordance with applicable standards and/or instructions as well as update/maintain existing PTD packages due to design change notices (DCNs), Engineering Change Proposals (ECPs), or field change bulletins (FCBs). PTD and PTD updates will be prepared for submission to NAVICP Mechanicsburg, PA for the purpose of updating previously issued APLs for continued support of various C^4ISR requirements, programs, and/or projects, and associated interface systems.

3.9.3.3 Deliverable Product. The contractor shall develop and/or review the following supporting documents, as defined by the task order, this SOW and CDRL Items as indicated.

	DESCRIPTION	CDRL ITEM
a.	Supplementary Provisioning Technical Documentation (PTD)	A051
b.	Provisioning Performance Schedule (PPS)	A050
c.	Logistic System Analysis Record (LSAR) Data	A049
d.	Technical Report, Provisioning Technical Documentation (PTD)	A046
e.	Technical Report, Logistic System Support	A038

3.9.3.4 User Logistics Support Summary

The contractor may be required to develop, or support development of a User Logistics Support Summary (ULSS). The ULSS is typically prepared by, or on behalf of, the Program Manager for users to identify logistics resources necessary to operate and maintain the system's subsystems and equipments in their operational environment. The ULSS may satisfy a number of formats commonly known as operational logistics support plan (OLSP) or summary (OLSS), phased support plan (PSP), material fielding plan (MFP), etc. The ULSS shall include the following information:

a. Equipment nomenclature, description, equipment identification code, national stock number, manufacturer's part number, cognizant procuring activity, inventory control point, designated overhaul point or depot, training agent, and any other organizational participants.

b. Maintenance concept.

c. Installation locations.
d. Support arrangements prior to organic support.
e. Key participants in the logistic support of the system or component including name, activity, and area of responsibility.
f. Allowance parts lists (APL) (i.e., initial outfitting list (IOL) numbers, or list of initial spare parts with stock numbers).
g. List of technical documentation and stock points required for operations at each level of maintenance.
h. List of support equipment for each level of maintenance, by stock or part number and manufacturer.
i. Training courses by site and schedule.
j. Personnel required for operation and maintenance (number, rate, Navy enlisted classification (NEC), military occupational specialty (MOS)). Identify changes to site manning documents attributable to the new equipment.
k. Software support, including software support activity (SSA) point of contact.
l. Facilities associated with the system, subsystems, or equipments by location including new facilities and modifications, and environmental, hazardous material, and safety considerations.
m. Warranty provisions.
n. Special or non-standard requirements.

3.9.4 Logistic Maintenance Support. The contractor shall develop, review, and update Tactical Mobile, USMC and FMS, C^4ISR requirements, programs and/or projects, and associated interface systems, subsystems, and equipment maintenance support documentation in accordance with applicable instructions, CDRLs, this SOW, and the task order. The contractor shall review design change notices (DCNs), Engineering Change Proposals (ECPs), field change bulletins (FCBs), and fleet inputs for potential impact on system/equipment operation and maintenance (O&M) manuals, maintenance requirement cards (MRCs), maintenance instructions and SOVT.

3.9.4.1 Logistic Analysis Support. The contractor shall review and submit recommended modifications to the initial provisioning baseline and spares levels based on analysis of usage data received from operating forces, and from recommendations received from the systems effectiveness function. Data analyzed includes:

a. CASREPs.
b. Maintenance Data Collection System (MDCS).
c. Mean Time Between Failure (MTBF) variances.
d. Field Service Reports
e. Equipment Repair Data
f. Remedy/Help Desk Database

3.9.4.2 Technical Manual Development. The contractor shall develop, review, and/or prepare updates to technical and Users manuals. Example of technical manual content may be found in MIL-DTL-24784.

3.9.4.2.1 Deliverable Product. The contractor shall develop and/or review the following supporting documents, as defined by the task order, this SOW and CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Technical Manual, Operation and Maintenance	A044
b.	Manual, Technical, Summary Report	A042
c.	Tables, Technical Update Revision	A042
d.	Manual, Technical Update Revisions, Red Lined Manuals	A042
e.	Manual, Technical Update Development/Revision	A042

f.	Technical Manual, Review Report	A042
g.	Troubleshooter's Guide/Update	A043
h.	Validation and Verification Report	A052

3.9.4.3 Operation and Maintenance (O&M) Manuals. The contractor shall develop, review, and update Tactical Mobile, FMS, USMC C^4ISR and/or related C^4ISR operation and maintenance (O&M) Manuals. Manuals shall be reviewed for accuracy, clarity, completeness of technical content, and usability.

3.9.4.3.1 Deliverable Product. The contractor shall develop and/or review the following supporting documents, as defined by the task order, this SOW and CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Operation and Maintenance (O&M) Manual	A044
b.	Technical Report, Document Review	A002
c.	Validation and Verification Report	A052

3.9.4.4 Maintenance Requirement Cards (MRCs). The contractor shall develop, review, and update Maintenance Requirement Cards (MRCs) due to design change notices (DCNs), field change bulletins (FCBs), and/or inputs from fleet activities for various C^4ISR requirements, programs and/or projects and associated interface systems, subsystems, and equipment. Examples of MRC's may be found in MIL-P-24534.

3.9.4.4.1 Deliverable Product. The contractor shall develop and/or review the following supporting documents, as defined by the task order, this SOW and CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Maintenance Requirement Cards	A045
b.	Maintenance Requirement Card/Schedule	A045
c.	Technical Report, Document Review	A002

3.9.5 Reliability and Maintainability. The contractor shall provide engineering, technical, and analytical support to C^4I Division Reliability, Maintainability, and Availability (RMA) Programs in accordance with Government approved RMA Procedures in this SOW and applicable CDRLs as included in the task order.

3.9.5.1 Reliability. The contractor shall perform a reliability prediction and/or review/analyze prime contractor reliability prediction data. The contractor shall submit a Reliability Prediction Report or Reliability Prediction Data Analysis Report as applicable.

3.9.5.2 Maintainability. The contractor shall develop and/or conduct a maintainability program for various C^4ISR requirements, programs and/or projects and/or associated interface systems, subsystems, and equipment in accordance with MIL-HDBK-470, this SOW and applicable CDRLs as included in the task order.

3.9.5.2.1 Maintainability Predictions. The contractor shall develop, review and/or evaluate maintainability predictions in accordance with MIL-HDBK-472. The contractor shall document and justify all assumptions and the applicability of all data used in development of each prediction. The predictions shall include all mechanical, electro-mechanical and electronic parts, and shall be based on the replacement of modules, chassis-mounted components and parts at the organizational maintenance level (0-Level). The results of these predictions shall be compared to the Systems/equipment's required MCMT (Mean Corrective Maintenance Time). The contractor shall ensure that prediction MCMT values do not exceed the requirements as defined in the Tactical Mobile, USMC and FMS, C^4ISR or associated interface system specification. The contractor shall recommend such changes in design as necessary to improve the predicted values sufficiently to meet the requirements. Analysis supporting model and simulation results shall be available for government review.

3.9.5.2.2 Maintainability Analysis. The contractor shall conduct an in-depth analysis of various Tactical Mobile, USMC and FMS C^4ISR requirements, programs and/or projects, and associated interface systems, subsystems, and equipment maintainability data. The maintainability analysis shall be performed concurrently with Prime Contractor designed efforts for incorporation of the quantitative and qualitative maintainability requirements into the equipment design. The maintainability analysis shall evaluate system and equipment design changes along with the possible catastrophic and critical mode of equipment failure. The maintainability analysis shall include:

a. A study of the indication/indicator of failure at the operation level and at the various levels of maintenance.

b. A determination of required special tools and test equipment (including special alignment jigs and fixtures) required during equipment maintenance.

c. A review of potential design, maintenance or production problems.

d. Identification of principal items inhibiting maintainability achievements and proposed solutions.

e. Identification of corrective and preventive maintenance features.

The contractor shall analyze the information obtained during the maintainability demonstration. This analysis shall include an evaluation of built-in test equipment (BITE), accessibility to plug-in modules and hand-wired components, effectiveness of fault indicators, and determination of whether the equipment has met the specified acceptance criteria. The contractor shall recommend correction to the applicable C^4ISR requirements, programs and/or projects, or associated interface system technical manuals and determine the statistical distribution of repair items. Analysis supporting model and simulation results shall be available for government review.

The contractor shall develop and/or review operational availability (OA) estimates and conduct OA analyses prescribed in OPNAVINST 3000.12. The contractor shall assess the achievement of the OA requirement contained in the applicable specification. The contractor shall recommend actions and alternatives to exceed OA thresholds.

3.9.5.2.3 Maintainability Demonstration. The contractor shall provide engineering and technical support to C^4I Division Program/Project Managers in conduct of systems, subsystems and equipment Maintainability Demonstrations. The contractor shall provide a Maintainability Demonstration Report.

3.9.5.3 Deliverable Product. The contractor shall develop and/or review the following supporting documents, as defined by the task order, this SOW and CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Reliability Prediction Report	A047
b.	Reliability Prediction Data Analysis Report	A047
c.	Maintainability Prediction Report	A048
d.	Maintainability Analysis Report	A048
e.	Maintainability Demonstration Report	A048

3.10 Task I: Material Control

3.10.1 Scope. The contractor shall provide the necessary resources to operate the logistics material storage at government warehouse facility located at SPAWAR Systems Center Charleston Office located at NAWC-AD, Patuxent River, MD and SPAWAR Systems Center Charleston, Naval Weapon Station, Hanahan, SC. The contractor shall provide support for material shipping and receiving, inventory control, plant account monitoring,

ordering and stocking of equipment and parts used to support the C^4I Division. Material control support shall be performed in accordance with the government, SPAWAR Systems Center C4I Division procedures Standard Operating Procedures. The following paragraphs further define the type of support required under this Task:

a. Provide Packing/Handling/Shipping and Transportation for C^4I Division hardware, parts, and spares required for fleet support in accordance with existing Government regulations.

Receive, inspect and inventory all incoming materials for SPAWAR Systems Center C^4I Division.

Maintain SPAWAR Systems Center C^4I Division hardware, parts, spares and inventory in accordance with existing SPAWAR Systems Center regulations.

Maintain an accurate inventory using Government furnished software database systems. Provide feedback to government for improving inventory accuracy and process improvement where feasible.

Transition inventory/material handling management to government directed software programs as required.

Conduct periodic inventories of material stored in government facilities and under Contractor care.

Prepare all necessary paperwork for procurement, turn-in, and shipment of SPAWAR Systems Center C^4I Division hardware, parts, spares and inventory in accordance with existing SPAWAR Systems Center regulations.

h. Maintain an inventory control system for assigned systems, equipment, spares, kits, and miscellaneous parts using government directed software database. Provide necessary management reports when requested.

3.10.2 Government Furnished Equipment. The government shall furnish access to government owned equipment. Office space shall be provided for contractor personnel on an as available basis. The government may provide equipment at the contractor's facility as required.

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3.10.3 Inventory Status. The contractor shall develop and maintain an inventory control system for assigned systems, equipment's, spares, ECP kits, and miscellaneous parts. This system shall include provisions for receipt, storage, issue, and/or shipment of these items. Government facilities may be utilized for these tasks.

3.10.4 Inventory Procedures. The contractor shall devise and implement procedures for a continuous on-going computer input-output analysis of parts, spares and supplies to effect optimum overall reporting of supply support. This will include:

a. Data analysis to reflect signals and projects elements of impending problem areas.

b. Recommending immediate action to preclude delinquent supply items.

3.10.5 Inventory Maintenance. The contractor shall review the following lists to ensure they accurately reflect Fleet Maintenance Support Requirements.

a. Coordinated Ships Allowance Lists (COSALs)
b. Allowance Parts List (APLs)
c. Allowance Equipage Lists
d. Provisioning Parts Lists (PPLs)
e. Tools and Test Equipment Lists (TTELs)

3.10.6 Logistics Miscellaneous. The contractor shall review APL and Technical Manual parts lists to validate repair echelon capabilities. The task functions are:

a. Evaluate APLs and initiate change requests to maintain its effectiveness.

b. Review, evaluate and report on the range and depth of technical overrides for designated equipments.

c. Maintain Government's inventory control database with CMPro.

d. Input requisitions into Management Information System (BSA) and maintain necessary inventory records as required.

e. Maintain C^4I Plan/Minor property database, for specific C^4I Programs.

3.11 Task J: Training Support.

3.11.1 Scope. The contractor shall provide engineering, technical, analytical, and instructional support to C^4I Division on various C^4ISR requirements, programs and/or projects such as those listed in paragraph 3.1. This support shall include the planning, analysis, coordination, development, review and maintaining of training programs, plan, requirement and documentation via software (HTML and/or XML) and hard copy as specified by the delivery order, this SOW and applicable CDRLs. This shall include potential application of distributed modeling and simulation for training utilizing Distributed Interactive Simulation and/or DOD High Level Architecture (HLA).

3.11.2 Planning. The contractor shall provide engineering, technical and analytical support to C^4I Division training planning efforts, including support at Training Planning Meetings and evaluation of Prime Contractor Training Plans and associated planning documentation. Minutes shall be recorded at all official training or planning meetings and documentation reviews.

3.11.3 Training Requirements Analysis. The contractor shall analyze system, equipment and computer software specifications and associated documentation to identify the specific training requirements for new or modified equipment and/or software and provide a detailed report of finding to cognizant C^4I Division Program/Project Managers.

3.11.4 Training Proposal.

a. For the Navy Systems: The contractor shall propose a training program, in accordance with MIL-HDBK-1379 Parts 1 & 2 for content and NAVEDTRA 130 &13 format. The Author Instruction Module II (AIMII) program shall be used to ensure SPAWAR training products will be collaboratively developed, tested, and introduced to the Fleet utilizing a SPAWAR Horizontal Integration (HI) Collaborative Training Development Process and the Navy Training Plan (NTP).

b. For Marine Corps Systems: The contractor shall propose a training program, in accordance with MCO 1510.34A, MCO 1553.1B. The training management for Marine Corps Formal Schools and Training Centers and Unit Training Management shall be conducted, in accordance with MCO 1553.2 and 1553.3.

3.11.4.1 Training Proposal Evaluation. The contractor shall review Prime Contractor Training Proposals and provide comments/recommendations to C^4I Division program/project managers.

3.11.5 Training Conference. The contractor shall provide engineering and technical support to the C^4I Division at Training Conferences. Support shall include review and evaluation of Prime Contractors proposed training program, data and documentation and provide comments/ recommendations.

3.11.6 Training Coordination. The contractor shall interface with the Fleet Combat Training Center Atlantic (FCTCLANT), MARCORSYSCOM, Government Agencies, FMS sites and such other activities to ensure that adequate training support is provided throughout the life cycle of the Tactical Mobile, FTAS, RMAST, PAC3T, TEG, IAS FOS, IOW, TCO, FMS systems such as MASC, DIAC, MSC and/or associated interface systems. The contractor shall interface with the USMC Training and Education Command (TECOM) for USMC C^4I life cycle training requirements.

3.11.7 Training Material and Services. The contractor shall develop, review or update C^4ISR requirements and/or C^4I job-skills training courses for the following types of Navy/USMC students, as specified by the task order:

a.	Electronic Technician (ET)	(Maintenance)
b.	Aviation Warfare Systems Operator (AW)	(Operator)
c.	Operation Specialist (OS)	(Operator)
d.	Watch Officer	(Operator)
e.	Information Technician (IT)	(Operator)
f.	Intelligence Specialist (IS)	(Operator/Analyst)
g.	Training Material and Services shall be provided for specified USMC Occupational Fields.	

These courses shall be suitable for presentation at Government-designated facilities and for use by the Government to conduct any required follow-on training throughout the life cycle of the system/equipment. Any updates to existing courses shall be provided to C^4I Division program/project managers. The course document requirements are identified in paragraph 3.11.10 of this SOW.

3.11.8 Training Plan. The contractor shall provide a Training Development and Training Support Activity (TSA) to Training Activities (TA) Plan. Only designated Fleet TAs, as reflected in the approved TSA to TA Transition Plan and the Navy Training Plan (NTP), may conduct formal training. The TA is the life cycle manager of formal training. As part of the TSA to TA process, the TA accepts the TSA developed FIT training for incorporation into existing, or development of new, FFT curriculum. The contractor shall provide on-site, and/or on-the-job training to personnel in the operations and maintenance of currently installed systems and equipment as well as for newly installed equipment or systems which become operationally ready during the period of the contract. The contractor shall develop course material for new hardware as well as revising existing training material for both operator and maintenance personnel. The course material will include job data worksheet, outline, instructor and student guides, tests and visual aids (IAW current CNET standards). Such training shall be on an "As Required" basis to accomplish on-site equipment familiarization for new personnel. The contractor will attend In-Progress Reviews (IPRs) and training Conferences as required. The contractor shall also provide on-site operator training associated with new operational software being delivered to sites as required. The TSA to TA Plan shall address the following forms of training:

3.11.8.1 Fleet Introductory Training (FIT). The contractor shall develop a technical maintenance-training program in accordance with the task order, including a training course outline/syllabus using OPNAVINST 1500.76 as a guide. The contractor shall provide approved on-site maintenance training for the entire staff on site immediately after installation of new and/or modified systems, equipment or software. The contractor shall develop the training to concentrate on the most crucial, recurring maintenance and/or operator problems and to provide trouble-shooting algorithms for correction or repair.

3.11.8.2 Fleet Formal Training (FFT). FFT can best be described a sustainment training. The contractor shall incorporate FIT training into existing curriculum and/or develop new FFT curricula.

3.11.8.3 Fleet Refresher Training (FRT). The contractor shall develop FRT training courseware and business plans intended for use in follow-on training and suitable for presentation at Government-designated facilities. The curricula shall be developed utilizing industry best practice and government specifications listed in the Statement of Work and CDRL governing FRT courseware development and delivery.

3.11.8.4 Operator/Organizational Level (O-Level) Maintenance Training. The contractor shall develop Operator and Organizational Maintenance (O-Level) Courses. These courses shall, at a minimum, cover theory of operation, job skills of preventive maintenance, equipment/system operation, shutdown safety and emergency procedures, equipment checkout, and alignment procedures. The O-Level Maintenance training shall be developed to provide O-Level maintenance personnel with the necessary information, skill development, and practical application required for inspection, maintenance, lubrication, assembly, disassembly, adjustment, troubleshooting, failure analysis, use of tools and equipment, parts replacement, and repair in accordance with the equipment/system maintenance concept.

3.11.9 Training Equipment/Personnel Support. The contractor shall develop training equipment designs/ configuration and support equipment, and procure or fabricate training equipment. The contractor shall provide Training Subject Matter Experts (SMEs) to support and assist Tactical Mobile and C^4I division engineers.

3.11.10 Deliverable Product. The contractor shall develop, revise and/or review the following supporting documents, as defined by the task order, this SOW and CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Trip Report	A012
b.	Job Data Worksheets	A054
c.	Training Course/ Curriculum Outline	A055
d.	Instructor Guides	A056
e.	Student Guides	A057
f.	Tests for Measurement of Student	A058
g.	Audio-Visual Aids	A059
h.	Technical Manual	A044
i.	Training Class Audit Report	A060
j.	Conference, Meeting Minutes & Presentation Reports	A003
k.	Technical Reports, General	A028
l.	Revisions to existing Government Documents	A061

3.12 Task K: Program Management Support.

3.12.1 Scope. The contractor shall establish a program office to identify and coordinate all items of work, and assure that all efforts are directed toward a common goal. This program support effort shall be headed by a Program Manager who shall bear overall responsibility for the successful execution of all work to be performed under this contract. The progress of this effort shall be documented by contractor provided progress and status reports, briefing materials and milestone reports as directed by the COR. The contractor shall:

3.12.2 The contractor shall develop an annual Contract requirements implementation plan for the COR's approval. This task implementation plan shall contain the anticipated level of effort as well as the labor categories for each task. This approved task implementation plan shall form the basis for communications between the COR and the Contractor Program Manager.

3.12.3 The contractor shall develop Monthly Progress Reports which shall include the following: Cover sheet; number of hours, by labor category, charged to each task; cost of materials expended by task; and travel and per diem charged under each task. Fund expenditures shall be broken down by category of funds.

3.12.4 The contractor shall monitor all C^4ISR program related activity, and associated interface system program/project status during the following activities: through review of vendor reports; periodic meetings with vendor and Government points of contact; participation in program/ project conferences; status reviews; and meetings. The contractor shall provide input as needed to the Government regarding the status of all areas of assigned programs to include the following:

a. Program Status
b. Schedules and Milestones
c. Documentation
d. Test and Evaluation
e. Fielding and Site Support
f. Points of Contact
g. Technical Issues

h. Actions Items

The contractor shall develop, update and maintain project status briefs, milestone charts and presentation material, including view graph and hard copy.

3.12.5 The contractor shall furnish technical comments and recommendations to the C^4I division at program reviews, in-process reviews, technical interchange meetings visits to hardware and software manufacturer's plants, and provide results in the form of minutes, trip reports, white papers or technical reports.

3.12.6 The contractor shall attend C^4I program meetings and reviews as directed by the COR. This involves developing a recommended agenda, establishing a system to track action items, identifying problems/ issues, and developing meeting information, data and minutes.

3.12.7 The contractor shall draft, update, review and provide inputs to program planning and technical documentation as defined by technical direction letters. Provide the appropriate documentation and review comments or recommendations to the C^4I Division program/project manager when directed by the COR.

3.12.8 The contractor shall provide personnel to perform tasks A through K of the SOW with security clearance levels of DOD SECRET. Personnel working on classified tasking (Intelligence or Communications) require DOD TOP SECRET.

4.0 REPORTS

4.1 Progress Reports

General. Progress report shall be submitted on a monthly basis and delivered to SPAWAR Systems Center Charleston no later than the 15th of the following month. The first report shall be delivered no later than the 15th of the month following the first full month of the contract.

4.1.1 Contents. Monthly progress report shall include the following items and data:

a. Cover sheet

b. Number of labor hours by total contract, task order number, labor categories used, and names of employees charge to each labor category.

c. Dollar amounts of material expended including outstanding monthly and cumulative commitments for total contract and each task order number.

d. Monthly and cumulative travel and per diem charge for total contract and each task order.

e. Monthly and cumulative total costs for contract and each task order.

f. Program summary.

g. Major milestone summary.

h. Data requirements status.

i. Action items.

j. Identification of new problem areas.

k. Status of previously identified problems.

l. Effort to be completed during next reported period.

m. Estimated total cost to complete.

n. Justification for cost increases or schedules slippage, if any, which may differ from previous report or the original estimate to complete specific efforts.

o. Identification of those task orders for which costs have exceeded 75% of the amount authorized.

4.1.2 **Format.** Reports shall be typewritten on commercial grade bond paper and shall include a cover sheet which shall identify the report by contract number, contractor's name, task order number and title, contract data requirements list (CDRL) number and title, period covered and date of preparation. Reports shall include charts, curves and other visual aids necessary to define the status of the contract clearly.

4.2 **Financial Progress Reports**

Financial progress reports shall be submitted on the 15th of each month no later than noon, Eastern Standard Time. The reports will be transmitted every month electronically to COR via a contractor furnished workstation, to provide the C^4I Division with current contract financial status.

4.2.1 **Deliverables Products**. The contractor shall develop the following reports, as defined by the CDRL Items as indicated.

	DESCRIPTION	**CDRL ITEM**
a.	Technical Report, Contractor Status and Man-hour Expenditure	A015
b.	Technical Report, Contractors Program Status Report	A017

5.0 CONTRACTOR FURNISHED FACILITIES.

5.1 The contractor shall maintain a facility primarily in the Charleston S.C. area with a support office required in the Patuxent River, MD, to support SPAWAR Systems Center, Code 61 to perform the tasks set forth for this effort. For the SPAWARSYSCEN Charleston, SC and Patuxent River, MD offices, the contractor-provided facility supporting each location must be located within a one-hour commuting period.

5.2 In performing this contract the contractor shall be required to perform various equipment integration efforts, component design engineering, breadboard and bench test, prototype fabrication, test bed design, and support services for government testing. The Government may not have facilities to provide the contractor to support this contract. Therefore, the contractor shall provide the commercial facilities. The Government does not intend to retain the facility or take title after the contract is complete.

5.2.1 Because of the hands-on hardware effort, each facility shall contain assembly test, and storage space as well as attendant office space to support staff. Each facility must meet any local, state, and federal commercial building code requirements. Each facility must have environmentally controlled office and lab/work spaces.

5.2.2 The contractor shall:

a. Have adequate storage for documentation produced for the contract or used as reference material.

b. Have Computer Aided Drafting (CAD) System compatible with AUTOCAD software from AUTODESK, Inc.

c. Have Graphics presentation capability compatible with Microsoft Power Point for Windows for PC compatible systems.

d. Provide all equipment required to perform the contract, which shall include but not be limited to the following: Office furniture, desktop microcomputers which are IBM PC compatible; software for word processing, database management, graphics and spreadsheets. The proper software for SPAWAR Systems Center is Microsoft Office including Excel, Word, MS Project etc., In addition, the contractor must provide all required office equipment and supplies.

e. Provide test, integration and support equipment as required.

5.3 The contractor shall furnish and be responsible for the maintenance and calibration of general-purpose test equipment necessary to perform tasks assigned under this contract. This test equipment will be used to support C^4I Division and Fleet sites Worldwide. The contractor shall provide all general-purpose hand tools required for performance under this contract.

5.4 Facility costs are considered to be an indirect cost under this contract and shall not be directly reimbursable. The cost of any facilities shall be included in the proposed overhead rate. In addition, no relocation costs will be allowed for relocating contractor employees assigned to work under resultant contract.

6.0 DATA CALENDAR.

The contractor shall provide a data calendar that shows all data items required under the contract and task orders and their delivery dates in matrix format. The calendar shall be updated monthly and provided with the monthly progress report.

7.0 MATERIAL

The contractor shall provide miscellaneous material when and to the extent authorized under the specifications of this contract and as authorized under each individual task order. Examples of the miscellaneous material to be furnished by the contractor include, but are not limited to, the following items:

Tactical Computers; Minicomputers; PC Motherboards; Real Time Software; Hard Disk; Floppy Diskette Drive; Network Servers; Network Server Expansion; Tape Drives; Tape Backup Systems; Workstation Network Interface Card; Work Stations; Communications Server; VME Chassis w/ Control Backplane; Software Tools; Sound Cards; Speakers; Microphones; Routers; Digital Service Units; Protocol Analyzers; Shelters; Tents; Operating Systems; Modems; Fax Machines; Printers; Scanners; Keyboards; Central Processing Units (CPU); Power Supply; Generator; Monitors; Receivers; Patch Panels; Digital Service Units; Waveguides; IT-21 compliance hardware/ software systems; Automatic Switches; I/O boards; Computer Memory; Networking Products; Surge Suppressor; System Console; Color Graphic Interface Card; Multi-Sync Color Monitor with Keyboard; Uninterruptible Power System; Power Generator; High Resolution Display; CD-ROM and Recorder; Power Converter; Videoconferencing Camera; Ethernet Switch; Tool Kits for Network and General Computer Repair; Television Set; Video Cassette Recorder; Video Converters; VGA Cards; VTC Software; Cameras; Televisions; Camcorder; Virtual Systems, Audio/Video Matrix Switcher; Electrohome Projector; Commercial Crypto; Cables (coax, fiber, etc.); Connectors; and Accessories.

The contractor will ensure if replacement items are provided, they are to be equal or superior to the original manufacturer's specifications and interchangeable without alteration.

The contractor shall provide transportation for equipment or material items required under the contract and task orders. The contractor shall verify or comply with the Navy Supply Systems before using commercial transportation system.

C-313 SECURITY REQUIREMENTS

The work to be performed under this contract as delineated in the DD Form 254, Attachment No. 1, involves access to and handling of classified material up to and including TOP SECRET.

In addition to the requirements of the FAR 52.204-2 "Security Requirements" clause, the Contractor shall appoint a Security Officer, who shall (1) be responsible for all security aspects of the work performed under this contract, (2) assure compliance with the National Industry Security Program Operating Manual (DODINST 5220.22M), and (3) assure compliance with any written instructions from the Security Officer Code OA1, SPAWAR Systems Center Charleston, P.O. Box 190022, North Charleston, SC 29419-9022.

C-314 DISPOSITION OF GOVERNMENT FURNISHED PROPERTY

When disposition instructions for Government Furnished Property are contained in the accountable contract or on the supporting shipping documents (DD Form 1149) the Contractor shall initiate and submit an excess inventory listing to the Procuring Contracting Officer (PCO), via the activity Property Administrator.

When disposition instructions are not stipulated in the contract or supporting shipping document (DD Form 1149) and excess inventory listing identifying Government Furnished Property and, under cost reimbursement contracts, Contractor Acquired Property, will also be submitted to the PCO, via the activity Property Administrator, at which time disposition instructions will be provided.

At the time of the Contractor's regular annual inventory, the Contractor will provide the PCO, via the activity Property Administrator, a copy of the physical inventory listing.

C-315 WORKWEEK

(a) All or a portion of the effort under this contract will be performed on a Government installation. The normal workweek for Government employees at SPAWAR Systems Center Charleston and Lexington Park, MD is Monday through Friday. Work at this Government installation, shall be performed by the contractor within the normal workweek unless differing hours are specified on the individual task orders. Following is a list of holidays observed by the Government:

Name of Holiday	Time of Observance
New Year's Day	1 January
Martin Luther King Jr. Day	Third Monday in January
Presidents' Day	Third Monday in February
Memorial Day	Last Monday in May
Independence Day	4 July
Labor Day	First Monday in September
Columbus Day	Second Monday in October
Veterans' Day	11 November
Thanksgiving Day	Fourth Thursday in November
Christmas Day	25 December

(b) If any of the above holidays occur on a Saturday or a Sunday, then such holiday shall be observed by the Contractor in accordance with the practice as observed by the assigned Government employees at the using activity.

(c) If the Contractor is prevented from performance as the result of an Executive Order or an administrative leave determination applying to the using activity, such time may be charged to the contract as direct cost provided such charges are consistent with the Contractor's accounting practices.

(d) This contract does not allow for payment of overtime during the normal workweek for employees who are not exempted from the Fair Labor Standards Act unless expressly authorized by the Ordering Officer. Under Federal regulations the payment of overtime is required only when an employee works more than 40 hours in a normal week period.

C-317 NOTICE TO CONTRACTOR OF CERTAIN DRUG DETECTION PROCEDURES

(a) Pursuant to Navy policy applicable to both Government and contractor personnel, measures will be taken to prevent the introduction and utilization of illegal drugs and related paraphernalia into Government Work areas.

(b) In furtherance of the Navy's drug control program, unannounced periodic inspections of the following nature may be conducted by installation security authorities:

(1) Routine inspection of contractor occupied work spaces.

(2) Random inspections of vehicles on entry or exit, with drug detection dog teams as available, to eliminate them as a safe haven for storage of or trafficking in illegal drugs.

(3) Random inspections of personnel possessions on entry or exit from the installation.

(c) When there is probable cause to believe that a contractor employee on board a naval installation has been engaged in use, possession or trafficking of drugs, the installation authorities may detain said employee until the employee can be removed from the installation, or can be released to the local authorities having jurisdiction.

(d) Trafficking in illegal drug and drug paraphernalia by contract employees while on a military vessel/installation may lead to possible withdrawal or downgrading of security clearance, and/or referral for prosecution by appropriate law enforcement authorities.

(e) The contractor is responsible for the conduct of employees performing work under this contract and is, therefore, responsible to assure that employees are notified of these provisions prior to assignment.

(f) The removal of contractor personnel from a Government vessel or installation as a result of the drug offenses shall not be cause for excusable delay, nor shall such action be deemed a basis for an equitable adjustment to price, delivery or other provisions of this contract.

C-318 LIABILITY INSURANCE--FIXED PRICE CONTRACTS

(a) The following types of insurance are required in accordance with the FAR 52.228-5 "Insurance--Work on a Government Installation" clause and shall be maintained in the minimum amounts shown:

(1) Workers' compensation and employers' liability: minimum of $100,000

(2) Comprehensive general liability: $500,000 per occurrence

(3) Automobile liability: $200,000 per person
$500,000 per occurrence
$ 20,000 per occurrence for property damage

(b) Upon notification of contract award, the contractor shall furnish to the Contracting Officer, as required by paragraph (b) of the FAR 52.228-5 "Insurance--Work on a Government Installation" clause, a certificate or written statement of insurance prior to commencement of work under this contract. The written statement of insurance must contain the following information: policy number, policyholder, carrier, amount of coverage, dates of effectiveness (i.e., performance period), and contract number. The contract number shall be cited on the certificate of insurance.

C-319 LIABILITY INSURANCE--COST TYPE CONTRACTS

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

(1) Workers' compensation and employers' liability: minimum of $100,000
(2) Comprehensive general liability: $500,000 per occurrence
(3) Automobile liability: $200,000 per person
$500,000 per occurrence
$ 20,000 per occurrence for property damage

(b) When requested by the contracting officer, the contractor shall furnish to the Contracting Officer a certificate or written statement of insurance. The written statement of insurance must contain the following information: policy number, policyholder, carrier, amount of coverage, dates of effectiveness (i.e., performance period), and contract number. The contract number shall be cited on the certificate of insurance.

C-324 OCCUPATIONAL SAFETY AND HEALTH REQUIREMENTS

(a) If performance of any work under this contract is required at a Space and Naval Warfare Systems Center Charleston facility, the Contractor shall contact the SPAWARSYSCEN Charleston Safety and Environmental Office, Code OAD, prior to performance of ANY work under this contract.

(b) Contractors are responsible for following all safety and health related State and Federal statutes and corresponding State, Federal and/or Navy regulations protecting the environment, contractor employees, and persons who live and work in and around contractor and/or federal facilities.

(c) Contractors shall monitor their employees and ensure that they are following all safety regulations particular to the work areas. Contractors shall ensure that their employees (i) wear appropriate safety equipment and clothing, (ii) are familiar with all relevant emergency procedures should an accident occur, and (iii) have access to a telephone and telephone numbers, to include emergency telephone numbers, for the SPAWARSYSCEN Charleston facility where work is performed.

C-325 KEY PERSONNEL

(a) The offeror agrees to assign to this contract those key personnel listed in paragraph (d) below. No substitutions shall be made except in accordance with this clause.

(b) The offeror agrees that during the first thirty (30) days of the contract performance period no personnel substitutions will be permitted unless such substitutions are necessitated by an individual's sudden illness, death or termination of employment. In any of these events, the contractor shall promptly notify the Contracting Officer and provide the information required by paragraph (c) below. After the initial thirty (30) day period, all proposed substitutions must be submitted in writing, at least fifteen (15) days (thirty (30) days if a security clearance is to be obtained) in advance of the proposed substitutions to the contracting officer. These substitution requests shall provide the information required by paragraph (c) below.

(c) All requests for approval of substitutions under this contract must be in writing and provide a detailed explanation of the circumstances necessitating the proposed substitutions. They must contain a complete resume for the proposed substitute or addition, and any other information requested by the Contracting Officer or needed by him to approve or disapprove the proposed substitutions. All substitutions proposed during the duration of this contract must have qualifications of the person being replaced. The Contracting Officer or his authorized representative will evaluate such requests and promptly notify the contractor of his approval or disapproval thereof in writing.

(d) List of Key Personnel

NAME	CONTRACT LABOR CATEGORY
	Program Manager
	Lead Project Engineer
	Senior Computer Scientist
	Senior Electronics Engineer
	Communications Engineer
	Senior System Engineer
	Senior Project Analyst
	Senior Computer Programmer
	Test Engineer III
	Network Engineer
	Electronics Technician III
	Senior Logistics Technician

(e) If the Contracting Officer determines that suitable and timely replacement of key personnel who have been reassigned, terminated or have otherwise become unavailable for the contract work is not reasonably forthcoming or that the resultant reduction of productive effort would be so substantial as to impair the successful completion of the contract or the service order, the contract may be terminated by the Contracting Officer for default or for the convenience of the Government, as appropriate. In addition, if the Contractor is found at fault for the condition, the Contracting Officer may elect to equitably decrease the contract price or fixed fee to compensate the Government for any resultant delay, loss or damage.

(f) If the offeror wishes to add personnel to be used in a labor category he shall employ the procedures outlined in paragraph (c) above. Adding personnel will only be permitted in the event of an indefinite quantity contract, where the Government has issued a delivery order for labor hours that would exceed a normal forty hour week if performed only by the number of employees originally proposed.

C-326 DELIVERY/TASK ORDER PROCEDURES (OCT 2003) – ALTERNATE I (OCT 2003)

Both cost-plus-fixed fee (level of effort (term) and completion type) and firm-fixed price orders may be issued under this contract. Each delivery or task order will include the order type deemed appropriate by the Government.

(a) *Procedures.* Each delivery/task order shall be placed in accordance with the following procedures:

(1) Upon identification of a requirement, the Contracting Officer's Representative (COR) or originator shall contact the Contractor for the purpose of arriving at a common understanding of the technical components which constitute the basis for performance under this delivery/task order and identifying the elements necessary for preparing a detailed Statement of Work (SOW) which contains sufficient definition to allow all parties to clearly identify an end product consistent with the scope of the contract.

(2) After both parties have reached agreement regarding the technical requirement of the SOW, and the SOW is completed, the Contractor and the COR shall sign and date the document to signify their common understanding of the delivery/task order requirements.

(3) Within five (5) calendar days after signing the SOW, the Contractor shall submit to the Ordering Officer/Administrator a complete cost estimate (or firm fixed price), with a copy of the SOW attached for the delivery/task order, sufficient to adequately describe how the Contractor will complete the requirements of the SOW. A copy of the cost estimate (or firm fixed price) shall be forwarded concurrently to the COR and/or originator. The cost estimate (or firm fixed price) shall contain the following documentation to enable the Ordering Officer/Administrator to make a determination of price reasonableness:

(i). Cost Plus Fixed Fee (CPFF).

(A) Direct labor, including labor categories, hours, rates and total.

(B) Indirect Rates.

(C) Other Direct Costs (ODCs).

1. Travel identified in the SOW needs only a total cost. Travel requirements not identified in the SOW must be fully documented including destination, number of people, number of days, airfare, per diem, car rental and other charges.

2. Material exceeding a unit price of $2,500 must be itemized. All other materials need only a total cost.

3. Equipment must be identified as Information Technology (IT) or non-IT. All IT equipment must be itemized. Non-IT equipment exceeding a unit price of $2,500 must be itemized. All other equipment not identified above needs only a total cost.

4. Total miscellaneous charges under $2,500 do not need to be itemized.

(D) Subcontractors. Subcontractors need only submit total cost with labor categories and hours to the prime contractor. Costs, with the same level of detail as submitted by the prime contractor for the task/delivery order, shall be submitted directly to the Government by the subcontractor.

(E) Consultants. Consultants need only submit total cost with labor categories and hours to the prime contractor. Costs, with the same level of detail as submitted by the prime contractor for the task/delivery order, shall be submitted directly to the Government by the subcontractor.

(F) Other Information. A statement that the cost estimate is based upon either a completion or level of effort task and the anticipated duration of the delivery/task order.

(G) Fee as specified in basic contract

(ii). Firm Fixed Price (FFP). The FFP shall include the following breakdown:

(A) Direct labor, including labor categories, hours, rates, and total.

(B) Indirect Rates.

(C) Other Direct Costs (ODCs).

1. Travel identified in the SOW needs only a total cost. Travel requirements not identified in the SOW must be fully documented including destination, number of people, number of days, airfare, per diem, car rental and other charges.

2. Material exceeding a unit price of $2,500 must be itemized. All other materials need only a total cost.

3. Equipment must be identified as Information Technology (IT) or non-IT. All IT equipment must be itemized. Non-IT equipment exceeding a unit price of $2,500 must be itemized. All other equipment not identified above needs only a total cost.

4. Total miscellaneous charges under $2,500 do not need to be itemized.

(D) Subcontractors. Subcontractors need only submit total cost with labor categories and hours to the prime contractor. Costs, with the same level of detail as submitted by the prime contractor for the task/delivery order, shall be submitted directly to the Government by the subcontractor.

(E) Consultants. Consultants need only submit total cost with labor categories and hours to the prime contractor. Costs, with the same level of detail as submitted by the prime contractor for the task/delivery order, shall be submitted directly to the Government by the subcontractor.

(F) Profit Rate and application.

Any backup documentation not provided when you submit your cost/price estimate may be requested later by the Ordering Officer.

(4) Once the Ordering Officer/Administrator has reviewed and accepted the Contractor's cost estimate (or firm fixed price), a DD Form 1155 will be executed by the Contracting Officer/Ordering Officer and sent to the Contractor as notice to begin work. The Contractor is cautioned that no work is to be started prior to receipt of a properly signed and executed DD Form 1155, Order for Supplies/Services. If the cost estimate (or firm fixed price) is insufficient or discussions are needed, the administrator will contact the Contractor to negotiate requirements.

(5)(i) Delivery or task orders may be issued under this contract by facsimile or by electronic commerce methods.

(ii) Oral orders may be placed hereunder only in emergency circumstances. Information described above shall be furnished to the contractor at the time of placing an oral order and shall be confirmed by issuance of a written delivery/task order on DD Form 1155 within two working days.

(b) *Content and Effect.*

(1) Each CPFF delivery/task order shall include:

(i) Effective date of order,

(ii) Contract and delivery/task order numbers,

(iii) Type of delivery/task order (i.e., completion or term),

(iv) Estimated hours (provided for information only on completion-type orders),

(v) Estimated cost, fee or price,

(vi) Scope, including reference to applicable (contract) specifications,

(vii) Delivery or performance date,

(viii) Place of delivery or performance,

(ix) Accounting and appropriation data, and

(x) Other information as appropriate (e.g., Government Furnished Property, material, or facilities to be made available for performance of the order; safety requirements; security requirements set forth on DD Form 254; data requirements set forth on DD Form 1423; etc.).

(2) Each FFP delivery/task order shall include:

(i) Effective date of order,

(ii) Contract and delivery/task order numbers,

(iii) Firm Fixed Price,

(iv) Scope, including reference to applicable (contract) specifications,

(v) Delivery or performance date,

(vi) Place of delivery or performance,

(vii) Accounting and appropriation data, and

(viii) Other information as appropriate (e.g., Government Furnished Property, material, or facilities to be made available for performance of the order; safety requirements; security requirements set forth on DD Form 254; data requirements set forth on DD Form 1423; etc.).

(c) *Maintenance of Records.* The Contractor shall maintain the following cost records under this contract as a minimum:

(1) Records for each delivery/task order, indicating the number of hours of direct labor performed, segregated to the individual employee performing the work,

(2) Records for each individual employee, identifying direct labor performed and segregated as to delivery/task order for which performed, and

(3) Records of all direct non-labor costs, allocated to individual delivery/task order.

(4) Nothing herein shall be deemed to excuse the Contractor from maintaining records required by other provisions of this contract.

(d) *Contractor Notification.* (1) The Contractor is responsible for immediately notifying the Ordering Officer/Administrator of any difficulties in performing in accordance with the terms of the order.

(2) Each delivery or task order under a cost reimbursement contract is deemed to include the FAR 52.232-22 “Limitation of Funds” or the FAR 52.232-20 “Limitation of Cost” clause, whichever is applicable.

C-329 CONTRACTOR RESPONSIBILITY DURING DESTRUCTIVE WEATHER CONDITIONS

During imminent destructive weather conditions, contractors working within government confines are required to secure all materials and equipment for the tasks and projects assigned to ensure proper protection and avoidance of potential hazards, unless otherwise advised by the Government On-Site Representative or the COR. Furthermore, contractors may be tasked under an existing contract or order to provide assistance as needed for any recovery. Tasking for such assistance does not authorize the contractor to exceed the actual or “Not to Exceed” amount stated on the task order or contract modification. At no time, shall the contractor place or expose its employees or any other person to life threatening or personally hazardous conditions.

C-701 YEAR 2000 COMPLIANCE REQUIREMENT--INFORMATION TECHNOLOGY

(a) All information technology (IT), whether commercial or noncommercial, delivered under this contract that will be required to perform date/time processing involving dates subsequent to December 31, 1999, shall be Year 2000 compliant when properly installed, operated, and maintained in accordance with the contract specifications and applicable documentation. If the contract requires that specific deliverables operate together as a system, this requirement shall apply to those deliverables as a system.

(b) Definitions

"Commercial items" is defined at the FAR 52.202-1 "Definitions" clause of this contract.

"Information technology" or "IT" as used in this requirement, means any equipment, or interconnected system(s) or subsystem(s) of equipment, that is used in the automatic acquisition storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the agency.

(1) For purposes of this definition, equipment is used by an agency if the equipment is used by the agency directly or is used by a contractor under a contract with the agency which—
    (i) Requires the use of such equipment; or
    (ii) Requires the use, to significant extent, of such equipment in the performance of a service or the furnishing of a product.
(2) The term "information technology" includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources.
(3) The term "information technology" further includes for this contract—
    (i) Any equipment that is acquired by a contractor incidental to a contract; or
    (ii) Any IT (regardless of the course) used by the contractor in the performance of this contract to develop or modify IT under the requirements of this contract, or
    (iii) Any equipment that contains imbedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation, are information technology.

"Year 2000 compliant" means that the IT accurately processes date/time data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap year calculations, to *the extent* that other IT, used in combination with the IT being delivered, properly exchanges date/time data with it. The "*proper exchange*" of date/time data shall be in accordance with the interface requirements specification(s) of the contract.

(c) For line item deliverables which are commercial items, and which include commercial IT, the terms and conditions of the standard commercial warranty covering such commercial IT shall apply in addition to, and to the extent such terms and conditions are consistent with this requirement. Any applicable commercial warranty shall be incorporated into this contract by attachment.

(d) Notwithstanding any provision to the contrary in any warranty of this contract, or in the absence of any such warranty or warranties, the remedies available to the Government under this requirement shall include those provided in the inspection clause(s) of this contract. Nothing in this requirement shall be construed to limit any rights or remedies the Government may otherwise have under this contract.

(e) Unless specified elsewhere in the contract, the Contractor will also deliver to the Government a report summarizing any Year 2000 compliance testing that was performed and the results thereof.

(f) The remedies available to the Government for noncompliance with this requirement shall remain available *until 31 January 2002 or one hundred eighty (180) days* after acceptance of the last deliverable IT, item under this

contract (including any option exercised hereunder), *whichever is later*. The remedies of this specification are in addition to all otherwise existing remedies, including, but not limited to, latent defect remedies.

C-719 EXEMPTION FROM ELECTRONIC AND INFORMATION TECHNOLOGY ACCESSIBILITY REQUIREMENTS (JUN 2001)

(a) The Government has determined that the following exemption(s) to the Electronic and Information Technology (EIT) Accessibility Standards (36 C.F.R. § 1194) are applicable to this procurement:

__X_ The EIT to be provided under this contract has been designated as a National Security System.

____ The EIT acquired by the contractor is incidental to this contract.

____ The EIT to be provided under this contract would require a fundamental alteration in the nature of the product or its components in order to comply with the EIT Accessibility Standards.

____ The EIT to be provided under this contract will be located in spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment.

____ Compliance with the EIT Accessibility Standards would impose an undue burden on the agency.

____ The EIT to be provided under this contract is purchased in accordance with FAR Subpart 13.2 prior to January 1, 2003.

(b) Notwithstanding that an exemption exists, the Contractor may furnish supplies or services provided under this contract that comply with the EIT Accessibility Standards (36 C.F.R. § 1194).

C-720 PERFORMANCE-BASED CONTRACT REVIEW AND ACCEPTANCE PROCEDURES

(a) This is a performance-based contract, as defined in FAR Part 37.6. Contractor performance will be reviewed in accordance with the Quality Assurance Surveillance Plan (QASP) as follows:

QUALITY ASSURANCE SURVEILLANCE PLAN

1.0 The contractor's performance will be evaluated through the Contractor Performance Assessment Reporting System (CPARS). The CPARS evaluation is accomplished on an annual basis. The CPARS evaluation will be based on all task orders performed (in whole or in part) during the previous 12-month period. The primary government official responsible for the CPARS evaluation is the Contracting Officer's Representative (COR) for the contract. The COR may be assisted, as necessary, by other government individuals having information relevant to the quality of contractor performance.

2.0 Contractor performance will be assessed on a continuing basis throughout the year based on review of deliverables (technical and management), technical meetings, formal In-Progress Reviews, and general contacts with the contractor.

3.0 Contractor performance will be evaluated in five general areas. A rating of Exceptional, Very Good, Satisfactory, Marginal or Unsatisfactory will be assigned to each area. These general areas are described below. The items identified under each area represent the types of consideration to be addressed. They should not be considered an exclusive list. The degree of Government technical direction necessary to solve problems that arise during performance will be a consideration for each area. Improvements made in an area during the evaluation period will also be considered as will degradation in the overall quality of performance.

3.1 Quality of Product or Service - Addresses the extent to which the contractor (a) met contract technical requirements, including the accuracy and completeness of reports/data delivered; (b) employed methods and approaches to ensure fully successful performance; (c) consistently conveyed his intended approach clearly and completely to ensure that there were no surprises; (d)

was proactive and demonstrated initiative; (e) remained flexible to internal or external changes and (f) was effective in developing and implementing process improvements to make the end product development more efficient and the end product display more effective.

3.2 Schedule – Addresses the extent to which the contractor met contract schedules, including the need for deadline extensions.

3.3 Cost Control – Addresses the contractor's overall effectiveness in controlling both direct and indirect costs as well as the incidence of cost overruns.

3.4 Business Relations – Addresses the responsiveness of the contractor's upper-level management to Government concerns and needs, the effectiveness of the contractor's management interface with the Government, and the overall cooperativeness and receptiveness of the contractor in dealing with the Government on both technical and management issues.

3.5 Management of Key Personnel – Addresses the overall quality of the contractor's team. Including their education, relevant experience, skill levels and expertise as well as the degree of compliance with the terms of the contract regarding Key Personnel. Also includes the effectiveness of the contractor's efforts to retain or attract qualified personnel.

EVALUATION RATINGS: DEFINITIONS

Exceptional. Performance meets contractual requirements and exceeds many to the Government's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor were highly effective.

Very Good. Performance meets contractual requirements and exceeds some to the Government's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective.

Satisfactory. Performance meets contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory/

Marginal. Performance does not meet contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor' proposed actions appear only marginally effective or were not fully implemented.

Unsatisfactory. Performance did not meet contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element being assessed contains serious problem(s) for which the contractor's corrective actions appear or were ineffective.

(b) The QASP defines this review and acceptance to be part of the annual Contractor Performance Assessment Reporting System (CPARS). The contractor may obtain more information regarding the CPARS process at the following internet site: http://cpars.navy.mil.

SECTION D Packaging and Marking

CLAUSES INCORPORATED BY FULL TEXT

D-305 PREPARATION FOR DELIVERY

(a) Supplies shall be prepared for delivery in accordance with ASTM-D-3951, "Standard Practice for Commercial Packaging", dated 1 September 1995.

(b) The contractor shall mark all shipments under this contract in accordance with MIL-STD-129, Military Standard Marking for Shipment and Storage".

D-307 PROHIBITED PACKING MATERIALS

The use of asbestos, excelsior, newspaper or shredded paper (all types including waxed paper, computer paper and similar hydroscopic or non-neutral material) is prohibited. In addition, loose fill polystyrene and plastic as packing materials are prohibited for items destined for afloat units.

D-308 MARKING OF SHIPMENT

Each shipment of material and/or data shall be clearly marked to show the following information:

SHIP TO:	MARK FOR:*
RECEIVING OFFICER	Contract #: _____
	Delivery Order #: _____
	Item #: _____
	Receiving Officer Code: _____

The receiving office is located at *.

As indicated on individual task orders

SECTION E Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001-0010	N/A	N/A	N/A	N/A

CLAUSES INCORPORATED BY REFERENCE:

52.246-2	Inspection Of Supplies--Fixed Price	AUG 1996
52.246-3	Inspection Of Supplies Cost-Reimbursement	MAY 2001
52.246-4	Inspection Of Services--Fixed Price	AUG 1996
52.246-5	Inspection Of Services Cost-Reimbursement	APR 1984
52.246-15	Certificate of Conformance	APR 1984
252.246-7000	Material Inspection And Receiving Report	MAR 2003

CLAUSES INCORPORATED BY FULL TEXT

E-303 INSPECTION AND ACCEPTANCE--DESTINATION

Inspection and acceptance of the supplies/services to be furnished hereunder shall be made at destination by the receiving officer or his duly authorized representative within seven (7) working days after receipt of supplies/services, or completion of services at destination.

SECTION F Deliveries or Performance

CLAUSES INCORPORATED BY REFERENCE:

52.242-15	Stop-Work Order	AUG 1989
52.242-15 Alt I	Stop-Work Order (Aug 1989) - Alternate I	APR 1984
52.247-34	F.O.B. Destination	NOV 1991
52.247-55	F.O.B. Point For Delivery Of Government-Furnished Property	JUN 2003

CLAUSES INCORPORATED BY FULL TEXT

F-303 PERIODS OF PERFORMANCE FOR ORDERING, ORDERS, AND OPTIONS TO EXTEND TERM OF THE CONTRACT

The period of performance of the contract, for the purpose of issuing delivery or task orders is as follows:

CLIN(S)	PERIOD(S) OF PERFORMANCE FOR ISSUING ORDER
0001 and 0002, Lot I	Date of contract award through one year thereafter

The period of performance for each order shall be stated within such order. Additional time of not more than 180 days beyond the ordering period may be allowed for completion of outstanding orders.

The period of performance for option CLIN(S) to extend the term of the contract is as follows:

CLIN(S)	PERIOD(S) OF PERFORMANCE
0003 and 0004, Lot II	One year commencing from date of expiration of the previous performance period
0005 and 0006, Lot III	One year commencing from date of expiration of the previous performance period
0007 and 0008, Lot IV	One year commencing from date of expiration of the previous performance period
0009 and 0010, Lot V	One year commencing from date of expiration of the previous performance period

The above period(s) of performance for the option(s) to extend the term of the contract shall apply only if the Government exercises the option(s) as stated in Section B in accordance with FAR clause 52.217-9 “Option to Extend the Term of the Contract”.

SECTION G Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

		MINIMUM GUARANTEE
ACRN:AA	97X4930 NH3S 000 77777 065236 2F 000000 B4253C022 REQ #N65236-4253-C022 J.O. #ATEUKP4FCB	$50,000.00

CLAUSES INCORPORATED BY REFERENCE:

252.242-7000 Postaward Conference DEC 1991

CLAUSES INCORPORATED BY FULL TEXT

5252.232-9000 SUBMISSION OF INVOICES (FIXED PRICE) (JUL 1992)

(a) "Invoice" as used in this clause does not include contractor's requests for progress payments.

(b) The contractor shall submit original invoices with __copies to the address identified in the solicitation/contract award form (SF 26-Block 10; SF 33-Block 23; SF 1447-Block 14), unless delivery orders are applicable, in which case invoices will be segregated by individual order and submitted to the address specified in the order (DD 1155-Block 13 or SF 26-Block 10).

(c) The use of copies of the Material Inspection and Receiving Report (MIRR), DD Form 250, as an invoice is encouraged. DFARS Appendix F-306 provides instructions for such use. Copies of the MIRR used as an invoice are in addition to the standard distribution stated in DFARS F-401.

(d) In addition to the requirements of the Prompt Payment clause of this contract, the contractor shall cite on each invoice the contract line item number (CLIN); the contract subline item number (SLIN), if applicable; the accounting classification reference number (ACRN) as identified on the financial accounting data sheets, and the payment terms.

(e) The contractor shall prepare:
___ a separate invoice for each activity designated to receive the supplies or services.
___ a consolidated invoice covering all shipments delivered under an individual order.
_X_ either of the above.

(f) If acceptance is at origin, the contractor shall submit the MIRR or other acceptance verification directly to the designated payment office. If acceptance is at destination, the consignee will forward acceptance verification to the designated payment office.

G-306 DESIGNATION OF CONTRACTING OFFICER'S REPRESENTATIVE

(a) The Contracting Officer hereby appoints the following individual as the Contracting Officer's Representative(s) (COR) for this contract/order:

(1)

Senior Project Engineer, Code 61C-MP
SPAWAR Systems Center, Charleston
P.O. Box 190022
N. Charleston, SC 29419-9022

(b) It is emphasized that only the Contracting Officer has the authority to modify the terms of the contract. Therefore, in no event will any understanding agreement, modification, change order, or other matter deviating from the terms of the basic contract between the Contractor and any other person be effective or binding on the Government. When/If, in the opinion of the Contractor, an effort outside the existing scope of the contract is requested, the Contractor shall promptly notify the PCO in writing. No action shall be taken by the Contractor, unless the PCO or ACO has issued a contractual change.

(c) In the absence of the COR named above, all responsibilities and functions assigned to the COR shall be the responsibility of the Alternate COR acting in behalf of the COR. The Contracting Officer hereby appoints the following individual as the Alternate COR:

(2)

Branch Head, Code 616
SPAWAR Systems Center, Charleston
P.O. Box 190022
N. Charleston, SC 29419-9022

G-314 TYPE OF CONTRACT

This is an Indefinite Delivery/Indefinite Quantity, Cost-Plus-Fixed-Fee (CPFF)/Firm Fixed Price (FFP), Performance Based type contract. Although the majority of tasking is cost reimbursable in nature, some task orders may be issued on a firm fixed price basis. The firm fixed price will be negotiated prior to place of the individual task orders. (Reference clause H-322)

G-317 INVOICING INSTRUCTIONS (COST REIMBURSEMENT CONTRACTS)

(a) Invoices/vouchers shall be submitted not more than every 2 weeks covering the amount claimed to be due for services rendered and cost incurred thereunder. There will be a lapse of no more than thirty days between performance and submission of invoices.

(b) The contractor will prepare three (3) copies of his invoices/vouchers. The original and one (1) copy of the invoices/vouchers will be forwarded to the cognizant Defense Contract Audit Agency (DCAA). One (1) copy of the invoice/vouchers shall be forwarded to Space and Naval Warfare Systems Center Charleston, Code 123. One (1) copy of the invoice/vouchers shall be forwarded to the COR.

(c) Invoices/vouchers will contain the following information:

(1) Contract number and contract line item number;

(2) Description of work;

(3) Straight time labor charges by man-hours, classification and price; in the case of cost-plus-fixed-fee type contracts, the invoice shall cite direct labor hours and labor rates incurred by labor category, total costs incurred and fixed fee billed.

(4) Premium time and charges (if any) by man-hours, classification, price/cost and name of approving official.

(5) Uncompensated overtime hours (if any) worked for the invoice period, by labor category, as identified in the FAR 52.237-10 “Identification of Uncompensated Overtime” provision.

(6) Travel and per diem costs (if any).

(7) Other costs incurred and allowable under the contract and identification of such costs.

(8) Additional information as required.

(9) Withholding under the Payments clause, if any.

(10) Cumulative value of all billings to date by cost incurred and fixed fee billed.

(d) For all but the final invoice/voucher, DCAA will review and approve invoices/vouchers for provisional payment and forward them to the paying office. Payment will be made by the Disbursing Office upon the basis of the DCAA approved invoice/voucher. The Contracting Officer's Representative (COR) will review his/her copy of the invoice/voucher and complete a Contractor Invoice Review Form. The COR will retain this form in the COR files. If the COR identifies discrepancies on the invoice, he will pursue resolution with the Contractor and request a revised invoice reflecting the correction.

(e) The final invoice/voucher will be forwarded to the Administrative Contracting Officer for approval and forwarding to the DCAA and disbursing office for final payment. The final invoice/voucher identified as such will list all invoices/vouchers previously tendered. Final payment will be predicated upon the execution of a Material Inspection and Receiving Report (DD Form 250) or other acceptance shall be deemed to have occurred on the effective date of the contract settlement. In accordance with FAR 32.905(c), the Material Inspection and Receiving Report (DD Form 250) shall include the signature, printed name, title, mailing address, and telephone number of the Government official responsible for acceptance or approval of the supplies or services. The Contracting Officer's Representative is the acceptance and approval official.

(f) The cognizant DCAA office of this contract is:

DEFENSE CONTRACT AUDIT AGENCY (DCAA):*

NAME: Columbia Branch Office
ADDRESS: 10025 Governor Warfield Parkway
One Mall North, Suite 200
Columbia, MD 21044-3521

(g) The DCAA office specified above is hereby designated as the cognizant audit agency for payments resulting from this contract, receiving invoices/vouchers from contractor, approving interim vouchers and issuing DCAA Form 1, Notice of Contract Costs Suspended and/or Disapproved, to deduct costs where allowability is questionable.

(h) The Administrative Contracting Officer, or his/her designated authorized representative, approves all completion/final invoices/vouchers and sends them to the disbursing office; and may issue or direct the issuance of DCAA Form 1 on any cost when there is reason to believe it should be suspended or disallowed.

(i) No interest penalty shall be paid to the contractor as a result of delayed contract financing payments. For purposes of the final invoice, payment is made after acceptance of services by the Government and is subject to assessment of interest penalty for payment delays in accordance with the FAR 52.232-25, Prompt Payment, clause of this contract.

(j) For purposes of payment under the final invoice, the constructive period in paragraph (a) (6) of the FAR 52.232-25, Prompt Payment, clause of this contract is changed from 7 days to 30 days.

G-319 RETENTION OF GOVERNMENT PROPERTY ADMINISTRATION

In accordance with FAR 42.201, the Procuring Contracting Officer specifically retains performance of property administration functions under this contract. The Space and Naval Warfare Systems Center-Charleston, Code 09A12, Property Control Branch, P.O. Box 190022, North Charleston, S.C. 29419-9022 is hereby designated by the Contracting Officer as the Property Administrator to ensure compliance with the contract's property requirements and the provisions of FAR Subpart 45.5.

G-320 SUBMISSION OF DD FORM 1662 "DOD PROPERTY IN THE CUSTODY OF CONTRACTORS"

Pursuant to the clause at DFARS 252.245-7001 "Reports of Government Property" clause, the contractor shall provide in duplicate the DD Form 1662 to the activity property administrator at the address set forth below by 31 October of the current year:

Space and Naval Warfare Systems Center-Charleston, Code 09A12, Property Control Branch, P.O. Box 190022, North Charleston, S.C. 29419-9022

G-321 CONTRACTOR PERFORMANCE APPRAISAL REPORTING SYSTEM (OCT 2002)

(a) Past performance information will be collected and maintained under this contract using the Department of Defense Contractor Performance Appraisal Reporting System (CPARS). CPARS is a web-enabled application that collects and manages the contractor's performance information on a given contract during a specific period of time. Additional information is available at http://www.cpars.navy.mil/.

(b) After contract award, the contractor will be given access authorization by the respective SPAWAR Focal Point, to review and comment on any element of the proposed rating before that rating becomes final. Within 60 days after contract award, the contractor shall provide in writing (or via e-mail) to the contracting officer the name, title, e-mail address and telephone number of the company individual or individuals who will have the responsibility of reviewing and approving any Contractor Performance Appraisal Report (CPAR) developed under the contract. If, during the life of this contract these company individual(s) are replaced by the contractor, the name, title, e-mail address and telephone number of the substitute individuals will be provided to the contracting officer within 60 days of the replacement.

SECTION H Special Contract Requirements

CLAUSES INCORPORATED BY FULL TEXT

5252.215-9210 INCORPORATION OF REPRESENTATIONS AND CERTIFICATIONS BY REFERENCE (NOV 1991)

All representations and certifications and other written statements made by the contractor in response to Section K of the solicitation or at the request of the contracting officer which are incident to the award of the contract or modification of this contract, are hereby incorporated by references with the same force and effect as if they were given in full text.

5252.219-9201 SMALL BUSINESS SUBCONTRACTING PLAN (OCT 2003)

Pursuant to Public Law 95-507, the Contractor's Subcontracting Plan for small business, HUBZone small business, small disadvantaged business, women-owned small business, veteran-owned small business, and service-disabled veteran-owned small business concerns is hereby approved and attached hereto as Attachment 3 and is made a part of this contract.

5252.232-9206 SEGREGATION OF COSTS

The Contractor agrees to segregate costs incurred under this contract at the lowest level of performance, either task or subtask, rather than on a total contract basis, and to submit invoices reflecting costs incurred at that level. Invoices shall contain summaries of work charged during the period covered, as well as overall cumulative summaries by labor category for all work invoiced to date, by line item, task or subtask.

Where multiple lines of accounting are present, the ACRN preceding the accounting citation will be found in Section B and/or Section G of the contract or in the task or delivery order which authorizes work. Payment of Contractor invoices shall be accomplished only by charging the ACRN which corresponds to the work invoiced. One (1) copy of each invoice will be provided to the COR, designated herein, and the PCO at the time of submission to DCAA.

5252.243-9400 AUTHORIZED CHANGES ONLY BY THE CONTRACTING OFFICER (JAN 1992)

(a) Except as specified in paragraph (b) below, no order, statement, or conduct of Government personnel who visit the Contractor's facilities or in any other manner communicates with Contractor personnel during the performance of this contract shall constitute a change under the Changes clause of this contract.

(b) The Contractor shall not comply with any order, direction or request of Government personnel unless it is issued in writing and signed by the Contracting Officer, or is pursuant to specific authority otherwise included as a part of this contract.

(c) The Contracting Officer is the only person authorized to approve changes in any of the requirements of this contract and notwithstanding provisions contained elsewhere in this contract, the said authority remains solely the Contracting Officer's. In the event the contractor effects any change at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract price to cover any increase in charges incurred as a result thereof. The address and telephone number of the Contracting Officer is:

NAME
ADDRESS P.O. Box 190022
North Charleston, SC 29419-9022
TELEPHONE

5252.245-9201 GOVERNMENT FURNISHED PROPERTY (MAR 2002)

The Government will provide only that property set forth below, notwithstanding any provisions of the specification(s) to the contrary:

DESCRIPTION	QUANTITY	DATE	LOCATION

As indicated on individual task orders

H-302 ORGANIZATIONAL CONFLICT OF INTEREST (SYSTEMS ENGINEERING)

(a) This contract provides for systems engineering and related technical support for various C4ISR requirements, programs, and projects. The parties recognize that by the Contractor providing this support, a potential conflict of interest arises as defined by FAR 9.505-1.

(b) For the purpose of this clause, the term "contractor" means the contractor, its subsidiaries and affiliates, joint ventures involving the contractor, any entity with which the contractor may hereafter merge or affiliate, and any other successor of the contractor.

(c) During the term of this contract and for a period of one (1) year after completion of this contract, the Contractor agrees that it will not supply (whether as a prime contractor, subcontractor at any tier, or consultant to a supplier) to the Department of Defense, any product, item or major component of an item or product, which was the subject of the systems engineering and/or technical direction in support of various C4ISR requirements, programs, and projects performed under this contract. The contractor shall, within 15 days after the effective date of this contract, provide, in writing, to the Contracting Officer, a representation that all employees, agents and subcontractors involved in the performance of this contract have been informed of the provisions of this clause. Any subcontractor that performs any work relative to this contract shall be subject to this clause. The contractor agrees to place in each subcontract affected by these provisions the necessary language contained in this clause.

(d) The Contractor further agrees that it will not perform engineering services and technical support of the type described in the SOW for any product it has designed, developed, or manufactured in whole or in part. The Contractor further agrees to notify the Contracting Officer should it be tasked to conduct engineering and technical support on such products and to take no action until directed to do so by the Contracting Officer.

(e) The Contractor acknowledges the full force and effect of this clause. It agrees to be bound by its terms and conditions and understands that violation of this clause may, in the judgment of the Contracting Officer, be cause for Termination for Default under FAR 52.249-6. The Contractor also acknowledges that this does not represent the sole and exclusive remedy available to the Government in the event the Contractor breaches this Organizational Conflict of Interest clause.

H-320 ALTERNATIVES AND UPDATES TO SPECIFICATIONS AND STANDARDS

(a) The Department of Defense is --

(1) committed to minimizing the use of military and federal specifications and standards; and

(2) seeking to use non-government specifications and standards to the maximu m extent practicable to satisfy its requirements.

(b) The Contractor --

(1) is encouraged to identify and propose alternatives to specifications and standards cited in this contract;

(2) may submit to the Contracting Officer a proposal addressing alternatives to contractually mandated military, federal, or commercial specifications and standards, consisting of the following:

(i) a copy of the proposed alternatives;

(ii) a comparison of the proposed alternatives to the specifications or standards cited in the contract; and

(iii) an analysis supporting the feasibility and cost-effectiveness of the proposed alternatives.

(c) If the Contractor has a contract, or multiple DOD contracts, that incorporate outdated or different versions of military, federal, or commercial specifications or standards, the Contractor may request that all of its contracts be updated to the latest version of the applicable specifications or standards. Updating must not affect the form, fit, or function of any deliverable item, and must demonstrate a benefit to the government. The Contractor may submit updating requests to the Contracting Officer through the cognizant contract administration office. The government will, to the extent practicable, evaluate the acceptability of any proposed alternative. If a proposed alternative is not considered for the instant procurement, it will be considered for future procurement. If the Contracting Officer does not accept the proposed alternative, the Contractor agrees to perform the contract in accordance with the specifications and standards cited in the contract.

H-322 TYPES OF TASK OR DELIVERY ORDERS

The following types of task or delivery orders may be issued under this contract:

(*) A cost-plus-fixed-fee (CPFF) level of effort (LOE) task order will be issued when the scope of work is defined in general terms requiring only that the contractor devote a specified LOE for a stated time period.

(*) A cost-plus-fixed-fee (CPFF) completion task order will be issued when the scope of work defines a definite goal or target which leads to an end product deliverable (e.g., a final report of research accomplishing the goal or target).

(*) A firm-fixed-price (FFP) delivery order will be issued when acquiring commercial items, or for acquiring other supplies or services on the basis of reasonably definite or detailed specifications and fair and reasonable prices can be established at the outset.

H-323 CONTRACTOR PICTURE BADGE

(a) A contractor picture badge may be issued to contractor personnel by SPAWAR Systems Center Security Office upon receipt of a valid visit request from the Contractor and a picture badge request from the COR. A list of personnel requiring picture badges must be provided to the COR to verify that the contract or delivery/task order authorizes performance at the Government Installation prior to completion of the picture badge request.

(b) An automobile decal will be issued by SPAWAR Systems Center Security Office upon presentation of a valid contractor picture badge and the completion of the Badge and Decal Record.

(c) The contractor assumes full responsibility for the proper use of the identification badge and automobile decal, and shall be responsible for the return of the badge and/or destruction of the automobile decal upon termination of personnel or expiration or completion of the contract.

(d) At the completion of the contract, the contractor shall forward to SPAWAR Systems Center Security Office a list of all unreturned badges with a written explanation of any missing badges.

H-341 EMPLOYMENT OF NAVY PERSONNEL RESTRICTED

In performing this contract, the Contractor will not use as a consultant or employ (on either a full or part-time basis) any active duty Navy personnel (civilian or military) without the prior approval of the Contracting Officer. Such approval may be given only in circumstances where it is clear that no law and no DOD or Navy instructions, regulations, or policies might possibly be contravened and no appearance of a conflict of interest will result.

H-343 CONTRACT DATA REQUIREMENTS – DELIVERY ORDERS

The data items shown on the DD Form 1423, Contract Data Requirements List, or included in the Statement of Work are either known data requirements or a general description of the data to be clarified or restated on each delivery order.

H-344 DELIVERY ORDER LIMITATION OF COST/FUNDS

In accordance with the FAR Clause 52.232-20, "Limitation of Cost," or 52.232-22 "Limitation of Funds," the Government shall not be obligated to reimburse the Contractor for work performed, items delivered, or any costs incurred under orders issued under the resultant contract, except as authorized by the contracting officer.

The cost factors utilized in determining the estimated costs under any order placed hereunder shall be the applicable rates current at the time of issuance of the task or delivery order, not to exceed, however, any ceilings established by the terms of this contract.

If at any time 75% of either the estimated cost or estimated level of effort specified in the task or delivery order is reached and it appears that additional funds and/or level of effort is required to complete performance, the Contractor shall promptly notify the Ordering Officer in writing. Such notification shall include the cost and level of effort expended and that which will be required to complete performance. The Government shall have the right to modify the task or delivery order accordingly.

If the Contractor exceeds the estimated costs authorized by task or delivery order placed hereunder, the Government will be responsible only for reimbursement of the cost and payment of fee in an amount up to that established by the task or delivery order.

The total amount of all task or delivery orders issued shall not exceed the estimated costs and fixed fee or level of effort set forth in this contract.

H-345 WAGE DETERMINATION APPLICABLE, SERVICE CONTRACT ACT

Attachment 2 incorporated herein sets forth the applicable Service Contract Act Wage Determination by the Secretary of Labor.

H-349 REIMBURSEMENTS UNDER COST REIMBURSEMENT OR TIME-AND-MATERIAL OR LABOR-HOUR CONTRACTS (MAR 2000)

(a) Office Equipment

The costs for acquisition, usage or rental of General Purpose Office Equipment including, but not limited to, typewriters, word processing machines, computers, computer time, printers, reprographic and xerographic copying machines, telecopiers, telephone equipment, and postage machines are considered overhead expenses and shall not be directly reimbursable under this contract. Such costs shall be included in the hourly rates payable under paragraph (a)(1) of the FAR 52.232-7 "Payments under Time-and-Material and Labor-Hour Contracts" clause, if this is a time-and-material or labor-hour contract. These overhead expenses will be reimbursed to the contractor as indirect costs under the FAR 52.216-7 "Allowable Cost and Payment" clause, if this is a cost-reimbursement contract.

(b) Overtime

Overtime is contemplated only on an emergency basis. However, if the need for overtime arises, such overtime shall not be worked without written authorization from the Contracting Officer.

(c) Overtime/Holiday Rate

(1) Overtime is defined as time worked in one workweek in excess of 40 hours in such workweek. Holiday time is defined as any time worked on a legal Federal Holiday. Legal Federal holidays for the purpose of this contract are listed below:

New Year's Day
Martin Luther King's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day

(2) Overtime and/or holiday work may be worked by the Contractor only to the extent it is specifically authorized in writing, by the ordering activity on individual orders placed under the contract. No additional hours of overtime may be worked without additional written authorization.

(3) Unless the contractor states otherwise in contractor's proposal it will be deemed that the contractor shall observe the same holidays as the Government and shall otherwise be open for business Monday through Friday during the performance of the contract.

(d) Vehicle and/or Truck Rental

When any special vehicles and/or trucks are required, the cost for contractor-owned vehicles and/or trucks shall be included in the overhead rate. The contractor shall be reimbursed for actual rental/lease of vehicles and/or trucks, only if authorized by individual task/delivery orders. Reimbursement of such rental shall be made based on actual amounts paid by the contractor, not to exceed the rates set forth in the individual task/delivery order.

(e) Expendable Material

Expendable materials, such as clerical supplies and materials, which are considered to be a normal cost of doing business, are considered to be overhead expenses shall not be billed as a separate material cost.

(f) Other Material

Material, other than expendable material, shall be furnished pursuant to specific authorization in a task/delivery order issued under this contract. The contractor will be required to support all material costs claimed by submission of paid subcontractor invoices. Contractor will be reimbursed at the contractor's cost less any applicable discount, plus material handling costs, if any, as specified in individual task/delivery orders. Material handling charge shall be shown separately only if the contractor's accounting system segregates that particular cost.

H-350 REIMBURSEMENT OF TRAVEL COSTS (SEP 2003)--ALTERNATE I (SEP 2001)

(a) Contractor Request and Government Approval of Travel

Any travel under the contract must be specifically identified by the contractor in a written quotation to the Ordering Officer prior to incurring any travel costs. Travel under this contract is only authorized under task orders issued by the Ordering Officer or by a modification to an issued task order. The travel request shall include as a minimum, the following:

(1) Contract number
(2) Date, time, and place of proposed travel
(3) Purpose of travel and how it relates to the contract
(4) Contractor's estimated cost of travel
(5) Name(s) of individual(s) traveling and;
(6) A breakdown of estimated travel and per diem charges.

(b) General

(1) The costs for travel, subsistence, and lodging shall be reimbursed to the contractor only to the extent that it is necessary and authorized for performance of the work under this contract. The costs for travel, subsistence, and lodging shall be reimbursed to the contractor in accordance with the Federal Acquisition Regulation (FAR) 31.205-46, which is incorporated by reference into this contract. As specified in FAR 31.205-46(a) (2), reimbursement for the costs incurred for lodging, meals and incidental expenses (as defined in the travel regulations cited subparagraphs (b)(1)(i) through (b)(1)(iii) below) shall be considered to be reasonable and allowable only to the extent that they do not exceed on a daily basis the maximum per diem rates in effect at the time of travel as set forth in the following:

(i) Federal Travel Regulation prescribed by the General Services Administration for travel in the contiguous 48 United States;

(ii) Joint Travel Regulation, Volume 2, DoD Civilian Personnel, Appendix A, prescribed by the Department of Defense for travel in Alaska, Hawaii, The Commonwealth of Puerto Rico, and the territories and possessions of the United States; or

(iii) Standardized Regulations, (Government Civilians, Foreign Areas), Section 925, "Maximum Travel Per Diem Allowances in Foreign Areas" prescribed by the Department of State, for travel in areas not covered in the travel regulations cited in subparagraphs (b)(1)(i) and (b)(1)(ii) above.

(2) Personnel in travel status from and to the contractor's place of business and designated work site or vice versa, shall be considered to be performing work under the contract, and contractor shall bill such travel time at the straight (regular) time rate shown in Section B; however, such billing shall not exceed eight hours per person for any one person while in travel status during one calendar day.

(c) Per Diem

(1) The contractor shall not be paid per diem for contractor personnel who reside in the metropolitan area in which the tasks are being performed. Per diem shall not be paid on services performed at contractor's home facility and at any facility required by the contract, or at any location within a radius of 50) miles from the contractor's home facility and any facility required by this contract.

(2) Costs for subsistence and lodging shall be paid to the contractor only to the extent that overnight stay is necessary and authorized in writing by the Government for performance of the work under this contract. When authorized, per diem shall be paid by the contractor to his employees at a rate not to exceed the rate specified in the travel regulations cited in FAR 31.205-46(a)(2) and authorized in writing by the Government. The authorized per diem rate shall be the same as the prevailing locality per diem rate. If this contract is a definite or indefinite delivery contract, then the written Government authorization will be by task/delivery orders issued by the Ordering Officer or

by a modification to an issued task/delivery order. If this contract is not a definite or indefinite delivery contract, then the written Government authorization will be by written notice of approval from the Contracting Officer's Representative (COR).

(3) Reimbursement to the contractor for per diem shall be limited to payments to employees for authorized per diem, as described above, not to exceed the authorized per diem. Fractional parts of a day shall be payable on a prorated basis for purposes of billing for per diem charges attributed to subsistence on days of travel. Fractional billing shall be on a 1/4, 1/2, and 3/4 basis. The contractor shall retain supporting documentation for per diem paid to employees as evidence of actual payments, as required by the FAR 52.216-7 "Allowable Cost and Payment" clause of the contract.

(d) Transportation

(1) For transportation other than described in subparagraph (d)(4) below, the contractor shall be paid on the basis of actual amounts paid to the extent that such transportation is necessary for the performance of work under the contract and is authorized in writing by the Government. If this contract is a definite or indefinite delivery contract, then the written Government authorization will be by task/delivery orders issued by the Ordering Officer or by a modification to an issued task/delivery order. If this contract is not a definite or indefinite delivery contract, then the written Government authorization will be by written notice of approval from the Contracting Officer's Representative (COR).

(2) When transportation by privately owned conveyance is authorized, the contractor shall be paid on a mileage basis not to exceed the applicable Government transportation rate specified in the travel regulations cited in FAR 31.205-46(a)(2) and is authorized in writing by the Government. If this contract is a definite or indefinite delivery contract, then the written Government authorization will be by task/delivery orders issued by the Ordering Officer or by a modification to an issued task/delivery order. If this contract is not a definite or indefinite delivery contract, then the written Government authorization will be by written notice of approval from the Contracting Officer's Representative (COR).

(3) The contractor agrees, in the performance of necessary travel, to use the lowest cost mode commensurate with the requirements of the mission and in accordance with good traffic management principles. When it is necessary to use air or rail travel, the contractor agrees to use coach, tourist class or similar accommodations to the extent consistent with the successful and economical accomplishment of the mission for which the travel is being performed. Documentation must be provided to substantiate non-availability of coach or tourist if business or first class is proposed to accomplish travel requirements.

(4) The contractor shall not be paid for travel mileage for contractor personnel who reside in the metropolitan area in which the services are being performed. Travel mileage shall not be paid for services performed at the contractor's home facility or at any location within a driving radius of 50 miles from the contractor's home facility.

H-352 CONTRACT MAXIMUM AMOUNT

During the life of this contract, the total maximum dollar amount available for placement under task orders is cumulative with each option exercised, and unexpended balances may be used in succeeding option years.

H-355 CONTRACTOR IDENTIFICATION

(a) Contractor employees must be clearly identifiable while on Government property by wearing appropriate badges.

(b) Contractor employees are required to clearly identify themselves and the company they work for whenever making contact with Government personnel by telephone or other electronic means.

SECTION I Contract Clauses

CLAUSES INCORPORATED BY REFERENCE:

52.202-1	Definitions	DEC 2001
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 2003
52.204-2	Security Requirements	AUG 1996
52.204-4	Printed or Copied Double-Sided on Recycled Paper	AUG 2000
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	JUL 1995
52.211-15	Defense Priority And Allocation Requirements	SEP 1990
52.215-2	Audit and Records--Negotiation	JUN 1999
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
52.215-15	Pension Adjustments and Asset Reversions	DEC 1998
52.215-17	Waiver of Facilities Capital Cost of Money	OCT 1997
52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other than Pensions	OCT 1997
52.215-19	Notification of Ownership Changes	OCT 1997
52.216-7	Allowable Cost And Payment	DEC 2002
52.216-8	Fixed Fee	MAR 1997
52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns	JAN 1999
52.219-8	Utilization of Small Business Concerns	OCT 2000
52.219-9	Small Business Subcontracting Plan	JAN 2002
52.219-9 Alt II	Small Business Subcontracting Plan (Jan 2002) Alternate II	OCT 2001
52.219-16	Liquidated Damages-Subcontracting Plan	JAN 1999
52.219-25	Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting	OCT 1999
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards Act - Overtime Compensation	SEP 2000
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	APR 2002
52.222-29	Notification Of Visa Denial	JUN 2003
52.222-35	Equal Opportunity For Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans	DEC 2001
52.222-36	Affirmative Action For Workers With Disabilities	JUN 1998
52.222-37	Employment Reports On Special Disabled Veterans, Veterans Of The Vietnam Era, and Other Eligible Veterans	DEC 2001
52.222-41	Service Contract Act Of 1965, As Amended	MAY 1989
52.223-5	Pollution Prevention and Right-to-Know Information	APR 1998
52.223-6	Drug Free Workplace	MAY 2001
52.225-13	Restrictions on Certain Foreign Purchases	JUN 2003
52.227-1	Authorization and Consent	JUL 1995
52.227-2	Notice And Assistance Regarding Patent And Copyright	AUG 1996

	Infringement	
52.227-3	Patent Indemnity	APR 1984
52.228-3	Worker's Compensation Insurance (Defense Base Act)	APR 1984
52.228-5	Insurance - Work On A Government Installation	JAN 1997
52.228-7	Insurance--Liability To Third Persons	MAR 1996
52.229-3	Federal, State And Local Taxes	APR 2003
52.230-2	Cost Accounting Standards	APR 1998
52.230-3	Disclosure And Consistency Of Cost Accounting Practices	APR 1998
52.230-6	Administration of Cost Accounting Standards	NOV 1999
52.232-1	Payments	APR 1984
52.232-8	Discounts For Prompt Payment	FEB 2002
52.232-9	Limitation On Withholding Of Payments	APR 1984
52.232-11	Extras	APR 1984
52.232-17	Interest	JUN 1996
52.232-22	Limitation Of Funds	APR 1984
52.232-23	Assignment Of Claims	JAN 1986
52.232-23 Alt I	Assignment of Claims (Jan 1986) - Alternate I	APR 1984
52.232-25	Prompt Payment	FEB 2002
52.232-25 Alt I	Prompt Payment (Feb 2002) Alternate I	FEB 2002
52.232-33	Payment by Electronic Funds Transfer--Central Contractor Registration	MAY 1999
52.233-1	Disputes	JUL 2002
52.233-1 Alt I	Disputes (Jul 2002) - Alternate I	DEC 1991
52.233-3	Protest After Award	AUG 1996
52.233-3 Alt I	Protest After Award (Aug 1996) - Alternate I	JUN 1985
52.237-2	Protection Of Government Buildings, Equipment, And Vegetation	APR 1984
52.237-3	Continuity Of Services	JAN 1991
52.242-1	Notice of Intent to Disallow Costs	APR 1984
52.242-3	Penalties for Unallowable Costs	MAY 2001
52.242-4	Certification of Final Indirect Costs	JAN 1997
52.242-13	Bankruptcy	JUL 1995
52.243-1	Changes--Fixed Price	AUG 1987
52.243-1 Alt II	Changes--Fixed-Price (Aug 1987) - Alternate II	APR 1984
52.243-2	Changes--Cost-Reimbursement	AUG 1987
52.243-2 Alt II	Changes--Cost Reimbursement (Aug 1987) - Alternate II	APR 1984
52.244-5	Competition In Subcontracting	DEC 1996
52.245-2	Government Property (Fixed Price Contracts)	JUN 2003
52.245-5	Government Property (Cost-Reimbursement Time-And-Materials, Or Labor Hour Contracts)	JUN 2003
52.245-18	Special Test Equipment	FEB 1993
52.246-1	Contractor Inspection Requirements	APR 1984
52.246-25	Limitation Of Liability--Services	FEB 1997
52.247-1	Commercial Bill Of Lading Notations	APR 1984
52.247-63	Preference For U.S. Flag Air Carriers	JUN 2003
52.248-1	Value Engineering	FEB 2000
52.249-2	Termination For Convenience Of The Government (Fixed-Price)	SEP 1996
52.249-6	Termination (Cost Reimbursement)	SEP 1996
52.249-8	Default (Fixed-Price Supply & Service)	APR 1984
52.249-14	Excusable Delays	APR 1984
52.251-1	Government Supply Sources	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	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	NOV 2001
252.204-7005	Oral Attestation of Security Responsibilities	NOV 2001
252.205-7000	Provisions Of Information To Cooperative 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
252.223-7004	Drug Free Work Force	SEP 1988
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	APR 2003
252.225-7002	Qualifying Country Sources As Subcontractors	APR 2003
252.225-7012	Preference For Certain Domestic Commodities	FEB 2003
252.225-7013	Duty-Free Entry	JAN 2004
252.226-7001	Utilization of Indian Organizations and Indian-Owned Economic Enterprises-DoD Contracts	SEP 2001
252.227-7013	Rights in Technical Data--Noncommercial Items	NOV 1995
252.227-7014	Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation	JUN 1995
252.227-7016	Rights in Bid or Proposal Information	JUN 1995
252.227-7019	Validation of Asserted Restrictions--Computer Software	JUN 1995
252.227-7025	Limitations on the Use or Disclosure of Government-Furnished Information Marked with Restrictive Legends	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 Conformity	JAN 1997
252.227-7037	Validation of Restrictive Markings on Technical Data	SEP 1999
252.231-7000	Supplemental Cost Principles	DEC 1991
252.232-7007	Limitation Of Governments Obligation	AUG 1993
252.242-7004	Material Management And Accounting System	DEC 2000
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
252.251-7000	Ordering From Government Supply Sources	OCT 2002
252.251-7000	Ordering From Government Supply Sources	OCT 2002

CLAUSES INCORPORATED BY FULL TEXT

52.215-21 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) Exceptions from cost or pric ing data. (1) In lieu of submitting cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.403-4 on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable--

(i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by

periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(ii) Information on modifications of contracts or subcontracts for commercial items. (A) If--

(1) The original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item; and

(2) The modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.

(B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include--

(1) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.

(2) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market.

(3) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.

(2) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this clause, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation , access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.

(b) Requirements for cost or pricing data. If the Contractor is not granted an exception from the requirement to submit cost or pricing data, the following applies:

(1) The Contractor shall submit cost or pricing data and supporting attachments in accordance with Table 15-2 of FAR 15.408.

As soon as practicable after agreement on price, but before award (except for unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

52.216-18 ORDERING. (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from date of award through one (1) year thereafter.

(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.

52.216-22 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 180 days after expiration of the contract.

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 30 days before the contract expires; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 5 years.

52.222-2 PAYMENT FOR OVERTIME PREMIUMS (JUL 1990)

(a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed that amount authorized in the specific task order or the overtime premium is paid for work --

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall--

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

52.222-42 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

THIS STATEMENT IS FOR INFORMATION ONLY: IT IS NOT A WAGE DETERMINATION

Employee Class		Monetary Wage-Fringe Benefits
LABOR CATEGORY	SCA NUMBER	GS/WG RATE/PAY
Computer Programmer II	03072	GS-7/$13.91
Database Administrator	03072	GS-7/$13.91
LAN Support II	03045	GS-8/$15.41
Electronics Technician III	29083	WG-10/$17.34
Electronics Technician II	29082	WG-9/$16.45
Electronics Technician I	29081	WG-8/$15.56
Electronics Assembler/Laborer	23470	WG-2/$10.23
Supply Technician	01400	GS-7/$13.91
Computer Data Librarian	03010	GS-4/$10.04
Quality Assurance/Control Specialist	23050	WG-11/$18.23
Technical Writer/Editor II	29480	GS-11/$20.59
Financial Analyst I	01014	GS-5/$11.23
System Analyst I	03101	GS-9/$16.45
System Analyst II	03102	GS-11/$20.59
Warehouse Supervisor	21020	WG-7/$14.68
Warehouse Specialist	20400	WG-5/$12.90
Shipping/Receiving Clerk	21100	WG-4/$12.01
Material Expeditor	21030	WG-7/$14.68
Dispatcher	21100	WG-4/$12.01
Material Handling Laborer	21040	WG-2/$10.23
Word Processor III	01613	GS-5/$11.23
Word Processor II	01612	GS-4/$10.04
Word Processor I	01611	GS-3/$8.94
Key Entry Operator II	01132	GS-3/$8.94

Illustrator III	13043	GS-9/$16.45
Illustrator II	13042	GS-7/$13.91
Illustrator I	13041	GS-5/$11.23

52.244-2 SUBCONTRACTS (AUG 1998) - ALTERNATE I (AUG 1998)

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

Approved purchasing system means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

Consent to subcontract means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) This clause does not apply to subcontracts for special test equipment when the contract contains the clause at FAR 52.245-18, Special Test Equipment.

(c) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (d) or (e) of this clause.

(d) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that--

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds--

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(e) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

ANY PROPOSED SUBCONTRACT NOT APPROVED AT THE TIME OF CONTRACT AWARD, WITH THE EXCEPTION OF INCIDENTAL SUBCONTRACTING IN THE AMOUNT OF $2,500.00 OR LESS.

(f)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (c), (d), or (e) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting--

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) If the Contractor has an approved purchasing system and consent is not required under paragraph (c), (d), or (e) of this clause, the Contractor nevertheless shall notify the Contracting Officer reasonably in advance of entering into any (i) cost-plus-fixed-fee subcontract, or (ii) fixed-price subcontract that exceeds the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of this contract. The notification shall include the information required by paragraphs (f)(1)(i) through (f)(1)(iv) of this clause.

(g) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination--

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(h) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(i) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(j) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(k) Paragraphs (d) and (f) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (APR 2003)

(a) Definitions. As used this clause--

"Commercial item", has the meaning contained in the clause at 52.202-1, Definitions.

"Subcontract", includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c)(1) The Contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.219-8, Utilization of Small Business Concerns (OCT 2000) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds $500,000 ($1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (APR 2002) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212(a)).

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

(v) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (APR 2003) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631) (flow down required in accordance with paragraph (d) of FAR clause 52.247-64).

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

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

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

52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any Defense Federal Acquisition Regulation Supplement (DFARS) (48 CFR Chapter 2) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

252.211-7003 ITEM IDENTIFICATION AND VALUATION (JAN 2004)

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

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

Commonly accepted commercial marks means any system of marking products for identification that is in use generally throughout commercial industry or within commercial industry sectors. Some examples of commonly accepted commercial marks are: EAN.UCC Global Trade Item Number; Automotive Industry Action Group B-4 Parts Identification and Tracking Application Standard, and B-2 Vehicle Identification Number Bar Code Label Standard; American Trucking Association Vehicle Maintenance Reporting Standards; Electronic Industries Alliance EIA 802 Product Marking Standard; and Telecommunications Manufacturers Common Language Equipment Identification Code.

Concatenated unique item identifier means--

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

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

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

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

DoD unique item identification means marking an item with a unique item identifier that has machine-readable data elements to distinguish it from all other like and unlike items. In addition--

(1) For items that are serialized within the enterprise identifier, the unique identifier shall include the data elements of
issuing agency code, enterprise identifier, and a unique serial number.

(2) For items that are serialized within the part number within the enterprise identifier, the unique identifier shall include the data elements of issuing agency code, enterprise identifier, the original part number, and the serial number.

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

Enterprise identifier means a code that is uniquely assigned to an enterprise by a registration (or controlling) authority.

Government's unit acquisition cost means--

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

(2) For cost-type line, subline, or exhibit line items, the Contractor's estimated fully burdened unit cost to the Government for each item at the time of delivery.

Issuing agency code means a code that designates the registration (or controlling) authority.

Item means a single hardware article or unit formed by a grouping of subassemblies, components, or constituent parts required to be delivered in accordance with the terms and conditions of this contract.

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

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

Registration (or controlling) authority means an organization responsible for assigning a non-repeatable identifier to an enterprise (i.e., Dun & Bradstreet's Data Universal Numbering System (DUNS) Number, Uniform Code Council (UCC)/EAN International (EAN) Company Prefix, or Defense Logistics Information System (DLIS) Commercial and Government Entity (CAGE) Code).

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

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

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

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

Unique item identification means marking an item with machine-readable data elements to distinguish it from all other like and unlike items.

Unique item identifier means a set of data marked on items that is globally unique, unambiguous, and robust enough to ensure data information quality throughout life and to support multi-faceted business applications and users.

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

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

(c) Unique item identification.

(1) The Contractor shall provide DoD unique item identification, or a DoD recognized unique identification equivalent, for--

(i) All items for which the Government's unit acquisition cost is $5,000 or more; and

(ii) The following items for which the Government's unit acquisition cost is less than $5,000:

Contract Line, Subline, orExhibit Line Item Number

Item Description

(iii) Subassemblies, components, and parts embedded within items as specified in Exhibit Number N/A or Contract Data Requirements List Item Number N/A.

(2) The unique item identifier and the component data elements of the unique item identifier shall not change over the life of the item.

(3) Data syntax and semantics. The Contractor shall--

(i) Mark the encoded data elements (except issuing agency code) on the item using any of the following three types of data qualifiers, as specified elsewhere in the contract:

(A) Data Identifiers (DIs) (Format 06).

(B) Application Identifiers (AIs) (Format 05), in accordance with ISO/IEC International Standard 15418, Information Technology--EAN/UCC Application Identifiers and ASC MH 10 Data Identifiers and ASC MH 10 Data Identifiers and Maintenance.

(C) Text Element Identifiers (TEIs), in accordance with the DoD collaborative solution ``DD'' format for use until the final solution is approved by ISO JTC1/SC 31. The DoD collaborative solution is described in Appendix D of the DoD Guide to Uniquely Identifying Items, available at http://www.acq.osd.mil/uid; and

(ii) Use high capacity automatic identification devices in unique identification that conform to ISO/IEC International Standard 15434, Information Technology--Syntax for High Capacity Automatic Data Capture Media.

(4) Marking items.

(i) Unless otherwise specified in the contract, data elements for unique identification (enterprise identifier, serial number, and, for serialization within the part number only, original part number) shall be placed on items requiring marking by paragraph (c)(1) of this clause in accordance with the version of MIL-STD-130, Identification Marking of U.S. Military Property, cited in the contract Schedule.

(ii) The issuing agency code--

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

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

(d) Commonly accepted commercial marks. The Contractor shall provide commonly accepted commercial marks for items that are not required to have unique identification under paragraph (c) of this clause.

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

(1) Description.*

(2) Unique identifier**, consisting of--

(i) Concatenated DoD unique item identifier; or

(ii) DoD recognized unique identification equivalent.

(3) Unique item identifier type.**

(4) Issuing agency code (if DoD unique item identifier is used).**

(5) Enterprise identifier (if DoD unique item identifier is used).**

(6) Original part number.**

(7) Serial number.**

(8) Quantity shipped.*

(9) Unit of measure.*

(10) Government's unit acquisition cost.*

(11) Ship-to code.

(12) Shipment date.

(13) Contractor's CAGE code or DUNS number.

(14) Contract number.

(15) Contract line, subline, or exhibit line item number.*

(16) Acceptance code.

* Once per contract line, subline, or exhibit line item.

** Once per item.

(f) Material Inspection and Receiving Report for embedded subassemblies, components, and parts requiring unique item identification. The Contractor shall report at the time of delivery, as part of the Material Inspection and Receiving Report specified elsewhere in this contract, the following information:

(1) Unique item identifier of the item delivered under a contract line, subline, or exhibit line item that contains the embedded subassembly, component, or part.

(2) Unique item identifier of the embedded subassembly, component, or part, consisting of--

(i) Concatenated DoD unique item identifier; or

(ii) DoD recognized unique identification equivalent.

(3) Unique item identifier type.**

(4) Issuing agency code (if DoD unique item identifier is used).**

(5) Enterprise identifier (if DoD unique item identifier is used).**

(6) Original part number.**

(7) Serial number.**

(8) Unit of measure.

(9) Description.

** Once per item.

(g) The Contractor shall submit the information required by paragraphs (e) and (f) of this clause in accordance with the procedures at http://www.acq.osd.mil.uid.

(h) Subcontracts. If paragraph (c)(1)(iii) of this clause applies, the Contractor shall include this clause, including this paragraph (h), in all subcontracts issued under this contract.

252.225-7043 ANTITERRORISM/FORCE PROTECTION POLICY FOR DEFENSE CONTRACTORS OUTSIDE THE UNITED STATES (JUN 1998)

(a) Except as provided in paragraph (b) of this clause, the Contractor and its subcontractors, if performing or traveling outside the United States under this contract, shall--

(1) Affiliate with the Overseas Security Advisory Council, if the Contractor or subcontractor is a U.S. entity;

(2) Ensure that Contractor and subcontractor personnel who are U.S. nationals and are in-country on a non-transitory basis, register with the U.S. Embassy, and that Contractor and subcontractor personnel who are third country nationals comply with any security related requirements of the Embassy of their nationality;

(3) Provide, to Contractor and subcontractor personnel, antiterrorism/force protection awareness information commensurate with that which the Department of Defense (DoD) provides to its military and civilian personnel and their families, to the extent such information can be made available prior to travel outside the United States; and

(4) Obtain and comply with the most current antiterrorism/force protection guidance for Contractor and subcontractor personnel.

(b) The requirements of this clause do not apply to any subcontractor that is --

(1) A foreign government;

(2) A representative of a foreign government; or

(3) A foreign corporation wholly owned by a foreign government.

(c) Information and guidance pertaining to DoD antiterrorism/force protection can be obtained from Space and Naval Warfare Systems Center Charleston, Code OA1; by telephone, DSN 588-4084 or 6737 or commercial (843) 218-4084 or 6737.

252.247-7023 TRANSPORTATION OF SUPPLIES BY SEA (MAY 2002)

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

(1) "Components" means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.

(2) "Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.

(3) "Foreign flag vessel" means any vessel that is not a U.S.-flag vessel.

(4) "Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.

(5) "Subcontractor" means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract.

(6) "Supplies" means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.

(i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.

(ii) "Supplies" includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.

(7) "U.S.-flag vessel" means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

(b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.

(2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if--

(i) This contract is a construction contract; or

(ii) The supplies being transported are--

(A) Noncommercial items; or

(B) Commercial items that--

(1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it contracts for f.o.b. destination shipment);

(2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that --

(1) U.S.-flag vessels are not available for timely shipment;

(2) The freight charges are inordinately excessive or unreasonable; or

(3) Freight charges are higher than charges to private persons for transportation of like goods.

(d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum --

(1) Type, weight, and cube of cargo;

(2) Required shipping date;

(3) Special handling and discharge requirements;

(4) Loading and discharge points;

(5) Name of shipper and consignee;

(6) Prime contract number; and

(7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.

(e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Maritime Administration, Office of Cargo Preference, U.S. Department of Transportation, 400 Seventh Street SW., Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information:

(1) Prime contract number;

(2) Name of vessel;

(3) Vessel flag of registry;

(4) Date of loading;

(5) Port of loading;

(6) Port of final discharge;

(7) Description of commodity;

(8) Gross weight in pounds and cubic feet if available;

(9) Total ocean freight in U.S. dollars; and

(10) Name of the steamship company.

(f) The Contractor shall provide with its final invoice under this contract a representation that to the best of its knowledge and belief--

(1) No ocean transportation was used in the performance of this contract;

(2) Ocean transportation was used and only U.S.-flag vessels were used for all ocean shipments under the contract;

(3) Ocean transportation was used, and the Contractor had the written consent of the Contracting Officer for all non-U.S.-flag ocean transportation; or

(4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written consent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

ITEM DESCRIPTION	CONTRACT LINE ITEMS	QUANTITY
TOTAL		

(g) If the final invoice does not include the required representation, the Government will reject and return it to the Contractor as an improper invoice for the purposes of the Prompt Payment clause of this contract. In the event there has been unauthorized use of non-U.S.-flag vessels in the performance of this contract, the Contracting Officer is entitled to equitably adjust the contract, based on the unauthorized use.

(h) In the award of subcontracts for the types of supplies described in paragraph (b)(2) of this clause, the Contractor shall flow down the requirements of this clause as follows:

(1) The Contractor shall insert the substance of this clause, including this paragraph (h), in subcontracts that exceed the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(2) The Contractor shall insert the substance of paragraphs (a) through (e) of this clause, and this paragraph (h), in subcontracts that are at or below the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

252.247-7024 NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000)

(a) The Contractor has indicated by the response to the solicitation provision, Representation of Extent of Transportation by Sea, that it did not anticipate transporting by sea any supplies. If, however, after the award of this contract, the Contractor learns that supplies, as defined in the Transportation of Supplies by Sea clause of this contract, will be transported by sea, the Contractor --

(1) Shall notify the Contracting Officer of that fact; and

(2) Hereby agrees to comply with all the terms and conditions of the Transportation of Supplies by Sea clause of this contract.

(b) The Contractor shall include this clause; including this paragraph (b), revised as necessary to reflect the relationship of the contracting parties--

(1) In all subcontracts under this contract, if this contract is a construction contract; or

(2) If this contract is not a construction contract, in all subcontracts under this contract that are for--

(i) Noncommercial items; or

(ii) Commercial items that--

(A) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);

(B) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(C) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

SECTION J List of Documents, Exhibits and Other Attachments

EXHIBIT	**TITLE**
Exhibit A	Contract Data Requirements List

ATTACHMENT	**TITLE**
Attachment 1	DD 254 Security Classification
Attachment 2	Wage Determination, No. 94-2103 Rev (30) dated 06/03/2003 94-2473 Rev (27) dated 06/05/2003
Attachment 3	Small Business Subcontracting Plan

DISTRIBUTION

CONTRACTOR:
Eagan, McAllister Associates, Inc.
47332 Eagan Mcallister Lane
P.O. Box 986
Lexington Park, MD 20653

DCAA OFFICE:
Columbia Branch Office
10025 Governor Warfield Parkway
One Mall North, Suite 200
Columbia, MD 21044-3521

PAYING OFFICE:
DFAS-Columbus Center
DFAS-South Entitlements
P.O. Box 182225
Columbus, OH 43218-2225

DCMA OFFICE:
DCMA Maryland
217 East Redwood Street
Suite 1800
Baltimore, MD 21202-5299

SPAWAR CODES:
Code 0123

Code 61C-MP

Code 616