

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

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2. AMENDMENT/MODIFICATION NO. 0003		3. EFFECTIVE DATE June 19, 2000	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (if applicable)
6. ISSUED BY U. S. Army Engineer District Philadelphia 100 Penn Square East Wanamaker Bldg, Rm 643 Philadelphia, PA 19107-3390		CODE	7. ADMINISTERED BY (if other than Item 6) Same as block 6	
9. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)		9A. AMENDMENT OF SOLICITATION NO. X DACW61-00-B-0020 9B. DATED (SEE ITEM 11) 5/30/2000 10A. MODIFICATION OF CONTRACTS/ORDER NO. 10B. DATED (SEE ITEM 13)		
CODE	FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

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

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

(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)

DEBRIS MANAGEMENT VESSEL

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A THIS CHANGE ORDER IS ISSUED PURSUANT TO (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT/ORDER NO. IN ITEM 10A.

B THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D OTHER (Specify type of modification and authority)

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

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

THE DATE AND TIME OF BID OPENING REMAINS THE SAME.

This amendment is issued to correct legibility problems with the solicitation and change the following:

- a. Clause numbers C201, C315, C320, C410, C415, C420, C420, C460, and C740 are changed to correct the referenced Drawing Number from 562-B205-01 to read 562-A205-01.
- b. Clause numbers C001, C040, C305, C425, C455, C456, C605, C660, C805, H04, and H18 are revised. Clause C425, paragraph C is further amended to change the reference from CHEMGRATE CORP, etc." to "Grating Pacific, Inc., (562) 598-4314".

Bidders MUST acknowledge receipt of this amendment on each copy of the offer submitted. FAILURE TO ACKNOWLEDGE THIS AMENDMENT BY THE DATE AND TIME SET FOR BID OPENING MAY RESULT IN REJECTION OF THE BID.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
_____ (Signature of person authorized to sign)		BY _____ (Signature of Contracting Officer)	

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SOLICITATION, OFFER AND AWARD

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)

RATING

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2. CONTRACT NO. DACW61-00-C-		3. SOLICITATION NO. DACW61-00-B-0020		4. TYPE OF SOLICITATION <input checked="" type="checkbox"/> SEALED BID (IFB) <input type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED May 30, 2000		6. REQUISITION/PURCHASE NO. W25PHS-0090-3019	
7. ISSUED BY U. S. Army Engineer District, Philadelphia 100 Penn Square East, Wanamaker Bldg., Rm 643 Philadelphia, PA 191007-3390				8. ADDRESS OFFER TO (If other than Item 7)					

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

SOLICITATION

9. Sealed offers in original and 1 copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in Rm 643 until 1400 local time 7/6/00 (Hour) (Date)

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

10. FOR INFORMATION CALL:	A. NAME William A. Bailey	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) 215-656-6932
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OFFER (Must be fully completed by offeror)

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

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

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52-232-8)	10 CALENDAR DAYS	20 CALENDAR DAYS	30 CALENDAR DAYS	CALENDAR DAYS
	%	%	%	%
14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)
15B. TELEPHONE NO. (Include area code)	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE.		17. SIGNATURE
			18. OFFER DATE

AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION 96 NA X 3123.0000 E5 X 08 2423 099993 963653 2520 0025MG
22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304(c) () <input type="checkbox"/> 41 U.S.C. 253(c) ()		23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified) See Section G
24. ADMINISTERED BY (If other than Item 7) See Section G	CODE	25. PAYMENT WILL BE MADE BY See Section G
26. NAME OF CONTRACTING OFFICER (Type or print)	27. UNITED STATES OF AMERICA <i>(Signature of Contracting Officer)</i>	
		28. AWARD DATE

IMPORTANT -- Award will be made on this Form, or on Standard Form 28, or by other authorized official written notice.

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**US Army Corps
of Engineers**

Marine Design Center

PLANS AND SPECIFICATIONS

TO

DESIGN, CONSTRUCT,
TEST AND DELIVER

ONE
DEBRIS MANAGEMENT VESSEL

DACW61-00-B-0020

DEPARTMENT OF THE ARMY
Corps of Engineers
Marine Design Center
Philadelphia, PA

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Design, Construct, Test and Deliver a Debris Management Vessel for the Corps of Engineers, Huntington District for use in support of its mission at Bluestone Lake, West Virginia, in accordance with the attached plans and specifications:

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL PRICE</u>
0001	DEBRIS MANAGEMENT VESSEL	1	VESSEL	XXXX	XXXXXXXX
0001AA	<u>PLANNING</u> (The submittals required for "Planning" are listed in contract clause H02.) This item is initiated by a Notice To Proceed (NTP) issued by the Contracting Officer.	1	JOB	XXXX	\$_____
0001AB	<u>ENGINEERING AND SCHEDULING</u> (The submittals required for "Engineering and Scheduling are listed in contract Clause H02.) This item is initiated only by a Notice To Proceed issued by the Contracting Officer. The Contractor may not start this item until he receives a Notice To Proceed for this item.	1	JOB	XXXX	\$_____
0001AC	<u>CONSTRUCT, TEST AND DELIVER</u> the vessel (The submittals for "Construct, Test and Deliver" are listed in contract Clause H02.) This item is initiated only by a Notice To Proceed issued by the Contracting Officer. The Contractor may not start this item until he receives a Notice To Proceed for this item.	1	JOB	XXXX	\$_____
	TOTAL	1	VESSEL	XXXX	\$_____
0002BC	<u>CONSTRUCT, TEST AND DELIVER</u> the vessel (The submittals for "Construct, Test and Deliver" are listed in contract Clause H02.) This item is initiated only by a Notice To Proceed issued by the Contracting Officer. The Contractor may not start this item until he receives a Notice To Proceed for this item.		JOB	:	\$_____
	TOTAL FOR ITEM 1 & 2			XXXXXX	\$_____

INSERT LOCATION OF THE SHIPYARD WHERE THE WORK WILL BE PERFORMED:

The Government may reject an offer as non-responsive if it is materially and mathematically unbalanced as to price for any offered item or combination of offered items. An offer is unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.

Refer to contract Section M for EVALUATION FACTORS FOR AWARD criteria.

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PART I - SCHEDULE - SECTION C
DESCRIPTION/SPECIFICATION/WORK STATEMENT

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PART I - THE SCHEDULE - SECTION C
DESCRIPTION/SPECIFICATION/WORK STATEMENT

C000 GENERAL

C001 GENERAL MISSION STATEMENT

The Marine Design Center (MDC) of the U.S. Army Corps of Engineers (USACE) has issued this solicitation to acquire a self-propelled, welded steel, Drift and Debris Management Vessel, which conforms to commercial standards and shall serve the U.S. Army Corps of Engineers, Ohio River Division, Huntington District (CEORH) in support of its mission at Bluestone Lake.

A second, identical vessel may be procured as an option by the Government once a contract has been awarded. If awarded, the option vessel shall be delivered to the same location as the first vessel. Since the option vessel is intended to be identical to the first vessel, no Phase I, Planning, or Phase II, Engineering and Scheduling, submittals need to be submitted for this vessel. All Phase III submittals, per Clause H02, shall be provided with an option vessel.

A. MISSION

The primary mission of the vessel is to manage drift and debris upriver of the Bluestone Lake Dam to ensure that individual pieces are small enough to pass through the sluice gates of the dam. The intention of Huntington District is to minimize, or possibly eliminate, the logjams that occur behind the dam following severe weather events.

B. OPERATION PROFILE

The vessel will operate solely on the upriver side of the Bluestone Lake Dam. It will maneuver under its own power, directing drift and debris through the sluice gates of the dam, reducing the size of large individual pieces of drift and debris, and removing non-biodegradable objects from Bluestone Lake. The vessel will also travel upriver a few miles to intercept debris before it reaches the dam.

Large objects will be removed from the water by the vessel's crane and stored on deck until it can be offloaded to the bank. Offloading is accomplished by having the vessel push itself as close to the shoreline as possible and having the onboard crane remove the debris to the bank.

A combination grapple and log-sawing device shall be provided to allow logs to be cut to manageable lengths and returned to the lake so they can pass through the dam sluices.

The vessel will also set buoys as necessary.

C. ENVIRONMENTAL CONSIDERATIONS

Service and storage will be in the fresh waters of Bluestone Lake and the New River. The vessel will operate intermittently, at any time of the year when debris management is required.

The vessel shall be designed to withstand the following ASHRAE design environment conditions for Beckley, West Virginia:

Ambient Temperatures	
Operating Season	+ 81°F max + 4°F min

D. SPECIAL CONSIDERATIONS

The vessel must be delivered to the upriver side of the Bluestone Lake Dam, afloat and ready for service. The intended launch site is Corps of Engineers property leased to the state of West Virginia and operated as part of Bluestone State Park, approximately three miles upriver of the dam. There is a large paved parking lot at the Bluestone Lake launch site that may be used by the contractor for assembly of any vessel components or machinery. The launch site is patrolled but not secured. The contractor shall be responsible for the security of the vessel and its components at all times.

Access to the launch site is limited to state and county roads. Rail service is also available, but only to the downriver side of the Dam. If the vessel or components are brought into the area by rail, they will still require transportation by road to get to the launch site.

The contractor shall return the launch site to its original condition following the completion of all work.

C002 PRINCIPLE CHARACTERISTICS

These Specifications are intended to describe the Concept for a Drift and Debris Management Vessel. The principle dimensions of the vessel shall be approximately as follows:

Length Overall (molded).....	50'-0"
Beam Overall (molded).....	20'-0"
Depth (molded).....	5'-0" (Minimum)
Maximum Draft (full load, 10 tons deck load)	2.5 feet

C003 DESIGN STANDARDS

The Drift and Debris Management Vessel shall be designed and constructed in accordance with the latest editions of the following standards:

- U.S. Army Corps of Engineers, Publication No. EM 385-1-1; "Safety and Health Requirements Manual".
- American Bureau of Shipping (ABS) "Guide For Shipbuilding and Repair Quality Standard for Hull Structures During Construction".

- American Bureau of Shipping (ABS) "Rules for Building and Class ing Steel Vessels for Service on Rivers and Intracoastal Waterways".
- U.S. Coast Guard Regulation, 46 CFR Subchapter J - "Electrical Engineering".
- U.S. Coast Guard, Navigation Rules and Regulations - International and Inland.
- National Electrical Code (NEC).

C005 CONCEPT DESIGN

These specifications describe a "Concept" for the subject vessel. Structure, arrangements, mechanical systems, electrical systems, and capacities have been considered sufficiently to verify feasibility and to achieve an adequate level of confidence that the vessel concept will meet the performance and operational requirements, and design objectives of the U.S. Army Corps of Engineers.

It is intended that the Contractor will be able to bid, design, and construct the vessel based on standard commercial design and fabrication and practice.

C006 VESSEL IDENTIFICATION

The vessel to be acquired through this solicitation has been assigned the following information:

MDC Hull Number.....562
MDC Project Number.....2397
Vessel Name.....To be determined

The vessel name has not been selected at this time. For the purpose of initial documentation and drawing preparation, the title "DEBRIS MANAGEMENT VESSEL" shall be used. Upon selection of the official name b y the Government, the Contractor shall incorporate the name into the "As-Built" documents.

The MDC hull number shall be used in lieu of an "Official Number".

C010 DEFINITIONS

CONTRACTING OFFICER (K.O.) - A person with the authority to enter into, administer and/or terminate contracts and make related determinations and findings.

COR - Contracting Officer's Representative - a member of the contract management and quality assurance team authorized by the Contracting Officer to perform certain administrative and managerial duties. A copy of the COR's authority letter shall be furnished to the Contractor.

USACE - Acronym for United States Army Corps of Engineers.

MDC - Acronym for Marine Design Center.

QC - Quality Control - Quality Control is a function of the Contractor. Refer to Clause E03. Quality Assurance (QA) is a function of the Government.

FINAL DESIGN - Final Design is the final phase in a project design. In "Design and Build" projects, the Final Design is performed by the construction contractor, after contract award. Final Design is always completed prior to the start of construction.

THE FOLLOWING IS A STANDARD DEFINITION FOR A DETAILED FINAL DESIGN EFFORT. DUE TO THE LIMITED TECHNICAL COMPLEXITY OF THIS DESIGN, PORTIONS OF THIS DEFINITION MAY NOT BE APPLICABLE TO THIS PROJECT, BUT ARE INCLUDED FOR GUIDANCE DURING DESIGN DEVELOPMENT.

Once the Final Design Phase has commenced, changes in hull dimensions and subdivision, for other than very minor changes in arrangement, will not be made.

During Final Design:

The scantlings and main structure will be defined. A detailed Weight Estimate will be generated using the MDC Work Breakdown Structure (WBS). An Intact and Damaged Stability Analysis will be performed in accordance with the contract.

Scantling plans will be developed showing all structural members. The scantling plans will include welding details and references to other plans as appropriate to provide a cohesive consistent design throughout all the drawings.

All plate seams, headers, snipes, cut-outs, radius corners and brackets will be detailed. "Typical" views may be used for numerous repetitions of identical or mirror images. Calculations required to size the scantlings and where special structural loading is intended will accompany the plans for the Government's Quality Assurance function.

Joiner details and material selection shall be worked out with schedules for sheathing, insulation, doors, furniture, fixtures, etc.

Machinery systems will be defined by selection or specification. All mechanical systems will be laid out in detail showing valves, filters, controls, receivers, pumps, strainers, sea chests, consumers, takedown connections, separators and other principal features or devices to scale.

Mechanical System Schematic Drawings will be prepared and will consist of a system schematic on the first sheet, with a Major Material Schedule, Major Equipment List and necessary sections and elevations on the second and subsequent sheets. Sections and elevations are required only to ensure that piping, ducting and cabling are routed through congested areas without interference.

Major system equipment (engines, motors, pumps, strainers, etc.) shall be shown in actual outline form (not schematically or by block).

All auxiliary pumps, hydraulic components and machinery, deck machinery and ancillary equipment will be sized and specified or selected.

HVAC systems will be defined and will include the calculations of fan and blower sizes and powers, heating and air conditioning equipment sizing and duct sizing. An HVAC load analysis will be completed.

The electrical system will be defined with consumers identified and quantified, controls and switch gear identified, a complete load analysis, short circuit analysis and one line diagram prepared and generator sets specified or selected. Lighting, receptacle and cable systems will be detailed and superimposed on a vessel arrangement with Material.

The Final Design must be so clear in its intent that the features, characteristics, capabilities, design criteria, margins and success criteria of each component or system cannot be mistaken. The level of detail presented and documented by calculation in the Final Design shall be sufficient for all required regulatory approvals, for construction and for the Government's Quality Assurance function.

C025 CONTRACTOR QUALITY STANDARDS

A. GENERAL

All articles, fittings, equipment, machinery, materials and supplies used in the construction and outfitting of the vessel shall be new, free of defects and imperfections, and be the standard product of reputable manufacturers. All items shall be suitable for marine application and meet the latest requirements of standard specifications published by national authorities. No salvaged materials shall be used in the works. Spare parts and service shall be readily obtainable.

During construction and before delivery, protection shall be provided for the vessel and all associated items intended for use on the vessel.

The Contractor shall be responsible for the construction of a complete and functioning vessel. Inspection by the MDC is for the purpose of verifying the proper function of the Contractor's quality control measures and is not to be used as a substitute for control of quality by the Contractor.

B. MATERIALS

Unless otherwise noted or specified on the Contract Drawings, all structural hull material shall be in accordance with the following specifications:

- American Bureau of Shipping (ABS), "Rules for Building and Classing Steel Vessels for Rivers and Intracoastal Waterways".
- Welding Materials - ABS "Approved Welding Electrodes, Wire-Flux and Wire Gas Combination".

Materials not included in the ABS specifications noted herein, shall be of commercial quality to ASTM, ANSI, or SAE specifications.

C. WORKMANSHIP

(1) General

All frames and longitudinal members, where applicable, shall be provided with limber holes and/or snipes of adequate size to allow water in bilges to flow to the lowest point of each compartment. Limber holes shall also be provided to allow for the passage of air in tanks. Limber holes shall be located at the plate edge.

All plating shall be neatly cut, fitted and welded. All sharp or ragged edges, which may constitute a hazard to personnel or present poor appearance, shall be ground smooth.

Where work of one trade joins, passes through, or is on other work, there shall be no discrepancy or misfit when completed. In engaging one kind of work with another, marring or damaging of previously accepted construction shall be cause for rejection.

All parts of the work intended to join or bear upon others shall have complete and solid surface contact and fit together neatly without excessive cold work during erection. All faying surfaces shall be painted and be clean and smooth before bolting up. Shims or liners shall not be used for the purpose of overcoming a bad fit.

Ends of outstanding flanges shall be cropped. Lightening holes may be punched, sawn, burned, or sheared and all edges shall have burrs removed.

All holes for machinery mounting bolts shall be drilled or punched; burning is not acceptable. Holes in a member having sharp curvature shall be avoided whenever possible.

Wherever bolts are used as fasteners, the bolts shall be fitted with lockwashers or similar approved fastener locking device.

(2) Welding

All welding shall be in accordance with the current rules and regulations of the American Bureau of Shipping.

All welding equipment used on the work shall be of a modern type subject to close control. The electrodes used throughout the work shall be suitable for use with the parent metal at each weld, and be approved by ABS.

Welding procedure, as to direction, length, numbers and sequence of beads, shall be carefully planned to minimize lock-up stresses. Care shall be exercised to produce smooth even beads, especially on all exposed plating and fittings. Beads shall be chipped and ground where directed by the Contracting Officer.

(3) Welders

All welding under this contract shall be done only by welders who have successfully passed the qualification tests of the American Bureau of Shipping or other regulatory bodies acceptable to ABS.

The Contractor shall bear the expense of conducting these tests and shall certify, by name to the Contracting Officer, welders who have successfully passed the prescribed tests and hold current, valid certifications.

The Contractor shall require any welder to repeat these tests when, in the opinion of the COR, the work of the welder indicates a reasonable doubt of his proficiency. In such cases, the welder shall be disqualified from any welding under this Contract until he has successfully passed the retest.

The Contractor shall maintain records of each welders certification during the course of the Contract. The records are to be available for examination upon the request of the COR or his representative.

D. PLATE FAIRNESS

Steel plating shall be installed using proper welding procedures and sequences to insure fair plating panels with minimum distortion. The use of filler materials to surface unfair areas is not acceptable.

Maximum allowable plating distortion is depicted in the American Bureau of Shipping (ABS) "Guide For Shipbuilding and Repair Quality Standard for Hull Structures During Construction". Distortion may not exceed the amounts in the guide.

E. INSTALLATION

Materials and equipment shall be installed in accordance with the approved recommendations of the manufacturer, and in compliance with the Contract documents. The installation shall be accomplished by workmen skilled in this type of work.

C040 SCOPE OF WORK

A. GENERAL

The Contractor shall design, build and deliver a fully functioning vessel in accordance with the Contract.

During the Engineering Phase of the Contract, the Contractor shall prepare a single "Final Design" for the vessel described in the Contract. That final design shall comply with the definition in Clause C010.

The Final Design shall be based on these Specifications and Contract Drawings.

During the construction phase of the Contract, the Contractor shall build, prepare "As-Built" drawings, test, deliver and final test the vessel.

B. CONTRACTOR'S RESPONSIBILITY

The Contractor assumes responsibility for building the vessel according to the furnished Specification and Contract Drawings. Should the Contractor determine at any time that he is unable to meet those design requirements, he shall notify the COR immediately of the problem experienced and his proposed manner of correction.

C. DRAWINGS AND DESIGN

The minimum drawings required during the Engineering Phase of the Contract are listed in Clause H13.

It is the intent of this Contract that the Final Design drawings be complete in every respect. All information required to construct the vessel and communicate to MDC the details of the construction shall be present on the drawings.

The Contractor shall perform engineering and design as required to develop the minimum required Final Design drawings, and to verify compliance with all technical requirements.

All drawings submitted to MDC for acceptance shall include as part of the submittal the supporting calculations and vendor "cut" sheets. Calculations supporting choice of structural scantlings, duct and piping sizes, and pump and fan sizes shall be presented in a professional manner stating assumptions, showing calculations, and presenting conclusions. Multiple sheet drawings shall have all sheets submitted at the same time for MDC review.

The Final Design prepared by the Contractor shall be submitted for review and acceptance by the Government. Detailed submittals to MDC and the costs of any required inspections or testing are the responsibility of the Contractor.

D. DELIVERY

The vessel shall be delivered to the upriver side of Bluestone Lake Dam, near Hinton, West Virginia. Upon delivery, the vessel shall be afloat and ready for operation. If an option vessel is awarded, it shall be delivered to the same location, and be afloat and ready for operation.

Access to this area is limited to 2-lane winding mountain highways. A freight railroad line runs through the community on the downriver side of the dam; however, the vessel will have to be transported to the upriver side of the dam for launching.

The contractor is required to deliver the vessel to the site, launch the vessel, fully test the vessel, and clean and restore the launch site to its original condition. The intended launch site is a Bluestone Lake State Park paved parking lot at the bank of the New River. The contractor return the launch site to its original condition upon completion of all work.

The contractor may, at his discretion, deliver the vessel complete, or in modular components which he will assemble on site. When completed, the vessel shall be all welded, or bolted in accordance with the requirements of Clause C305 Hull Structure.

The contractor is responsible for coordinating the delivery of the vessel to match the physical access restrictions to the site. The Contractor shall propose a method for delivery during the Planning Phase (CLIN 0001A) of the contract. The accepted delivery and assembly method shall be delineated in the logistics and assembly plan. Refer to Clause C170. The Contractor is responsible for the safe delivery of the vessel to Bluestone Lake.

PART I - THE SCHEDULE - SECTION C
DESCRIPTION/SPECIFICATION/WORK STATEMENT

C100 SCIENTIFIC

C105 HULL GEOMETRY

The hull shall have a partial width raked stern and full width raked bow. The sides shall be flat and vertical with rounded bilges. The deck shall be flat and without camber. The rake at the stern shall provide flow into the propeller and clearance for the propeller when in the reversed position.

The bow shall have a flat headlog usable for pushing logs and debris.

C115 WEIGHT ESTIMATE, INCLINING AND CRANE TEST

A. WEIGHT ESTIMATE

This vessel includes a crane, which requires the weight and center of gravity of the vessel to be closely monitored to ensure the required stability of the vessel under crane loading.

The Contractor shall prepare a weight estimate for the vessel during the Engineering Phase of the Contract. The estimate shall identify LCG, VCG, and TCG. The estimate shall be based on the drawings developed during the Engineering Phase. Sufficient detail shall be provided to identify individual bulkheads, deck, bottom, sides, frames in compartments, pipe sizes and lengths, equipment models, duct sizes and length, cable sizes and lengths, etc. Weights and centers of gravity shall be documented in a spreadsheet type format. A 5% margin shall be included in the Engineering Phase weight estimate.

Fourteen days prior to the launch of the vessel, the weight estimate shall be revised and submitted to MDC to reflect any changes to the weight and center of gravity of the vessel during the construction of the vessel. A weight margin of 2% shall replace the previous 5% margin and be included in the Construction Phase weight estimate.

B. INCLINING

Upon completion of all work, with the vessel in the lightship condition, an inclining test shall be conducted. The crane shall be in the stowed position. The inclining test shall be carried out in accordance with ASTM F 1321 - 90. The Contractor shall provide an inclining report with this criteria which gives the "as inclined" and "lightship" load condition displacements and CG locations.

Within 5 business days after completion of the inclining test, the Contractor shall submit the results to the Government.

C125 HYDROSTATICS

Hydrostatic calculations in tabular form are to be completed for drafts from 1 foot to the deck edge on 3 inch increments. The hydrostatic curves shall be plotted on a standard D size drawing or 8 -1/2" by 11" paper. The curves are to include as a minimum:

- displacement in fresh water, full and molded
- center of buoyancy (LCB, VCB)
- tons per inch immersion (TPI)
- longitudinal center of flotation (LCF)
- transverse and longitudinal metacentric heights (KM_L , KM_T)
- moment to change trim one inch (MTI1")
- block, prismatic and waterplane coefficients (C_b , C_p , C_{wp})

The tabulated values shall be submitted in professional form with a cover sheet including the standard drawing title block and drawing number.

C150 DAMAGED STABILITY

The vessel shall meet a one compartment damaged stability standard where, when any one compartment is flooded, the vessel shall maintain positive righting arm and all parts of the main deck shall remain above the flooded waterline.

Damaged stability calculations shall show equilibrium water lines, curve of righting arm versus heel angle in 5 degree increments. The freeboard shall be reported at the four deck corners for each damaged condition.

The Contractor shall prepare a damaged stability analysis during the Engineering Phase of this Contract documenting compliance with one compartment damaged stability.

The damaged stability analysis shall be presented in a complete, professional manner with an introduction, summary of results, and conclusion statements. The calculations shall be easy to follow without knowledge of the specific analysis software used. Units and origins for measurements shall be clearly labeled throughout the document.

C155 INTACT STABILITY

The intact stability calculations will be performed by the Government once the weight estimate has been developed by the contractor.

The analysis will be performed with the crane in its stowed position, and under various loading conditions.

The vertical center of gravity of the debris will be assumed 3' -0" above the deck. The longitudinal center will be centered within the debris area. The transverse center will be assumed on the centerline of the vessel.

C160 LOAD HANDLING STABILITY

The load handling stability of the vessel shall be in accordance with the Corps Safety Manual (16.F).

The Government will perform the stability analysis for all loading conditions. To facilitate this analysis, the Contractor shall provide the following crane manufacturer's data:

- lifting capacity charts (including any machine list criteria)
- cab weight and center of gravity
- boom weight and center of gravity (for each individual section)
- grapple/saw weight and center of gravity

This data shall be provided at least 21 days prior to the completion of the Engineering Phase (Phase II) of the contract. The Contractor is encouraged to provide this information as soon as it becomes available.

For the hull size (Clause C002), hull shape (Clause C105), and crane capacity (Clause C455), the crane lift stability of the concept vessel has been verified. Any deviations from these criteria may result in diminished stability characteristics for which the Contractor is responsible.

The Contractor shall perform his own calculation for the crane lifting stability to justify any deviations from the concept design that may have occurred.

If any crane lift limitations are determined to exist, the Government will notify the Contractor promptly. The Contractor shall respond with a proposed solution within 15 days.

C170 LOGISTICS & ASSEMBLY

A. DRAWING

The Contractor shall provide a plan explaining and/or displaying the proposed method for transporting the vessel from their facility to the launch site. The plan shall include any details regarding assembly of modules, launching details, and security of the vessel at the launch site.

The complete submittal of this plan shall be submitted no later than one month after the start of the Construction Phase of this Contract.

B. ASSEMBLY SITE

The Government will make available an assembly site on the upriver side of Bluestone Lake Dam; however, the Contractor shall be responsible to provide all power and materials, as well as return the site and its access road to the condition they were in prior to this use. The contractor shall also be responsible for security of components at the assembly site.

C180 NOISE AND VIBRATION

Noise in the deckhouse and crane cab shall be in accordance with OSHA regulations for an 8 hour/day work period exposure without hearing protection.

C185 TESTS AND TRIALS

This vessel and its component parts shall undergo testing and trials in accordance with Clause E05.

Tests and trials shall be performed on the assembled vessel at the Contractor's facility and on site after delivery.

PART I - THE SCHEDULE - SECTION C
DESCRIPTION/SPECIFICATION/WORK STATEMENT

C200 GENERAL ARRANGEMENTS

C201 VESSEL CONFIGURATION

The configuration of the hull and deck arrangement shall be as shown on Contract Drawing 562 -A205-01, OUTBOARD PROFILE AND ARRANGEMENT, except as noted below.

Bulkheads and subdivisions within the hull have been shown on Contract Drawing 562-A205-01 as suggested locations only. Zones have been depicted to provide a general sense of how the hull arrangement should be laid out for the basic intended functions of the vessel. It is the responsibility of the Contractor to design the location and size of sub-assemblies and bulkheads of the hull structure to meet the one compartment damaged stability requirements of Clause C150, and the intact stability requirements of Clauses C155 and C160, and vessel transportation requirements of Clause C170.

Arrangements shall provide ready accessibility to machinery and operating equipment for operation, maintenance, and inspection.

C215 GENERAL ARRANGEMENT

A. HULL

The hull shall be subdivided as necessary to comply with the stability (Clauses C150, C155 and C160) and transportation (Clause 170) requirements of the vessel.

All compartments shall be accessible through hatches in the main deck. Two hatches, at opposite corners, shall be provided in each compartment.

Two center hull compartments shall be utilized in part as storage spaces. Structure within these spaces shall provide an open arrangement to facilitate access and stowage.

The hull shall contain the fuel oil tank.

B. MAIN DECK

The main deck shall contain a pedestal -mounted crane located on the centerline of the vessel near the bow, open deck space to temporarily store collected debris, the propulsion engine and z-drive unit, generator set and deckhouse. No walkway shall be less than 36" clear width.

C. DECKHOUSE

A deckhouse shall be located slightly forward of the propulsion unit at the aft end of the vessel. The deckhouse shall enclose the propulsion and steering, provide sufficient space to allow 4 people to sit, a small toilet space, and space for a large lockable steel toolbox.

C255 CONSOLE ARRANGEMENT

The pilothouse console shall contain all controls, alarms, monitoring equipment, communication, and navigation equipment necessary for the vessel's operation. All gauges and indicators shall be installed with lights and dimmer switches.

The position and location of the equipment on the console shall be tentatively determined during the Engineering Phase, and confirmed during the Construction Phase. The console arrangement shall be approved by the COR prior to fabrication.

The console and pilot's chair shall be elevated on a platform above the main deck by 18" inches to improve the visibility of the operator. A step shall be provided to access the console platform.

PART I - THE SCHEDULE - SECTION C
DESCRIPTION/SPECIFICATION/WORK STATEMENT

C300 STRUCTURE

C305 HULL STRUCTURE

A. GENERAL

The hull shall be of all welded steel construction and divided into watertight compartments.

The hull may be constructed of watertight compartment modules which are bolted together rather than welded together. If bolted construction is used, the bolting arrangements may not penetrate into the compartment watertight envelope. The bolting design shall be adequate to resist all loadings on the hull.

All steel shall conform to ASTM A36 ABS Grade, mild steel. Hull scantlings and all welding shall meet the minimum requirements of the ABS Rules, referenced in Clause C003.

Structural arrangements within the storage spaces shall minimize trusses, brackets and stanchions. The spaces shall be of an open configuration allowing easy access for the stowage of rope and other materials.

B. HEADLOG AND BOW

The headlog and bow area of the hull shall be reinforced for use in pushing against log jams.

The headlog plate shall be 3/4" thick. The rake bottom plate shall be 3/8" thick and extend aft of the rake by 12 inches. The side shell plate from the headlog to 18 inches aft of the rake shall be 3/8" thick.

The vertical stiffeners of the headlog shall be a minimum of 5" x 3" x 5/16" angles spaced at maximum every 18", and a 12" x 3" x 3/8" flanged plate shall replace every third stiffener placement. This stiffening shall be integrated into the bow structure with no unsupported ends and be continuous welded to plating and adjacent structure.

C. MAIN DECK

The deck (including all stiffeners) forward of the deckhouse shall be designed for a deck loading of 1000 lbs/ft² to accommodate debris storage. The main deck plate shall not be less than 5/16" thick.

The main deck shall be reinforced as necessary to support the crane pedestal, the deckhouse, the propulsion unit, and the generator set.

D. CONSOLE PLATFORM

An 18-inch high, welded steel, platform shall be constructed within the deckhouse in way of the control console and pilot's chair. Two welded steel steps with non-skid tread (one port and one starboard) shall be provided to access the platform. The steps shall be half the platform height and at least 16" wide by 8" deep.

E. CRANE PEDESTAL MOUNT

A mounting base of welded steel construction shall be provided and installed on the main deck. The top of the base shall be designed to mate with and bolt to the crane pedestal provided by the crane manufacturer. The base shall be a maximum of 12 inches high to accommodate the crane pedestal. The base shall be of sufficient strength to transfer the crane loads into the main deck and hull structure without exceeding the yield strength of the material with a factor of safety of 1.25.

F. DOUBLER PLATES

All deck fittings and equipment shall be mounted on doubler plates welded continuously to the deck with headers or brackets below. Doublers shall be slot welded to the deck on maximum 12 inch grid spacing. Plates shall have 6 inch radius corners and extend a minimum of 6 inches beyond the item in all directions.

G. OVERBOARD DISCHARGES

All overboard discharge openings through the shell plating shall be located as close to the main deck as practicable.

Discharge penetrations shall not extend beyond the hull plating and shall be of extra strong pipe welded to a circular insert shell plate. Insert plates shall be of equal or greater thickness than the wall of the attached spool piece. The insert plate thickness shall be at least 1/8 inch thicker than the hull plate thickness in the area of the penetration.

Any pipe penetrating the hull shall be fitted with schedule 80 spool pieces and sea valves. The inboard end of the spool piece shall have a 150 lb. pipe flange to bolt to the sea valve. The sea valve shall be located less than 6 inches from the hull opening.

Openings shall be located well clear of draft marks and other hull markings.

Special consideration shall be given for pipe penetrations between assemblies. Generally, they shall be viewed as overboard discharges.

C315 DECKHOUSE

The deckhouse shall be constructed on the aft end of the vessel, forward of the propulsion unit as shown on Contract Drawing 562-A205-01, OUTBOARD PROFILE AND ARRANGEMENT.

The deckhouse shall be constructed of all welded steel construction . All steel shall conform to ASTM A36 ABS Grade, mild steel. Deckhouse scantlings shall meet the ABS minimum requirements.

The deckhouse top shall be sloped aft with a minimum slope of 6 inches from front to back. The top shall overhang the deckhouse on all sides by 12 inches, and shall have a 2" x 1/4" flat bar seal -welded to the upper side, outer edge to act as a rain guard. Pipe style weather drains shall be installed in the aft outer corners of the top draining to the main deck.

The deckhouse shall have windows all around for maximum visibility.

Minimum finished headroom in the deckhouse shall be 7' -6" throughout (including in way of the control console platform).

C317 MAST

The Contractor shall provide and install a steel mast extending above t he aft side of the deckhouse. The mast shall provide a platform for the navigation lights and radio antennae.

C320 TANK

The fuel oil tank shall be all welded steel construction. The tank shall be constructed in accordance with ABS Rules.

The fuel oil tank shall be installed within the hull in a location approximately as shown on Contract Drawing 562-A205-01. The tank bottom and sides shall not be integral with the bottom and sides of the vessel. The Contractor may install an independent tank or construct a tank integral with the hull structure, except as previously noted.

The fuel oil tank shall be complete with manhole, fill connection, sounding tube, tank level indicator, containment box, drain, vent and all necessary connecting piping, gauges and controls as required by various clauses of this specification.

C330 FOUNDATIONS

Suitable foundations shall be provided under all units of machinery, crane, tanks, deck fittings, and other heavy concentrations of weight to properly mount the item, to distribute the loads into the hull structure, and to avoid undue stresses and vibrations in the hull.

The crane foundation shall smoothly transfer the maximum crane test loads into the hull structure without over stressing any member. The crane foundation , up to the crane slewing bearing shall be reviewed by ABS as part of the hull structure in accordance with ABS Crane Rules.

Foundations members shall be lightened and openings provided to permit access to all parts of the foundation for inspection, drainage and maintenance.

The propulsion unit, generator set, and crane foundation mounts shall be configured in accordance with the manufacturers' recommendations.

Bolt holes in foundations shall be templated from the unit.

Web plates of foundations shall be stiffened at holding -down bolts and other points of load concentration.

All equipment bolted to foundations shall have mounting bolt holes accurately bored (not burned) and reamed to provide a no-slop fit.

Threaded portion of the bolts shall be clear of the foundation or equipment pads, and heavy lock washers used under all nuts. Elastic stop nuts may be substituted for lock washers.

Where dripping of oil or water can be expected, the top plates of foundations shall be tight and project slightly beyond the edges of bedplates or bases of units to be supported. Flat bars shall be seal -welded around the edges of the top plates to retain any leakage of oil or water. Access shall be provided to remove the leakage. Quick disconnect fittings shall be provided to drain all drip pans and leakage containments.

PART I - SCHEDULE - SECTION C
DESCRIPTION/SPECIFICATION/WORK STATEMENT

C400 OUTFIT

C406 COATINGS

A. GENERAL REQUIREMENTS

The contractor shall provide a two component epoxy coating system on the vessel, with a urethane top coat on the main deck, deckhouse exterior and crane.

All interior spaces, except the interior of the fuel tank, shall be coated with two component epoxy system.

A minimum dry film thickness shall be provided as follows :

- 10 mils for all exterior coatings
- 4 mils for all interior coatings

B. SURFACE PREPARATION

Surface preparation for all structural steel shall be in accordance with Steel Structures Painting Council Standards, SSPC-SP10-85 (Near White Metal Blast) throughout. Profile after blasting shall be 1 -1/2 to 2-1/2 mils in depth and jagged. All mill scale, weld spatter, dirt, oil, and grease shall be removed.

Immediately upon completion of surface preparation, all steel shall be coated with the coating system described in this clause.

C. APPLICATION OF COATINGS

Surface preparation and paint application shall be in strict compliance with the coating manufacturer's recommendations. All painting on both interior and exterior surfaces below the main deck shall be accomplished prior to launching of the vessel.

D. COATING "TYPE" AND DFT SCHEDULE

All areas of the vessel shall be coated in accordance with the following schedule:

(1) Hull and Deckhouse Interior

All steel surfaces with the exception of the interior of the fuel oil tank, shall be coated at 4 mils DFT minimum.

(2) Hull and Deckhouse Exterior

All steel surfaces shall be coated at 10 mils DFT minimum. Non -skid garnet additive shall be added to the barrier coat on the main deck area, including the interior of the deckhouse and console platform.

The main deck, as well as all lettering and numerals above water, shall be overcoated with top coat of urethane.

(4) Fuel Oil Tank

The fuel oil tank interior shall be maintained with a coat of mineral oil applied immediately following surface preparation. The exterior of the tank below the main deck shall be coated the same as the hull interior.

E. COATING COLOR SCHEDULE

Colors shall conform to Federal Standard 595a(3) Colors Identification Numbers. Color chips (3" x 5") may be produced from the Naval Publications and Forms Center, 5801 Tabor Road, Philadelphia, PA 19120 (215 -697-2000). The coloring schedule shall be as follows:

AREA	COLOR/FS595 NUMBER
Hull Exterior	Black/17038
Deckhouse Exterior	Old Ivory/17855
Deck & Housetop	Deck Red/10076
Deckhouse Interior Deck	Deck Red/10076
Hull & Deckhouse Interiors	White/27880
Deck Fittings	Yellow/13655
Hull Markings	White/27880
Handrails & Grab Rails	Black/17038
Crane Pedestal Fdn.(Abv.Dk.)	Deck Red/10076

All items of machinery and equipment shall be painted with the individual manufacturer's standard colors. Painted surfaces damaged in handling and installing the equipment shall be repainted with paint supplied by or recommended by the individual manufacturer.

All unpainted machinery items having black cast or carbon steel surfaces shall be given a prime coat and finish coat of gray machinery enamel.

F. FINAL INSPECTION OF PAINTING

The Contractor is responsible for delivering the vessel with all painted surfaces in sound condition, and in accordance with this specification.

Prior to launching or assembly (of the sub-assemblies) of the vessel, all interior and exterior painting shall be thoroughly inspected, and any defects or damage in the coating shall be repaired by the Contractor as necessary to restore the integrity of the paint system, and to meet the requirements of the specification.

The vessel shall not be launched, nor shall sub-assemblies be assembled, until painting has been inspected by the COR.

All painting shall be re-inspected prior to Provisional Acceptance, and damaged areas of the coating shall be repaired by the Contractor to the satisfaction of the COR.

C410 HULL OUTFIT

A. RUB RAILS

A rub rail shall extend along each side of the vessel and across the bow and stern. The rub rail shall be located as shown on Contract Drawing 562-A205-01, OUTBOARD PROFILE AND ARRANGEMENT. Care shall be taken to minimize discontinuity between sub-assemblies.

The bow and stern rub rail shall be similar to JOHNSON DURAMAX MARINE SINGLE TOW -KNEES Model DB-1408 with 3/4" x 10" plate backed with vulcanized 2" thick rubber pad. The forward and aft corners shall be curved corner units similar to JOHNSON DURAMAX MARINE PRECURVED TOW-KNEES Model DB-1708 with 3/4" x 10" backing plate.

The sides shall be 10" x 1" steel plate with chamfered edges (3/4" at 45 degrees) continuously welded to the side shell.

C415 DOORS, WINDOWS, HATCHES and MANHOLES

A. GENERAL

All door, window, hatch and manhole openings shall be provided with headers as necessary to transfer the hull and local structural stresses around the openings.

B. DOORS

All doors shall be equipped with stainless steel handles and hinges, and shall have a door stop installed. All doors shall be 6' -8" high.

(1) Exterior Doors

All exterior doors shall be 30" wide, weathertight, solid core. The doors shall be completely seal welded at the top to prevent rain entering inside the core and corroding the door from the inside out. A 6-inch sill shall be provided.

The doors shall be fitted with fixed windows 18" x 18" (or larger). The doors are to be provided with mortise cylinder locks (common key) with latch bolt, dead bolt, and automatic closers. The dead bolt shall operate by key from both sides. The doors shall be located as shown on Contract Drawing No. 562-A205-01, OUTBOARD PROFILE AND ARRANGEMENT with the door swinging outward and aft.

(2) Interior Doors

The toilet space shall be accessed by a 24" wide, hollow core steel door (steel to be a minimum of 16 gauge) with louvered bottom. For privacy, the door shall have provisions for latching from the inside of the toilet space.

C. WINDOWS

All windows shall be a minimum 1/4 inch thick safety glass. All windows shall be of the same manufacturer to provide consistent styling, function and ease of repair.

The glass shall be set in neoprene glazing or in extruded aluminum frames, which are either clipped or bolted into the deckhouse structure in accordance with the manufacturer's recommendations.

Mullions between windows in the deckhouse shall be minimum width possible to reduce visibility obstruction. To minimize width, no joinery shall be installed along these mullions.

The tops of the windows shall be 6' -6" above the control console platform. The minimum vertical projected height of the windows in way of the control console platform shall be 36". Elsewhere, the vertical projected height shall be 42".

The forward and aft centerline windows shall be fitted with a heavy -duty de-icer similar to SEACLEAR heated window system. The heated window system shall be powered by 120 Volts AC.

Independently operated, pendulum type window wipers shall be supplied and installed for the center forward and center aft windows of the deckhouse. The window wipers shall be powered by a two speed, 120 volt AC motor and park sensor. The wiper controls shall be mounted on or near the control console within comfortable reach of the operator. Position of the controls shall be determined during the construction phase.

On the side bulkheads of the deckhouse, one window on each the port and starboard sides shall be of the sliding type with insect screens. The outer forward portions shall be fixed and the aft inner portions shall slide. The screens shall be aluminum framed with stainless steel mesh and shall be fitted into the track incorporated into the window frame.

The windows shall have see-through amber colored shades of the roll-up type.

The inside of all windows shall be fitted with finished steel security bars painted the same as the deckhouse interior. The security bars shall prevent intruder access to the deckhouse when the vessel is not in use, and shall be easily removable for normal operation of the vessel. Means of attachment shall allow for quick, frequent removal and reinstallation of the security bars by one person, without need for unusual or special tools.

D. HATCHES

Two access hatches shall be provided for each hull compartment. The hatches shall be located at opposing corners of each compartment.

Hatches shall be single bolt steel manholes with steel rings, flush, round, and watertight similar to Centex, with 24" clear opening. Each hatch shall be installed with a hasp, locking bar and padlock, or an alternative method for locking.

In each of the two storage compartments one of the two required hatches shall be square, aluminum with steel ring, flush, and watertight similar to FREEMAN Model 3030AMSR Square Lift -Out Hatch with a 30" x 30" clear opening.

A galvanized 5/16" steel chain shall be attached between the underside of the deck and each hatch to prevent loss of the hatch when open.

E. MANHOLES

An 18" clear opening, bolted plate oil -tight manhole shall be located in the fuel oil tank. The manhole shall be similar to Centex with countersunk screws.

C420 DECK FITTINGS

Deck fittings shall be located as shown on Contract Drawing 562 -A205-01, OUTBOARD PROFILE AND ARRANGEMENT.

A. KEVELS

The Contractor shall provide and install six steel, 24 -inch kevels. Three kevels shall be located along each side of the vessel (Port and Starboard). The kevels shall be of the open type with smooth formed openings.

B. DOUBLE BITTS

The Contractor shall provide and install four double bitts similar to NABRICO DF-537. One bitt shall be welded to each corner of the deck.

C425 HANDRAILS, GRAB RAILS AND GRATING

A. HANDRAILS

A pipe railing shall be installed along the sides and stern of the vessel in accordance with USACE Safety Manual EM-385-1. The rails and stanchions shall be of 1 -1/2 inch I.P.S. pipe.

Openings in the handrails (approximately 36") shall be provided near midship on both sides of the vessel, for personnel egress. The openings shall be fitted with a two tier chain rail in line with the pipe rail horizontal members. The chain shall be 3/16" proof coil chain, galvanized, and fitted with a snap hook at one end.

B. GRAB RAILS

Grab rails shall be provided on the exterior of all of the deckhouse bulkheads. Grab rails shall be 1-1/2 inch diameter nominal steel pipe, and positioned 34 inches above the deck.

C. GRATING

The hull compartments designated for storage shall be fitted out with fiberglass bar type, non -skid grating of about 1" x 4" pattern by 1" deep similar to CHEMGRATE Standard Grid (CHEMGRATE CORP., Woodinville, WA, 1-800-345-5636). The grating shall be designed to support a load of at least 100 lbs. per square foot. Deflection under full load shall not exceed 0.01 times the span.

Grating shall be cut and banded for fitting around piping such that no sacrifice of strength results.

Grating installation shall be performed in accordance with manufacturer's recommendations.

C427 VERTICAL LADDERS

Vertical ladders shall be installed at all hatches and manhole accesses. A vertical ladder shall be provided on the exterior of the deckhouse to access the deckhouse top.

C430 DECK COVERINGS & CEILINGS

A. DECK COVERING

Interior decking and console platform shall be of the same non-skid surface as used throughout the weather exposed deck.

B. CEILING

A suspended, vinyl faced acoustic ceiling shall be installed throughout the deckhouse and toilet space. The ceiling finished shall be a drop-in ceiling tile system using metal T tracks, with a perimeter support angle. The clear headroom shall be a minimum of 7' -6".

Equipment mounted to the ceiling shall be bolted through to ship structure.

C435 JOINER & FURNISHINGS

A. JOINER WORK

Vinyl faced aluminum sheathing shall be installed in the deckhouse and toilet space. Sheathing for vertical surfaces shall be about 0.050 inch thick aluminum sheet with vinyl finish similar to MALLYCLAD, Madison Heights, MI 48071 (313-585-4110).

All items mounted against the bulkhead panels shall be fastened directly to bulkhead support structure.

The color scheme of the joiner work shall be selected by the COR from available color options, only one color shall be chosen for the entire deckhouse.

Metal furring strips shall be provided where necessary to provide a firm fair base for the sheathing.

The sheathing shall be fastened to the furring strips or the deckhouse framing by pop rivets, or self-tapping stainless steel sheet metal screws with decorator caps. Fastener spacing shall prevent drumming and vibration of the sheathing.

Access panels shall be provided as required for access to wiring or piping behind the sheathing.

B. FURNISHINGS

(1) Toilet Space

The toilet space shall be furnished with an electric incinerating toilet, a two-roll toilet paper dispenser and a cabinet for the storage of toilet paper and toilet supplies

(2) Deckhouse

The deckhouse shall be furnished with a swivel pilot's chair similar to TURNBULL CO., Model 299, a control console, a settee with cabinet space below to store life jackets, a steel tool box with hasp (cushion atop to provide additional seating), and a 5 gallon bottled water dispenser.

C436 INSULATION

The Contractor shall thermally and acoustically insulate the deckhouse and toilet space.

The overhead and exterior vertical bulkheads of the deckhouse and toilet space shall be insulated with 4 inches of CLAREMONT's "Tuffskin 1613" insulating system, or similar. The outer surface shall be faced. The mounting shall be in accordance with the manufacturer's recommendations for marine service. However, as a minimum, the mounting studs shall be welded to the bulkhead/roof structure. Adhesive mounting is not acceptable.

C445 LIFESAVING, FIRE AND SAFETY

The Contractor shall provide and install the safety equipment required on USCG "Uninspected" vessels (46CFR, Subchapter C), and as listed below:

- One 24 unit first aid kit in waterproof container to be wall mounted in the deckhouse, outside of the toilet space.
- One 24 inch diameter ring buoy of unicellular plastic construction, with 90 feet of 3/8 inch SAMSON braid line and electric water light located on the forward side of the deckhouse.
- One portable fire extinguisher Class A -II, mounted inside the deckhouse in full view.
- One portable fire extinguisher Class B -II, installed in a weathertight box on the aft side of the deckhouse.

C455 CRANE, GRAPPLE AND SAW

A. CRANE

A pedestal mounted, diesel powered, hydraulically operated knuckle boom, loader -type crane, similar to PRENTICE E-180-SM, shall be provided and installed near the bow, at an equal distance from the bow and both sides of the vessel. The crane shall rotate 360 degrees.

The crane shall be completely self-sufficient, including its own fuel tank.

The crane shall be powered from an integral, crane mounted diesel engine similar to CUMMINS 4BTA3.9, with 113 hp. The engine shall be radiator/air cooled.

The crane shall include a 27 foot long, welded, high strength steel knuckle boom, aluminum -bronze pivot bearings, mounting hardware for installation of pedestal to vessel steel support structure, heated cab, and two halogen floodlights located within the operator guard.

The cab shall include:

- insulated panels
- tinted safety glass windows and tinted Lexan skylight
- sun visor
- steel operator guard
- electric windshield wiper and washer
- horn
- all controls necessary to operate the crane
- mechanical joystick loader controls
- inclinometers
- defroster fan
- electric heater
- dome light
- automotive style door with sliding window
- fully adjustable suspension seat with lumbar support and foldup arm rests
- circuit breaker panel
- dry exhaust having a rain cap/flap and a spark arresting silencer rated for residential level sound attenuation
- fire extinguisher

The crane shall be rated to lift 4905 lbs. at the maximum reach. Additional rated lifts required are 6700 lbs. at a radius of 25 feet and an elevation of 5 feet above the pedestal base, and 17350 lbs. at a radius of 10 feet and at the elevation of the pedestal base. This capacity shall include the weight of the grapple and saw.

The crane boom (without the grapple) shall be capable of extension to 11 feet below the pedestal base.

The hydraulic system shall be complete with pump, hoses and oil reservoir. A hydraulic system similar to the PRENTICE standard 3-Line Bar Slasher Hydraulic Package with a 48 gal/min. pump and 8 Line Swivel shall be provided to include compatible hydraulic service to the grapple and saw. Exposed hoses on the boom arm shall be specially designed for robust service and tied down and guarded as practical to minimize chance of entanglement with/damage from debris.

The crane shall be equipped with such necessary special fittings and equipment required for attachment and operation of the grapple and saw.

B. GRAPPLE AND SAW

A cross-over style grapple similar to HULTDINS Supergrip TL430 steel hydraulic operated grapple shall be provided and installed on the crane. The grapple shall have a 43 inch maximum opening. All appropriate transition pieces required to install the grapple and saw onto the crane knuckle boom shall be approved in writing by the manufacturers of the crane, grapple and saw. Upon request, this documentation shall be made available to the COR.

The grapple shall come complete with:

- recessed 25 ton capacity rotator capable of withstanding severe external loads in all directions
- cushioned cylinders to eliminate shock loads
- built-in dust seals on bushing material
- tapered sleeve pin joints to eliminate joint motion

Fitted to and installed on the grapple shall be a hydraulically operated chain saw similar to HULTDINS Model 550s-19cc Supersaw. The hydraulic pressure and flow shall be compatible with the optional hydraulic power pack supplied with the crane. The saw shall have a maximum cutting diameter of at least 27.5 inches.

The chain saw shall have the following:

- automatic chain tension system
- automatic chain lubricating system
- fast replacement of saw chain or bar
- automatic saw bar return
- steel housing to protect saw bar in the retracted position

C456 CAPSTAN

An electric capstan similar to Schoellhorn-Albrecht Machine Co., Inc. Capstan/Carpuller Model SA1014 - 10E shall be located as shown on the Contract Drawing 562-A205-01, OUTBOARD PROFILE AND ARRANGEMENT.

The capstan shall have the following properties:

- base of capstan barrel no more than 15" above the deck
- 20,000 lbs. starting pull
- 7,500 lbs. running pull
- 35,000 lbs bollard pull
- 40 fpm line speed
- single speed, reversing
- a cast steel capstan barrel
- high strength ductile iron gear box
- positively lubricated oil immersed gear set with reservoir and sump
- precision helical/worm gear reduction sets

- heat treated/high alloy steel shafting
- double taper roller bearings for axial and radial load control
- spring loaded double lip seals
- weatherproof brake and motor
- high starting torque, crane and hoist duty, NEMA "D", 10 HP motor, 230 Volt
- magnetic self-adjusting disc brake, 230 volt

C460 NAMEPLATES, NOTICES AND MARKINGS

A. NAMEPLATES

Nameplates, serial number plates, tags, etc. shall remain in place on the equipment as furnished by suppliers. The Contractor shall use caution during the construction to not damage or paint over nameplates. Damaged nameplates shall be replaced prior to Final Acceptance.

All nameplates and notices shall be stamped or engraved on brass or plastic plates. All weather exposed nameplates, notices, and markings shall be brass.

Where applicable, lettering size and sign colors shall be as per the Corps Safety Manual (Clause C003).

As a minimum, the following signs shall be provided:

- Two signs reading "DANGER NO TRESPASSING U.S. GOVERNMENT PROPERTY" shall be placed on the exterior side of the deckhouse, main deck, port and starboard.
- Two signs reading "NO ONE PERMITTED BEYOND THIS POINT DURING CRANE OPERATION" shall be placed on the exterior side of the deckhouse, main deck, port forward and starboard forward.
- "NO SMOKING" notices shall be placed at the fuel oil fill station.
- The front of the settee shall be marked to indicate that lifejackets are stored inside.
- All controls, gauges, switches, panels, etc., shall be labeled with phenolic label plates.
- An engraved metal fire control plan complying with the ABS Rules (Part 4, Section 7, paragraph 7.25.10).
- Manholes, vents, fills, and sounds shall be marked with tank identification and intended service.
- Confined space "ENTER BY PERMIT ONLY" shall be located at the entry to each tank or hull compartment.
- Label plates shall be attached to all valves, manifolds, pumps and mechanical equipment to indicate the system and function of the equipment.
- For valves, the label plates shall be installed over the stem of the hand wheel, where possible and shall indicate the direction of opening (or closing).

- All piping and hoses shall be marked at each termination and at each watertight bulkhead or deck penetration to indicate service and flow direction.
- All electrical equipment shall be provided with standard label plates indicating manufacturer, model number, capacity, and operating voltage, current, etc. All breakers shall be labeled.
- Power distribution wiring shall be marked to indicate phase and polarity. All cables shall be suitably identified throughout their length with cable tags identifying the circuit designation. The tags are to be fabricated from strip aluminum or bronze.

B. DRAFT MARKS

Draft marks of raised Arabic type numerals, 6-inches in height and cut from 1/4 inch steel plate, shall be continuously welded to the shell plating. The draft numbers shall be located on the port and starboard sides of the vessel as shown on Contract Drawing 562-A205-01, OUTBOARD PROFILE AND ARRANGEMENT. The draft marks shall be measured from the underside of the bottom plating projected to the bottom of the numerals. The bottom figures shall correspond to multiples of 1 foot of draft. Draft marks shall be painted white.

C. HULL MARKINGS

The name of the vessel and the words "U.S. ARMY CORPS OF ENGINEERS" shall be cut from 1/4 inch steel plate and continuously welded to the vessel. The letters and numbers shall be 12 inches high and located along each side of the vessel. Exact locations shall be approved by the COR.

The name of the vessel shall be located on the side shell, port and starboard at the bow, on the same horizontal line with the Corps marking. All letters shall be painted white.

D. COMMUNICATIONS MARK AND SIGNATURE

Two Corps of Engineers "Communications Mark and Signature" devices shall be fabricated and installed on self-contained panels mounted on the deckhouse top on centerline. This Communication Mark is detailed in SECTION J. The lettering for the signature shall be upper case and lower case Helvetica and include the District name.

The Communications Mark and Signature shall meet the requirements of the U.S. Army Corps of Engineers Graphics Standards Manual (EP 310-1-6). A copy will be provided to the successful bidder.

The castle and border of the insignia shall be made of aluminum plate, 1/4 inch thick and shall be attached to the 3/8 inch aluminum backing plate with 2 inch long aluminum standoffs. The edges of the plate shall be ground smooth. An assembled Communications Mark and Signature shall be bolted to a foundation atop the deckhouse. The foundation shall be removable. Care shall be taken to isolate dissimilar materials.

The Communications Mark shall be approximately 3 feet across and be as high as necessary to maintain the appropriate proportions required.

The Signature shall be placed below the Communications Mark and shall be painted with 6 -inch high letters on the backing plate. The signature letters shall be painted black.

C470 COMMUNICATIONS EQUIPMENT

A. VHF RADIOS

Two VHF Marine Transceivers (similar to Icom IC -M56) and Two VHF Marine Handheld Transceivers (similar to Icom IC-M5) shall be provided complete with all hardware and pilothouse roof mounted whip antennas. The radios shall be located in the pilothouse with easy access from the operator's position.

The rechargeable batteries, battery packs and case, and AC battery charger shall be provided for the VHF Marine Handheld Transceivers. The VHF Marine Transceivers shall be supplied with 12 VDC bank.

B. HORN

An electrically powered horn similar to SIGNALTONE Airtone SS Electric Horn shall be provided and installed on the deckhouse front bulkhead above the windows with a remote operating switch easily accessible to the operator.

PART I - SCHEDULE - SECTION C
DESCRIPTION/SPECIFICATION/WORK STATEMENT

C600 MACHINERY

C601 GENERAL

A. GENERAL

All machinery systems shall be in accordance with the regulatory bodies specified. Reference made to specific sections of codes, rules and standards in these specifications are intended to emphasize specific salient items.

All equipment needing electrical power shall be supplied with 120/240 volt AC service unless specified otherwise.

All pumps are to be provided with mechanical seals.

Machinery guards shall be provided over all rotating and hazardous machinery. The guarding shall be consistent with that required by the Corps Safety Manual (Clause C003).

B. PRESSURE & TEMPERATURE GAUGES

All pressure gauges shall give readings in psig and all temperature gauges shall give readings in degrees Fahrenheit. The gauges shall be selected so the operating point is in the middle of the gauge range. All gauges shall be fitted with gauge isolation valves.

Pressure gauges shall be provided on the discharge side of all pumps, and pressure/vacuum gauges shall be provided on the suction of all positive displacement pumps.

Temperature gauges shall be provided on all piping which transfers a medium in excess of ambient temperature.

C. PIPING - GENERAL REQUIREMENTS

Piping shall be sized and arranged to obtain optimum operating conditions for the equipment and intended service. Items of piping not covered in these specifications, but necessary for the proper installation and operation shall be furnished and installed the same as specified.

System design shall route all piping as directly as practicable; shall not interfere with structure, machinery access or handling gear; and shall be sufficiently flexible and supported to account for thermal expansion, shock, vibration and working of the vessel. Whenever practicable, piping shall be run below grating levels. No piping runs shall be made through access openings.

A sufficient number of unions and/or flanges shall be installed in all pipe lines to permit dismantling of the lines and equipment. Valves shall be installed in sufficient quantity to isolate any piece of equipment in the systems.

Pipes passing through watertight or oiltight bulkheads or decks shall be made of extra heavy pipe in that section, in way of the penetration and the bulkhead or deck shall maintain its integrity. Where pipes pass through watertight bulkheads or decks, the penetrations shall be made watertight.

Heat sensitive materials shall not be used in piping systems which penetrate watertight subdivisions where deterioration of such systems would, in event of fire, impair the watertight integrity of such bulkheads or decks. Copper tubing that penetrates watertight bulkheads and decks shall use a suitable stuffing tube. Spool pieces with flanges shall be provided for all galvanized pipe penetrations to prevent the destruction of galvanizing due to welding.

D. PIPING - SPECIFIC REQUIREMENTS

All piping shall be schedule 40, ASTM A -53, Type S or E except where otherwise indicated.

All piping between the side shell and the first inboard valve shall be schedule 80. Fasteners for valves at the hull connections and sea chests shall be stainless steel. All tank penetrations shall be schedule 80 welded couplings unless specified elsewhere.

When three or more valves are located together for the same service they shall be combined in a manifold.

Manually operated valves shall be readily operable by one man, directly or through mechanical advantage type operators.

E. PIPING RESTRICTIONS

Piping shall not be run over or in the vicinity of switchboards, distribution panels, or other electrical equipment unless unavoidable, in which case flanged joints, valves, etc. shall not be installed in the vicinity.

Piping conveying flammable materials shall be routed to avoid being located adjacent to or over hot surfaces, unless adequately shielded.

F. PIPE HANGERS

Rigid hangers shall be designed and located in accordance with ASTM Designation: F708 -81 (Re-approved 1991). The hangers shall safely support the weight of the piping, its operating or test fluid (whichever is heavier), and its insulation and lagging (where installed).

The number of supports installed, the type selected and their location shall prevent excessive vibration of piping under all system operating conditions, but they shall not constrain the piping to such an extent as to cause excessive transfer of load from support to piping or from support to support.

The locations and type of supports selected shall prevent excessive stress from being transmitted by the piping to machinery, equipment, or ship structure.

Hangers for copper pipe or tubing shall be lined with plastic. Non -ferrous metal pipes shall be insulated from direct contact with any structure.

G. PIPE CLEANING

All piping, piping appurtenances and applicable equipment shall be thoroughly cleaned after fabrication and prior to installation in the vessel. After complete installation, each system shall be thoroughly cleaned and flushed of all foreign matter with applicable system's medium, or an approved substitute.

System flushing shall be conducted at the applicable system's maximum operating pressure and temperature, and above normal line velocity. However, prior to flushing operations, such units as heat exchangers and control valves, having in-line mechanisms capable of trapping or being affected by the carry-over of foreign matter, shall either be removed or blanked-off and by-passed.

H. PIPE MARKING

All piping shall be marked and color coded in accordance with the following:

- Fuel Oil Yellow
- Bilge Light Green
- Hydraulic Oil. Orange

Piping labels shall be as required by the Corps Safety Manual, FIGURE 8 -3.

C605 PROPULSION DRIVE SYSTEM

A. GENERAL

The Contractor shall provide and install a heavy duty, self-contained, diesel powered, radiator cooled, 360 degree rotating z-drive.

The system shall be deck mounted on the vessel, centerline at the stern.

The z-drive unit shall have the following features:

- 90 degree powered elevation of the lower gearbox assembly and propeller, with no disassembly required for 90 degree elevation.
- drive leg length sufficient to locate the propeller upper tip a minimum 1 foot below the waterline.
- lower unit hydraulic hold down release to allow propeller and lower gearbox to ride over submerged objects
- 360 degree rotating steering, hydraulic powered from the propulsion engine
- 4- stroke in line configuration marine type diesel engine of American manufacture
- continuous engine rating sufficient to provide minimum 120 HP at the propeller .
- 12 volt battery start, with charging alternator, battery, cables, and weathertight battery box.
- radiator type water cooling
- dry exhaust having a rain cap/flap and a spark arresting silencer rated for residential level sound attenuation
- fuel tank sufficient to operate the engine for 4.5 hours (approx. 35 gallons)
- auxiliary fuel tank sufficient to operate the engine an additional 9 hours (approx. 75 gallons)
- engine enclosure to protect from the weather
- drip pan under the engine
- engine oil sump shall be fitted with a ball valve and quick disconnect fitting so that oil can be added to or drawn from the sump
- engine mounted with resilient vibration mounts on a single skid with the entire propulsion package

B. CONTROLS

A single remote control free standing console shall be installed in the deckhouse in the location shown on the Contract Drawing 562-A205-01, OUTBOARD PROFILE AND GENERAL ARRANGEMENT.

The console shall include:

- "joystick" style lever steering control
- propeller angle indicator
- throttle and engine tachometer
- clutch engage/disengage push buttons, if clutch is provided
- oil pressure warning light
- water temperature warning light
- start/stop push buttons
- rheostats
- power on switch
- fusing

- nameplates
- throttle and electrical cable between the propulsion unit and the console as required
- all gauges shall be back lighted and a dimmer control shall be provided

C. PROPELLER

The propeller shall be stainless steel or Nickel Aluminum Bronze. The size shall be determined by the propulsion system manufacturer based on a design speed of 4 MPH. Minimum propeller diameter shall be 36 inches. The propeller shall have a standard SAE taper bore and shall be built in accordance with ISO R484 Class II requirements.

D. SPECIAL TOOLS

A tool box containing the necessary hand tools, propeller wrench and propeller seal installation tool shall be provided with the propulsion unit, including one set of propulsion unit lifting cables, if available from the manufacturer.

Instructions shall be provided with all special tools.

C630 FUEL OIL SYSTEM

A. GENERAL

The Contractor shall provide and install all pumps, filters, piping, hoses, and valves necessary to form a complete fuel oil system. The system shall serve the main propulsion unit, generator set, and crane.

B. TANK

The vessel shall include a single fuel oil tank of 500 gallons. Refer to Clause C320 for construction details.

The vent, fill and service connections at the main deck shall be fitted with an enclosed, vented spill containment capable of holding 5 gallons. Beneath the sounding tube in the fuel tank, a 6 inch x 6 inch striker plate of at least 3/16-inch plate shall be seal welded to the tank bottom. The fuel fill shall be provided with a locking mechanism.

C. TRANSFER SYSTEM

The Contractor shall provide and install a fuel transfer system to fill the tanks of the propulsion unit, generator set and crane from the main fuel oil tank. The system shall include an electric motor driven, 1½ hp centrifugal type pump near the fuel oil tank; a strainer in the pump suction line; a pump relief valve; and a shutoff valve between the main fuel tank and the pump. The discharge of the transfer pump shall terminate with a valve and quick disconnect fitting located near the starboard side of the deckhouse.

A 50-foot length of 1-inch fuel hose shall be provided in a bulkhead mounted rake near the fuel station. The hose shall be fitted with a matching quick disconnect fitting for attachment to the transfer station outlet at one end, and a valved fill nozzle at the other.

Both the pump and the area under the transfer station shall be protected by 5 gallon spill containments.

C660 PORTABLE BILGE PUMP

The Contractor shall furnish a portable, cart-mounted, bronze diaphragm type, self-priming, electric bilge pump similar to EDSON Model 220EWB-20. The pump shall include:

- 20 GPM capacity
- bronze body with 1 1/2 inch pipe connections
- cart mount with wheels and handle
- 50 foot power cord
- TEFC motor, wired for 110 V single phase operation
- motor guard
- minimum 20 foot 1 1/2 inch smooth bore suction and charge hoses with cam lock quick connectors
- low profile suction strainer, similar to McMaster Carr 44365K22, with steel construction, bottom holes, and cam lock connector.

C670 VENTS, SOUNDS, FILLS AND OVERFLOWS

Vents shall be provided and constructed in accordance with all applicable ABS and USCG rules and in accordance with system specifications.

Storage compartments and the fuel oil tank shall have vents. The fuel oil tank vent shall have a flame screen and all other vents shall have insect screens. Vents shall be located clear of the crane operating area and open deck area. The forward storage space vent shall be located adjacent to the crane pedestal. Exact locations of all vents shall be approved by the COR prior to installation.

A sound tube shall be provided in the fuel oil tank. The sound tube shall be as straight as practicable and located at the lowest point of the tank.

The fuel oil tank fill, sound tube and vent shall be enclosed in a spill containment.

C685 HEATING AND VENTILATION

The Contractor shall provide and install a 5 kW, thermostatically controlled, forced air, electric resistance heater in the deckhouse. Ventilation shall be provided by a 200 cfm, roof ventilator in the control room and a 50 cfm exhaust fan in the head. Air shall be supplied naturally to the deckhouse through the windows, and to the head through a louvered opening in the door.

PART I - SCHEDULE - SECTION C
DESCRIPTION/SPECIFICATION/WORK STATEMENT

C700 ELECTRICAL

C701 GENERAL REQUIREMENTS

A. GENERAL

All materials and equipment shall be new and approved for marine service and shall be installed in accordance with the applicable rules and regulations (Clause C003). Where not otherwise specified, all machinery, equipment, materials and installation shall comply with applicable IEEE, NEMA, NEC, ABYC, and ANSI standards and codes.

All electrical junctions, connections, switches and outlet boxes shall be steel.

All electrical equipment furnished shall be the approval of the Underwriter's Laboratories, Inc. where applicable.

Connections to equipment and terminal boards shall be made with compression type connectors.

Ring tongue compression terminals shall be used for all control terminations. Ends of all cables shall be seal welded against moisture by taping in combination with insulating compounds or other MDC approved methods.

Equipment shall be located and orientated as conveniently as practicable for operation and maintenance. All equipment shall be accessible for removal, servicing and adjustment without dismounting or removal of other equipment.

B. PRIMARY POWER SYSTEM

The primary power system shall be rated 240/120 volt AC, single phase, 60 Hz. Power to this system shall be supplied by the generator set.

C. DC POWER SYSTEM

Four 12 VDC systems shall be provided as follows:

- Starting battery system for the diesel main engine.
- Starting battery system for the crane engine.
- Starting battery system for the diesel generator set.
- One 12 VDC battery shall be provided for all accessories required for normal vessel operation.

Each system shall consist of a battery in a weathertight, vented, high density polyethylene box. The batteries shall be of the lead acid type and provided with a battery charger and ammeter.

Charging of the non-starting 12 VDC battery shall be accomplished by a 12 VDC solar battery charger. The 12 VDC starting batteries shall be charged by engine mounted alternators.

Fail safe/isolators and noise filters shall be provided as needed to satisfy the DC system circuit requirements.

C720 ONE LINE DIAGRAM

The Contractor shall develop separate one line diagrams for the AC and DC electrical systems. The one line diagrams shall be submitted to the Government during the Engineering phase.

Catalog cut-sheets for equipment shown on the one line diagrams shall be submitted with the one line diagrams.

C725 CABLING

Cables shall be similar to L.F. GA UBERT, Specification #474, TNI Series, USCG and ABS approved. All cables for receptacle circuits shall be 12 AWG or larger.

All wiring shall be clipped and bracketed to provide straight, vertical and horizontal runs throughout the vessel.

All cable installations shall be supported on galvanized steel brackets, and shall comply with all applicable provisions of IEEE-45, Sections 20 and 22. Cable supports shall be heavy enough to bear the weight of the cables without bending, and all supports shall have rough or sharp edges removed so that cable will not be damaged. Horizontal runs of cable shall be supported by brackets spaced every two feet. Vertical runs of cable shall be supported every two feet with individual metallic cable straps and bar hangers or brackets. Plastic wire ties are not acceptable.

Each run of cable shall be secured individually by a cable strap on bar hangers or brackets, and all assembled multiple runs shall be secured by a single locking device.

All cable watertight bulkhead penetrations shall employ NELSON MCT Multi-Plug and/or the Uni-Plug system. Spare plugs shall be incorporated in each Multi-Plug Unit for the addition of cables. Individual cable penetrations into boxes, panels, switches, etc. shall be brass watertight stuffing tubes.

All cables shall be identified with tags fabricated from strip aluminum with raised lettering, securely fastened to the cable by banding.

Soldering shall be performed only with resin or other neutral flux. Ends of all wires not tinned by the cable manufacturer shall be tinned before securing to terminals or before applying lugs. Solderless lugs shall be used wherever practicable. Terminals or lugs that are to be soldered to cable ends shall first be cleaned and tinned or treated with a neutral flux to ensure a good bond.

C730 LIGHTING AND RECEPTACLES

A. GENERAL

(1) Lighting

A complete lighting system shall be provided and installed in order to adequately light the vessel.

All fixtures shall be made of corrosion resistant materials suitable for Marine use and shall be spaced evenly to provide proper distribution of light. Fixture installation shall be such that the low point of all fixtures is above the lowest structural members.

All lighting switches shall be marine type, weather tight where required by location, and shall be mounted for convenient operation.

(2) Receptacles

Duplex receptacles shall be 20 Amp GFCI type and provided throughout the deckhouse and toilet space. Duplex receptacles shall be divided into two separate circuits, one for interior receptacles and one for exterior receptacles.

The number and location of duplex receptacles shall be as follows:

- One duplex receptacle in the toilet space
- Three duplex receptacles in the deckhouse, location shall be determined by the COR
- Two exterior watertight duplex receptacles, one forward and one aft, of the deckhouse.

B. INTERIOR LIGHTING

Interior lighting fixtures shall be fluorescent, ceiling mounted fixtures, controlled by a switch at each normal entrance to the deckhouse and toilet space. Fluorescent type lamps shall be rapid start and cool white.

C. EXTERIOR LIGHTING

Exterior deck lighting shall consist of two watertight incandescent type fixtures, installed one along each side of the deckhouse. The exterior lights shall be controlled by a single switch located adjacent to the control console in the deckhouse.

D. FLOODLIGHTS

A complete floodlight system shall consist of weather tight quartz halogen type fixtures. The floodlights shall be controlled by individual switches. The switches shall be located adjacent to the control console in the deckhouse.

Four floodlights shall be installed, one centered on each side of the deckhouse, just below the deckhouse top.

E. SEARCHLIGHT

The Contractor shall supply and install one adjustable searchlight on the deckhouse top.

The searchlight shall be a 12" diameter, weathertight, quartz halogen type fixture with control from inside the deckhouse. The searchlight shall be powered from the 120/240 volt AC system .

The searchlight shall be located as necessary to position its control adjacent to the control console, approximately on centerline at the forward end of the deckhouse. The final location shall be approved by the COR prior to installation.

F. NAVIGATION LIGHTS

The vessel shall be furnished with a complete system of navigation lights in accordance with USCG Rules (Clause C003).

G. EMERGENCY LIGHTS

Emergency lighting shall consist emergency ballast within the fluorescent fixtures. The ballast shall provide 3-4 hours of emergency lighting.

C733 ELECTRICAL POWER PLANT

A. DESCRIPTION OF WORK

The Contractor shall provide and install a single diesel generator set.

The diesel generator shall be a marine type, with a continuous rating of 20 kW minimum at 0.8 power factor at 60 Hz and 1800 rpm. The generator shall be set up to supply 240/120 volt AC, single-phase, 60Hz electrical power.

The diesel generator shall be self-contained with its own fuel oil tank and radiator cooled jacket water system. The dry exhaust system provided for the generator shall be sized to the exhaust openings of the generator engine and shall include a high attenuation, residential type spark arresting muffler and a steel flexible expansion connection at the engine. The exhaust pipe opening shall be protected from rain by a cap or flap.

The generator shall be equipped with an amortisseur winding and shall be capable of delivering 110 percent load for two hours without exceeding permissible limits of temperature rise. The generator, along with its regulation and excitation systems shall be capable of supporting overload conditions as well as maintaining short circuit currents of such magnitude and duration as required to properly actuate selective tripping of downstream protective devices.

The generator shall be provided with its own dedicated, electric start. The system shall be a 12 volt DC system including starter motor, battery charging alternator, and regulator.

The diesel engine and generator shall be provided with the following features and options:

- Air cooled and self-ventilated.
- Provided with a brushless excitation system and an automatic solid state voltage regulator.
- Steel base frame with drip pan.

- The generator and engine shall be mounted on elastomer vibration mounts in order to isolate engine vibration. Vibration mounts shall be sized for maximum 20% transmissibility.

B. GENERATOR ENGINE MONITORING AND ALARMS

The following alarms and instrumentation shall be included on the local control panel for the generator:

- start/shutdown
- generator "power available" indicator
- generator automatic shutdown alarm
- generator trouble alarm for:
 - high jacket water temperature
 - low lube oil pressure.

C740 SWITCHBOARD & POWER CONTROL

A. SWITCHBOARD

A switchboard shall be provided and installed for the electrical systems as shown on the drawing 562 - A205-01. The switchboard shall be front only accessible, fully serviceable from the front, be of compact size and adequately supported to resist vibration. The switch board shall contain circuit breakers for the generator and all of the equipment required for control of the 240/120 VAC, 60 Hz generator.

The interrupting rating of each circuit breaker shall be suitable for the maximum short circuit current available at the point of application as determined by short circuit analysis. The circuit breakers provided shall have a minimum interrupting rating of 10,000A RMS symmetrical at their respective voltage level, and shall be capable of interrupting without damage, the maximum fault current at the breaker from the system.

The switchboard shall include, but not be limited to the following basic components and features:

- Voltmeter and selector switch
- Ammeter and selector switch
- Frequency meter
- Generator power available indicating light
- 12 VDC battery charger power available indicating light
- Space heater switch with indicating light
- Ground fault detection ammeter and test switch (240/120V system).

120 VAC loads shall be distributed as evenly as possible among the two -phases of the power system, to achieve optimum phase current balance.

B. POWER CONTROL

The switchboard shall be equipped with plug -in or drawout type circuit breakers.

The switchboard shall have the necessary control, detection, protection, instrumentation, inputs/outputs, and any other function required by the system.

The generator breaker shall be provided with an adjustable time delay under voltage trip and trip characteristics to provide maximum selective coordination with downstream circuit breakers.

Circuit breaker coordination and selectivity shall be provided so that, for a fault on any part of the system, the fault is cleared by the protective device that is closest to the point of fault without tripping upstream breakers in accordance with 46 CFR 111.51.

C. DISTRIBUTION

The 240 VAC distribution bus circuit breakers shall be manually operated and provided with inverse time, ambient -temperature-compensated, thermal magnetic trips and shall have interchangeable thermal trip units and adjustable magnetic trips in ratings where available.

The Contractor shall submit switchboard diagrams and details to the Contracting Officer for review.

C745 DISTRIBUTION PANELBOARDS

A. GENERAL

Power and lighting panelboards shall be used to supplement the distribution section of the switchboard for all of the electrical loads on the vessel. The number and ratings of the panelboards shall be selected based on the present total load requirements and future load growth. Panelboards shall be located so that they are readily accessible. The panelboards shall be dead front circuit breaker type equipped with molded case circuit breakers.

As far as practicable, load distribution should be such that the distribution panelboards shall feed electrical loads that are located in their respective areas.

B. CIRCUIT BREAKERS

The distribution panelboards shall be connected to feeder circuit breakers in the 240V main switchboard. The 120 vac loads shall be distributed as evenly as possible among the 240/120 vac system, to achieve optimum phase current balance. The panelboards shall be equipped with molded case circuit breakers with ratings and the number of poles to satisfy system requirements. The 240 VAC distribution bus circuit breakers shall be manually operated and provided with inverse time, ambient -temperature-compensated, thermal magnetic trips.

In addition, each of distribution panelboards shall be provided with a minimum of four spare breakers, with trip ratings representative of trip ratings furnished for other loads. The circuit breakers in all the panelboards shall have quick make, quick break, trip-free mechanism. The interrupting rating of each circuit breaker shall be suitable for the maximum short circuit current available at the point of application as determined by short circuit analysis. The circuit breakers shall have a minimum interrupting rating of 10,000 RMS symmetrical amperes at their respective voltage levels, and shall be capable of interrupting without damage the fault current available at the breaker from the system.

C. DC PANEL

The DC distribution panelboard shall include, but not be limited to the following basic components and features:

- Power available light for the system
- Battery selector switch
- Line voltage meter
- Load current meter
- Power available light for each load.

C750 MOTORS AND CONTROLLERS

A. MOTORS

All motors shall be drip proof protected, except those exposed to the weather, which shall have waterproof enclosures. All motors shall be NEMA type, and shall be sized and designed for continuous operation of the driven auxiliary at rated capacity.

All motors shall be equipped with anti-friction bearings. All motors using grease lubricated bearings shall be provided with grease fittings and shall have positive means for preventing grease from being forced out upon the motor windings.

B. CONTROLLERS

All motor circuits shall have motor feeder short circuit and ground-fault protection. All motor controllers shall have disconnect means, motor branch circuit and ground-fault protection, manual reset motor over load protection, and integral start/stop push-button set. Controllers arranged for automatic or remote operation shall also be provided with Hand-Auto or Local-Remote selector switch. Exterior mounted controllers shall be mounted in weathertight enclosures.

Controllers for all of the motors shall be full-voltage magnetically operated type. In cases where starting motors across the line can produce detrimental disturbances to the systems, reduced voltage starters shall be used.

PART I - SCHEDULE - SECTION C
DESCRIPTION/SPECIFICATION/WORK STATEMENT

C800 SPARE PARTSC805 REQUIRED SPARES

The Contractor shall provide the following spare parts for the vessel; if an option vessel is awarded, all spare parts except for the Propeller shall be provided for the option vessel:

DESCRIPTION	QUANTITY	PACKAGING
Saw Chain	2	PROTECTED
Saw Chain Bar	1	PROTECTED
Propeller (Not required for an option vessel)	1	PROTECTED
Propulsion Unit air, fuel and oil filters	1 case	CONSUMABLE
Generator set air, fuel and oil filters	1 case	CONSUMABLE
Crane air, fuel and oil filters	1 case	CONSUMABLE
Crane spare hydraulic hose & fittings	1 set	PROTECTED
Complete bilge pump	1	PROTECTED
Floodlight lamp	2	PROTECTED
Toilet bags	1 case	CONSUMABLE
Set of navigation lamps	1	PROTECTED
Window Wipers	1 per	CONSUMABLE
One spare wiper blade shall be provided for each deckhouse window wiper	1 per Window	
Coatings - Base coat	1 case	CONSUMABLE
Coatings - Base Coat	1 case	CONSUMABLE
Coatings - Barrier Coat (Black)	1 case	CONSUMABLE
Coatings - Barrier Coat (Red)	1 case	CONSUMABLE
Coatings - Top Coat (Old Ivory)	1 case	CONSUMABLE
Coatings - Top Coat (Deck Red)	1 case	CONSUMABLE

NOTE: One case of paint equals four 1 gallon cans. Paint must meet the requirements of Clause C406.

Refer to SECTION D of this Contract for Packaging and Marking of Spare Parts.

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PACKAGING AND MARKING

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PACKAGING AND MARKING

D01 PACKAGING & MARKING

The packaging of all Spare Parts is the responsibility of the contractor.

"Consumables" such as bulbs, filters, paint and hardware shall be packaged for storage inside a ware house.

"OUTSIDE" spare parts shall be fitted with contractor furnished pallets, or fixtures to raise them off the ground during storage and provide a lifting rig for moving them by crane, forklift and truck.

All Spare Parts and materials will be marke d or labeled by the contractor.

All outside spare parts and materials will be marked with a stencil, in paint of a contrasting color, in at least three places, with letters not less than 3-inches high, with the following information:

- VESSEL NAME
- NAME OF PART (COMPLETED BY THE CONTRACTOR)
- DRAWING REFERENCE (COMPLETED BY THE CONTRACTOR)
- MANUFACTURER (COMPLETED BY THE CONTRACTOR)
- YEAR OF MANUFACTURE (COMPLETED BY THE CONTRACTOR)
- OTHER IDENTIFYING INFORMATION

All protected spare parts and equipment shall be fitted with a plastic name tag, engraved plastic nameplate or other device acceptable to the Contracting Officer's Representative with the following information completed by the contractor:

- NAME OF PART & PART NUMBER
- NAME OF EQUIPMENT OF WHICH ITEM IS A PART
- DRAWING REFERENCE
- MANUFACTURER
- YEAR OF MANUFACTURE
- OTHER IDENTIFYING INFORMATION

PART I - THE SCHEDULE - SECTION E
INSPECTION AND ACCEPTANCE

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PART I - THE SCHEDULE - SECTION E
INSPECTION AND ACCEPTANCE

E01 INSPECTION

The contract will be managed by the Marine Design Center (MDC) of the U.S. Army Corps of Engineers (USACE) and is subject to inspection by its appointed representatives to insure strict compliance with the terms of the contract. No Government Representative, except the Contracting Officer, is authorized to change any provision of the specifications, nor shall the presence or absence of a Government Representative relieve the Contractor from any requirements of the contract.

The Contractor shall provide gas-free and oxygen level certificates for all compartments prior to permitting entrance for work or inspection. This procedure shall be reflected in the Contractor's Quality Control plans.

E02 LAUNCHING

The Contractor shall be responsible for the satisfactory launching of each vessel at the time and date selected and mutually agreed upon by the Contractor and the Contracting Officer's Representative (COR).

The Contractor shall provide a written notice to the Contracting Officer 10 calendar days prior to the launching. The contractor shall carry out the necessary calculations required for a safe launching of each vessel.

Prior to launching, all painting below the main deck (interior and exterior) must be completed. The contractor shall schedule 3 days between inspection and launch to allow any new paint on the interior/exterior hull to cure.

E03 QUALITY CONTROL AND INSPECTION

After Notice To Proceed with "PLANNING" (Phase I) the Contractor shall develop a Contractor Quality Control (CQC) and Inspection Program for the work required in this contract. This program shall

- Define the review and correction process for all "Engineering and Scheduling" phase submittals .
- Define Contractor tests and inspections to be accomplished for each work item of the contract.
- Be commensurate with the complexity of the work in the specification and adequate to assure the Contractor that the product or subproduct offered conforms to the requirements of the contract.
- Be available to the Contracting Officer's Representative at all times and contain recorded data of all Contractor conducted inspections and tests conducted to date.
- List by name and title, the Contractor Representatives who are authorized to witness or perform and sign for each test and inspection.

The following are the minimum requirements for data to be recorded:

- Type of inspection or test (e.g., visual, mechanical, liquid penetrant, radiographic), accept/reject criteria, and a statement as to whether the inspection was satisfactory or unsatisfactory.
- Number and type of deficiencies of material or workmanship found in the product or subproduct inspected and corrective action taken to correct the deficiencies and to preclude recurrence.
- Date and signature of the Authorized Contractor Representative who witnessed or performed the test or inspection.

Responsible authorized personnel shall inspect the work in progress and all completed work, conduct necessary tests and record the data required. An Authorized Contractor Representative shall sign the records attesting to the validity of the information. Contractor certified inspection is an integral part of all work, therefore the COR will consider the entire contract incomplete if Contractor documentation and records signed by the Contractor's Authorized Representative are not complete.

A SUBCONTRACTORS

1. Work subcontracted and/or performed away from the shipyard is covered by this inspection system. The prime Contractor cannot delegate the authority to witness or perform, and sign for tests and inspections conducted away from the shipyard, without approval of the COR.

2. If the subcontractor has an established Quality Control program with designated organization and personnel, the prime Contractor may designate an appropriate individual in that organization as his authorized representative. Such designation shall clearly indicate that the individual is an employee of a subcontractor and his appointment shall be subject to the approval of the COR.

B TESTING

When any workmanship, material, or apparatus fails to pass any test or inspection, it shall be fully retested only after all known faults have been eliminated. Where directed by the COR, such failed material or apparatus shall be completely removed from the work and renewed. Any defects in workmanship or material shall be remedied by the Contractor at no additional cost to the Government, except where work was performed on material furnished by the Government.

E04 FACILITIES FOR PERSONNEL AT THE CONTRACTOR' S FACILITY

While it is not intended that the Marine Design Center will have a Resident Engineer's Office, the Contractor shall provide office space for use by a Marine Design Center staff of up to three people.

The space shall be convenient to the work site and consist of a desk, chair, one commercial telephone, access to the Contractor's telephone system, and one drawing table suitable for layout of drawings for study. The space shall be air conditioned, heated, ventilated, well maintained and well secured, and be convenient to toilet and shower facilities. The space and facilities shall be suitable for both male and female staff.

Government Representatives attending the construction may bring with them walkie-talkie radios for intra-agency communication, cameras, and various items of test equipment. The Contractor shall permit unencumbered ingress and egress to and from the shipyard and the vessel with such equipment.

Upon request, the Government representative shall have the unrestricted use of the following office equipment:

- Telecopier with automatic and unattended capabilities. The telecopier shall be similar to CANNON USA Model FAX-410 with a dedicated outside (Bell System) telephone line.
- Photocopier with reduction/enlargement and sorting capability. The photocopier shall be provided with paper, fluids, toner and service.
- Word-processing equipment, paper, supplies, etc.

While at Bluestone Lake for construction, assembly or testing of the vessel, the contractor is not required to provide the aforementioned amenities for the Government representatives, as they have office facilities in the area.

E05 TRIALS, TESTS AND DEMONSTRATIONSA. GENERAL REQUIREMENTS

1. Levels of Testing

The Contractor shall perform tests on all equipment, machinery, and systems; individually, and integrated as a whole. The tests shall be performed as necessary to demonstrate satisfactory compliance with the Specification requirements contained in Section C, "DESCRIPTIONS/ SPECIFICATIONS/WORK STATEMENTS," of this Contract.

The Contractor shall perform five levels of testing as follows:

Level 1	Pre-Trial Tests
Level 2	Builder's Dock Trials
Level 3	Dock Trials
Level 4	Open Water Trials
Level 5	Final Acceptance Demonstrations

All demonstrations, tests, and trials shall be performed as specified herein and as specified in Contract Section C. The Contractor shall furnish all labor, materials, tools, and test equipment as necessary and perform the testing, trials, and demonstrations specified.

2. Consumables and Operating Fluids

The Contractor shall furnish all fuel oil, hydraulic oil, lubricating oil, engine anti-freeze, treatment chemicals, degreasing agents, gases, potable water and any other consumables required to perform the tests and demonstrations.

3. Test Agenda and Test Memoranda

The Contractor shall prepare an Agenda and Test Memoranda of the required tests and trials in accordance with the requirements set forth herein. Two copies of the Agenda and Test Memoranda shall be submitted to the COR for review and approval prior to the Construction Phase (Phase 3) of the contract (see Clause HO2).

a. Test Agenda

The Contractor shall prepare a Test Agenda for Level 3 and 4 Tests and Trials. The Agenda shall be a complete, detailed schedule of all tests, trials and demonstrations specified in this clause. The Test Agenda shall be arranged by day, not date, and shall list the specific tests, trials, and demonstrations, and the sequence in which these will be performed.

b. Test Memoranda

The Contractor shall prepare Test Memoranda for all systems and equipment tested under the Levels 1, 2, 3, 4, and 5 test and trial requirements of this clause.

The test memoranda shall describe the actual test procedures, and data to be taken. The procedures shall be in accordance with the "start-up" procedures for the equipment, as delineated in the operating manuals furnished for the equipment by the manufacturer. The Contractor shall incorporate demonstrations of all applicable controls, instruments, and alarms, into each system's Builder's Dock Trials, Dock Trials, Open Water Trials, and Final Acceptance Demonstrations sections of the Test Memoranda. Data recorded in time intervals shall be tabular so that data trends can be easily recognized.

Each test memorandum shall:

- o Reference the manufacturer's manual(s) used to format the test procedure.
- o Describe instrumentation for each test.
- o Include a blank space for relevant nameplate data, ambient conditions, tested parameter values for each time interval, designated values for pass/fail.
- o Include signature blocks for Contractor Representative witness, Government Representative and ABS witness signatures, times, and dates.
- o Include a space for writing comments.

The Test Memoranda shall be typed on 8-1/2 inch by 11 inch sheets of paper, single side, in three ring notebook, with dividers for each section. Each page shall include the Marine Design Center project number (#2397) at the top.

The memoranda shall be arranged by system and equipment, with each level of testing for a specific system or piece of equipment recorded under the respective heading.

The Test Memoranda shall be arranged by system and level of testing similar to the following outline:

X. System (or equipment)

- a. Pre-Trial Tests
- b. Builder's Dock Trials
- c. Dock Trials
- d. Open Water Trials
- e. Final Acceptance Demonstrations

4. Test Reports

The Contractor shall compile the results of all tests and trials in a Test Report in accordance with the requirements set forth herein. Four levels of test reporting are required in accordance with the following schedule.

- a. Within 2 days of the completion of any Pre-Trial test, a copy of the documentation of that test shall be available to the COR for review.
- b. A preliminary Builder's Dock Trial Test Report shall be available to the COR for examination following the successful completion of Pre-Trial Tests (Level 1) and the Builder's Dock Trials (Level 2).
- c. Following the successful completion of Dock Trials (Level 3), the Contractor shall make the Dock Trials Test Report available to the COR for review.

- (1) Test Report Requirements (Levels 1, 2 and 3).

The Contractor shall make available a Test Report comprised of the results of all required Level 1, Level 2 and Level 3 tests and trials, and the results of all Vendor's tests. The Test Report shall be the filled -in version of the Test Memoranda. The test report shall be maintained current as tests and test levels progress. The test report shall be furnished in three ring binders, with dividers for each test.

The Test Report, including the results of all Level 1 and Level 2 trials, shall be available to the COR prior to, and during, the Level 3 tests. The Test Report, including the results of all Level 1, Level 2 and Level 3 tests and trials, shall be available for review by the COR prior to and during the Level 4 trials.

The Test Report, including the results of all Level 1, Level 2, Level 3, and Level 4 tests and trials, shall be available for review by the COR prior to and during the Level 5 demonstrations.

(2) Test Report Review and Approval

The Test Report shall be reviewed and approved by both the Contractor and the COR at the conclusion of each level of testing. Review and approval of the Test Report by the Contractor and the COR is a precondition of moving to the next level of testing.

d. Within 10 calendar days following the successful completion of Acceptance Trials (Level 5), the Contractor shall submit the Acceptance Trials Test Report to the COR for review.

(1) Test Report Requirements (Level 5)

The final version of the Test Report, including results of all five levels of the tests and trials, shall be bound in three ring binders and submitted in triplicate, within 30 calendar days following successful completion of the Level 5 demonstrations, and prior to Final Payment.

5. Deficiencies

The COR will compile a list of deficiencies which will be given to the Contractor. All deficiencies shall be corrected. Final Acceptance of the vessel will be made following remedy of all deficiencies.

The successful completion of all tests, trials, demonstrations and remedied deficiencies, shall be determined by the COR.

B. PRE-TRIAL TESTS (LEVEL 1)

The Pre-Trial tests are designed to ensure proper construction, and installation of all equipment, piping, and electrical systems, tanks, and exterior and interior bulkheads. Pre-trial tests shall be performed during the course of construction and prior to the beginning of Builder's Dock Trials (Level 2).

The COR shall be notified at least 24 hours in advance of any such testing and may, at his discretion, send a Government representative to witness any or all tests.

Documentation of all pre-test inspection shall be in accordance with the requirements of Section E03 (Quality Control and Inspection). All deficiencies, including cracks, leaks, grounds detected in new circuits, or poor workmanship shall be corrected prior to commencement of Builder's Trials (Level 2). Pre-trial tests shall include the following:

1. Hull

All tanks and watertight bulkheads shall be tested in accordance with ABS Rules to the satisfaction of the COR.

2. Superstructure

All weathertight exterior bulkheads shall be hose tested for tightness prior to coating. All weathertight doors, windows, manholes, and hatches, shall be hose tested for tightness.

3. Piping System Tests

(a) General

The testing requirements set forth herein include system flushing procedures which shall be performed to demonstrate system cleanliness and integrity.

(b) Piping Systems

After thorough flushing, hydrostatically test all piping systems for leaks at 1-1/2 times working pressure for a duration of no less than 10 minutes per test. Each system shall be inspected for leaks at the welds, fittings, hoses, etc.

(c) HVAC

Operationally test ventilation fans, along with its ducting to ensure absence of leaks, adequate support, and acceptable vibration levels. Operationally test the heaters.

4. Electrical Cabling

Insulation resistance readings of all installed power and lighting cable shall be taken using a 500 volt megger, and shall be in accordance with IEEE Standard 45, Section 46. The measured cable insulation resistance must meet or exceed the minimum values outlined in the referenced IEEE publication. Also, measure the voltage drop of the longest receptacle circuit. A complete record of all readings shall be kept to assure that all circuits and equipments have been checked and for possible assistance in troubleshooting any discrepancies detected during subsequent testing.

5. Exhaust Systems

Blank off and test the flanges, welds, and gas jets of each exhaust system using compressed air and soap bubbles. The main engine exhausts, and the diesel generator exhausts shall all be checked in this manner.

C. BUILDER'S DOCK TRIALS (LEVEL 2)

Builder's Dock Trials are a preliminary "run -through" of all required Dock Tests (Level 3) by the Contractor. The intent of this testing is to provide both the Contractor and the COR reasonable assurance that all equipment and systems have been thoroughly prepared and are ready for formal testing and that the Contractor has made adequate provisions for Dock Trials (Level 3).

Builder's Dock Trials shall be conducted at the Contractor's facility listed in Section B of the contract. The COR shall be notified, in writing, at least 2 working days prior to the scheduled commencement date of Builder's Trials. The Test Report must be current prior to commencing Builder's Dock Trials.

The trials shall be of sufficient scope and duration to assure that all machinery and equipment is operable and all systems are complete. The trials need not be carried out to the same degree as the Level 3 testing.

D. DOCK TRIALS (LEVEL 3)

Dock Trials are the operability tests the Contractor must perform in the presence of the Government Representative to demonstrate the proper installation, operation, control, and performance of all equipment, machinery, and systems installed as part of this Contract. Specific dock trials and demonstrations are defined in paragraph E.

In addition, each test or demonstration shall include control, instrumentation and alarm operation as applicable.

Prior to the start of Dock Trials, all construction and installations must be complete (except for final cleaning and touch-up painting), and all Level 1 and Level 2 testing must be successfully completed and documented. The Test Report must be current through the two levels of testing and approved by the COR before Level 3 testing can proceed.

Commencement of Dock Trials shall not be sooner than one full working day after completion of Builder's Dock Trials. The COR shall be notified immediately of any condition which would delay the conduct of Dock Trials.

The COR shall be notified in writing 10 working days in advance of the date set for testing. Results of the Level 2 Testing must be faxed to the Marine Design Center at least one day prior to the start of the Dock Trials, if Level 2 Testing was not attended by a Government Representative.

All testing and trials shall be conducted in the presence of a Government representative and any vendor representatives required by the Contract. The tests shall be conducted in accordance with the Agenda.

The Contractor shall indicate in the test memoranda which tests will be performed using the diesel generators and which tests will be performed using the shore power.

During dock trials and thereafter, the atmosphere in spaces being prepared for, and preserved by, paints and tank coatings dissolved in highly volatile, toxic, and flammable solvents (29 CFR 1915.35(b)), shall be tested frequently and shall be in accordance with the U.S. Occupational Safety and Health Agency Standards regulations stated in CFR 1915.31-36.

Within 24-hours of final inspection, and before any representative of the U.S. Government boards the vessel for such duties, each compartment or space to be inspected shall be certified "SAFE FOR WORKERS" by the National Fire Protection Association (NFPA) certified Marine Chemist. This means that in the compartment or space so designated:

- The oxygen content in the atmosphere is at the least 19.5 percent by volume;
- Toxic materials in the atmosphere are within permissible concentrations;
- The residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's certificate.

The Contractor shall notify the Government when this certificate has been issued. A vessel will not be inspected and accepted by the Government without an NFPA Marine Chemist's certificate for each hull compartment designated "SAFE FOR WORKERS".

The success of all tests and the existence of any deficiencies shall be determined by the COR. Deficiencies shall be remedied prior to start of the Open Water Trials (Level 4).

E. SPECIFIC DOCK TRIALS AND DEMONSTRATIONS

1 CRANE TEST

Test the deck crane as follows:

- Demonstrate raising and lower of the block and rotation of the crane through its full rotation.
- Verify operation of the cab heater, windshield wiper, dome light, defroster fan and halogen floodlight.
- Demonstrate extension of the crane boom 11 feet below the pedestal base.
- Demonstrate operation of the crane grapple and saw in an actual log handling test.
- Load test the crane at 125% of its rated load at maximum radius and at its minimum radius.

2 WINDOW & DOOR TIGHTNESS

Using a hose, demonstrate weather tightness of all windows and doors.

3 MAIN PROPULSION ENGINE

For the main engine, demonstrate the following in the presence of an authorized manufacturer's representative:

- Cold starting. The cold starting testing shall demonstrate startup of the engine.
- Starting and stopping of the engine from its control panel in the deckhouse.
- Emergency stop. Resetting at the local engine panel.

- Automatic shutdown for engine overspeed.
- Engine Alarms. Ensure the proper operation of all alarm test circuits for the engine.
- Engine jacket water heater.

4 DIESEL GENERATOR SET

For the diesel generator set, demonstrate the following in the presence of an authorized manufacturers representative:

- Cold starting.
- Starting and stopping from its local panel.
- Alarms at its local panel. Ensure the proper operation of all alarm test circuits.
- Automatic shutdown for engine overspeed.

5 CRANE ENGINE

For the crane engine, demonstrate the following in the presence of an authorized manufacturers representative:

- Cold starting.
- Starting and stopping from its local panel and from the cab.
- Alarms. Ensure the proper operation of all alarm test circuits.
- Automatic shutdown for engine overspeed.

6 LOAD BANK TESTING

The diesel generator set shall be load bank tested. Operate at 1/4, 1/2, 3/4 and full loads in 15 minute intervals, and then at 110% rated load (with the use of a load bank) for 2 hours. All engine and generator parameters shall be recorded at 5 minute intervals for the partial and full load periods, and at 15 minute intervals for the 110% load period.

7 ENGINE COOLING SYSTEM

Demonstrate proper cooling takes place during the operation of the main propulsion engine, diesel generator engine, and crane engine.

8 ENGINE EXHAUST SYSTEM

Demonstrate the operation of the main propulsion engine, diesel generator engine, and crane engine exhaust systems. Inspect each system for leaks and measure the back pressure on each system.

9 STEERING SYSTEM

Before leaving the dock for Open Water Trials, demonstrate the operation of the steering through its full range of motion.

10 FUEL OIL TRANSFER SYSTEM

Ensure proper flow to the main propulsion engine, diesel generator engine, and crane engine during operation. Demonstrate the ability of the main engine, diesel generator engine and crane engine to take suction from their fuel oil tanks. Demonstrate the operation of all remote operated shut-off valves.

Demonstrate the ability of the fuel oil transfer pump to transfer fuel oil from the main fuel tanks to the engine tank.

11 BILGE PUMP

Demonstrate the operation of the portable bilge pump by taking suction of water from a container of water located in a below decks compartment.

12 HEATING AND VENTILATION

Demonstrate operation of the heater and the roof ventilator in the deckhouse.

13 AC ELECTRICAL SYSTEM

A Distribution Panel - Demonstrate the operation of all circuit breakers in the distribution panel board.

14 DC ELECTRICAL SYSTEM

A General - Verify the operation of the batteries and battery chargers before and after starting the diesel generator, main propulsion engine and the crane engine.

B Distribution Panel - Demonstrate the operation of all circuit breakers in the DC panels.

C Demonstrate the operation of the battery selector switches. Verify the proper operation of the 24\12 volt DC converters.

15 LIGHTING

- A Lighting - Demonstrate the operation of all interior lights, exterior lights, and floodlights. Demonstrate the operation of all lighting switches.
- B Emergency Lighting - Demonstrate the operation of all emergency lights.
- C Navigation Lights - Demonstrate the operation of all navigation lights. Demonstrate the operation of all circuit breakers and "bulb-out" alarms in the navigation lighting panel.
- D Searchlights - Demonstrate the operation of the searchlight.

16 RECEPTACLES

Convenience Receptacles - Demonstrate the operability of all convenience receptacles by using 80% load for each receptacle. Check the receptacles for polarity.

F. OPEN WATER TRIALS (LEVEL 4)

1 GENERAL

After all items on the schedule of Dock Tests (Level 3) have been satisfactorily completed and any deficiencies corrected to the satisfaction of the COR, the Contractor shall commence a program of Open Water Trials.

The Contractor's personnel shall operate the vessel and shall make all observations and record all data. Commencement of Open Water Trials shall not be conducted until completion of Dock Tests.

The COR shall be notified immediately of any condition which would delay the conduct of the Open Water Trials.

The COR shall be notified in writing 10 working days in advance of the date set for the trials.

All testing and trials shall be conducted in the presence of a Government representative and any vendor representatives required by the contract. The trials shall follow the agenda prepared under paragraph A.3 (a).

2 TRIAL LOCATION

The site of the trials shall be such that accurately placed targets can be readily observed for the purpose of computing speeds. The site of the trials shall also be free from fog and traffic, with a depth of water of at least 20 feet. The Contractor shall take the vessel to the nearest location that will provide the required minimum depth and permit operation of the vessel at full speed. The Level 5 tests will be performed at Bluestone Lake. Depending upon the Contractor's construction plan, additional levels of testing could occur at Bluestone Lake.

3 TRIAL CONDITIONS

Vessel shall be complete and ready for trials with full (100%) fuel oil and full potable water. A two man trial crew shall be aboard, with tools and miscellaneous equipment aboard.

Record drafts at the draft marks and read the hull freeboards at the four corners. These draft readings shall be used to calculate the displacements and LCG. Compare these values to the updated final weight estimate.

After trials are completed, again read the drafts and take the freeboards as a double check on the trial displacement and trim. Sound the fuel tank and calculate the fuel (volume) consumed during the trial period.

4 GENERAL TRIAL DATA

The following general data shall be furnished by the Contractor. This data shall be recorded at the location of the runs:

- Location of trial course and direction of runs
- Depth of water
- Density of the water
- Wind velocity, temperature and direction relative to course
- Displacement at time of trial
- Draft of the vessel fore and aft
- Fuel consumption for each pair of runs (Volume of fuel)
- Total number of people on board
- Total weight of people
- Ballast carried (if any)
- Freeboard forward
- Freeboard aft
- Propeller diameter, pitch and style

5 MANEUVERABILITY TRIALS

During main engine testing in the ahead direction, operate the steering from hard over to port to hard over to starboard, and intermediate positions to simulate normal operation.

6 COMMUNICATION EQUIPMENT

During the Open Water Trials, operation of the following communication equipment shall be demonstrated:

- A VHF Radios - Demonstrate the operation of the VHF marine radios.
- B Demonstrate the operation of the horn.

G. FINAL ACCEPTANCE DEMONSTRATIONS (LEVEL 5)

Final Acceptance Demonstrations are tests the Contractor must perform following delivery to demonstrate to the operating staff the proper operation, and performance of all the equipment, machinery, and electrical systems functioning as an "integrated whole" as described herein.

Final Acceptance Demonstrations shall be conducted following successful completion of Level 3 and Level 4 tests, correction of all deficiencies and delivery of the vessel to the designated delivery point. Final Acceptance Demonstrations must be performed in the presence of a Representative of the Contracting Officer.

The Contractor shall provide sufficient personnel and resources to operate all of the equipment and demonstrate its proper installation.

E06 FINAL INSPECTION

When all work and testing has been satisfactorily completed at the builders yard, the Contractor a Government Representative shall make a complete physical inspection and inventory of the vessel. A "punch list" of deficiencies will be developed and presented to the Contractor for corrective action.

All corrective action necessary to eliminate the "punch list" deficiencies shall be completed at the Contractor's facility. The Contractor shall give the COR 7 working days notice prior to the desired date of reinspection.

Prior to any inspection or reinspection the vessel and all its equipment shall be thoroughly cleaned and all painting and finishes put in first class condition.

E07 PROVISIONAL ACCEPTANCE

Following satisfactory completion of all tests and trials, correction of all "punch list" deficiencies, and receipt of all contract deliverables, the vessel will be Provisionally Accepted at the builder's yard. Delivery of the vessel may not be started until Provisional Acceptance of the vessel has been made.

E08 FINAL ACCEPTANCE

Final Acceptance will be made upon delivery of the vessel, afloat and "Ready for Service" at the delivery point designated and following successful completion of the Final Acceptance Demonstrations. "Ready for Service" is defined as clean inside and out; all trash, dunnage, lashing, and delivery related material disposed of; loose items of outfit in place; all electrical and mechanical systems operational; equipment properly adjusted; instruments and electronics calibrated or aligned, fuel and water tanks filled and damaged paint touched up.

The vessels will be subject to a complete inspection at the time of delivery.

The contractor shall provide necessary personnel, equipment and materials to make each vessel "Ready for Service".

E09 COMMERCIAL WARRANTY OF SUPPLIES

The Contractor shall assign, in writing, all commercial warranties for equipment provided under this contract to the Government. The effective date of all commercial warranties shall be the date of Final Acceptance.

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PART I - THE SCHEDULE - SECTION F

DELIVERY OR PERFORMANCE

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PART I - THE SCHEDULE - SECTION F
 DELIVERIES OR PERFORMANCE

F01 PERFORMANCE

TIME OF DELIVERY

(a) The Government requires delivery to be made according to the following schedule:

REQUIRED DELIVERY SCHEDULE			WITHIN DAYS
ITEM NUMBER	DESCRIPTION	QUANTITY	AFTER DATE OF NOTICE TO PROCEED
0001A	Planning	1 job	30 calendar days
0001B	Engineering and Scheduling	1 job	120 calendar days
0001C	Construct, Test and Deliver	1 job	210 calendar days

OPTIONAL VESSEL (CLIN 0002), IF AWARDED:

0002	CONSTRUCT, TEST AND DELIVER (This Vessel shall be Identical to Line Item 0001)	1 job	300 calendar days
------	--	-------	-------------------

The Government will evaluate equally, as regards time of delivery, offers that propose delivery of each quantity within the applicable delivery period specified above. Offers that propose delivery that will not clearly fall within the applicable required delivery period specified above, will be considered nonresponsive and rejected. The Government reserves the right to award under either the required delivery schedule or the proposed delivery schedule, when an earlier delivery schedule, than required above. If the offeror proposes no other delivery schedule, the required delivery schedule above will apply.

OFFEROR'S PROPOSED DELIVERY SCHEDULE

ITEM NUMBER	DESCRIPTION	QUANTITY	WITHIN DAYS AFTER DATE OF NOTICE TO PROCEED
0001A	PLANNING	1 job	
0001B	ENGINEERING AND SCHEDULING	1 job	
0001C	CONSTRUCT, TEST AND DELIVER	1 job	

OPTIONAL VESSEL (CLIN 0002), IF AWARDED:

0002	CONSTRUCT, TEST AND DELIVER (This Vessel shall be Identical to Line Item 0001)	1 job	
------	--	-------	--

(b) Attention is directed to the Contract Award provision of the solicitation that provides that a written award or acceptance of offer mailed, or otherwise furnished to the successful offeror, results in a binding contract. The Government will mail or otherwise furnish to the offeror an award or notice of award not later than the day award is dated. Therefore, the offeror should compute the time available for performance beginning with the actual date of Notice To Proceed rather than the date the written notice is received from the Contracting Officer through the ordinary mails. However, the Government will evaluate an offer that proposes delivery based on the Contractor's date of receipt of the contract or notice of award by adding five days for delivery of the award through the ordinary mails. If, as so computed, the offered delivery date is later than the required delivery date, the offer will be considered nonresponsive and rejected.

For the purposes of estimating the phase completion and contract completion dates, the Contractor should take into account the time required to review the Contractor's submittals and the time between phases required to issue a Notice To Proceed. Refer to Clause H01 for additional explanation.

F02 PLACE OF DELIVERY

The Contractor shall deliver the vessel afloat and ready for service at the following location:

U.S. Army Corps of Engineers
U.S. Army Engineer District, HUNTINGTON
Bluestone Lake and Dam
Bluestone State Park, West Virginia

F03 NOT USEDF04 NOT USEDF05 GOVERNMENT DELAY OF WORK (APR 1984)

(a) If the performance of all or any part of the work of this contract is delayed or interrupted (1) by an act of the Contracting Officer in the administration of this contract that is not expressly or impliedly authorized by this contract, or (2) by a failure of the Contracting Officer to act within the time specified in this contract, or within a reasonable time if not specified, an adjustment (excluding profit) shall be made for any increase in the cost of performance of this contract caused by the delay or interruption and the contract shall be modified in writing accordingly. Adjustment shall also be made in the delivery or performance dates and any other contractual term or condition affected by the delay or interruption. However, no adjustment shall be made under this clause for any delay or interruption to the extent that performance would have been delayed or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an adjustment is provided or excluded under any other term or condition of this contract.

(b) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved, and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the delay or interruption, but not later than the day of final payment under the contract.

(End of clause)
(FAR 52.242-17)

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PART I - THE SCHEDULE - SECTION H
SPECIAL CONTRACT REQUIREMENTS

H01 CONTRACT ORGANIZATION

a. PLANNING

Planning is line item 0001A of the contract and commences only after receipt by the contractor of a Notice of Contract Award (Award) and a Notice To Proceed (NTP) with contract line item 0001A. In this first phase of the contract, the Contractor is required to present planning information that demonstrates a logical, orderly and workable approach to the contract. The Contractor is not authorized to begin the engineering and scheduling until this phase of the project is completed, and the planning documents are approved by the COR, at which time an additional Notice To Proceed will be issued.

b. ENGINEERING AND SCHEDULING

Engineering and Scheduling is line item 0001B of the contract and commences only after receipt by the Contractor of a Notice To Proceed with contract Line Item 0001B. In this second phase of the contract, the Contractor is required to complete the design, perform other production engineering, and develop the contract schedule. The Contractor is not authorized to begin physical construction until this phase of the project is completed, and the engineering and scheduling documents are approved by the COR, at which time an additional Notice To Proceed will be issued.

c. CONSTRUCT, TEST AND DELIVER

Construct, Test, and Deliver is line item 0001C of the contract and commences only after completion of the Engineering and Scheduling phase and receipt by the Contractor of Notice To Proceed with Line Item 0001C (Line Item 0002 is also Construct, Test, and Deliver, but for an optional, identical vessel). During this third phase of the contract, necessary records and scheduling documents shall be completed, the vessel shall be constructed, tests and trials performed, physical delivery shall be made, the vessel shall be tested at the delivery location. This phase of the contract is completed with receipt by the Contractor of a letter of FINAL ACCEPTANCE and submittal of all final documents.

d. PHASE SEQUENCING

It is intended that the three phases for the vessel will be performed sequentially. If the option vessel, CLIN 0002, is awarded, it is anticipated that the NTP for CLIN 0001C and CLIN 0002 will be provided to the Contractor simultaneously.

The time allotted for each phase spans an interactive process involving both the Contractor and the Government. This process includes preparation, review and approval of the phase submittals, contract administration, mailing, preparation and issuance of Notices To Proceed.

In order for the Contractor to plan the work and for the Government to properly apply Termination Clauses, a graphic identifying the sequence milestones and the performance period allotted to each milestone for CLIN 0001 has been developed and is shown on a following page.

The graphic shows the three basic contract phases. Each contract phase is further subdivided into the milestones that must be completed within each phase and the amount of time allowed to accomplish each. Note that the total time allowed for each phase of the contract matches the "REQUIRED DELIVERY SCHEDULE" in Clause F01. The graphic will be updated to reflect the successful offeror's proposed schedule if it is shorter than the required schedule.

The milestones and periods of performance identified in the graphic are contract requirements.

The Contractor must be aware that the quality, completeness and detail of the submittals have a direct bearing on the approval process. Extended review iterations will extend the time necessary to receive approval of the submittals and will subject the contractor to assessment of Liquidated Damages or Termination for Default.

Refer to Clause H05 for information concerning the submittal review process.

e. OPTIONAL VESSEL

If the option for a second identical vessel, CLIN 0002, is awarded, it will not follow the same contract organization as CLIN 0001. Phase I (PLANNING) and Phase II (ENGINEERING & SCHEDULING) submittals are not required for CLIN 0002 since the second vessel is intended to be identical to the first vessel, CLIN 0001.

		Receipt by contractor of NTP CLIN 0001A (Planning)	
Phase I 30 Calendar Days	20 Calendar Days	Receipt @ MDC of initial submittal of all Phase I deliverables	
	5 CD	Receipt by contractor of submittal review	
	5 CD	Receipt @ MDC of final revised Phase I deliverables (if necessary)	
15 CD		Receipt by contractor of NTP CLIN 0001B (Engineering & Scheduling)	
Phase II 120 Calendar Days	60 Calendar Days	Receipt @ MDC of initial submittal of all Phase II deliverables	
	30 CD	Receipt by contractor of submittal review	
	30 CD	Receipt @ MDC of final revised Phase II deliverables (if necessary)	
30 CD		Receipt by contractor of NTP CLIN 0001C (Construct, Test & Deliver)	
Phase III 210 CD	210	Construct, Test and Deliver Final Acceptance	

CONTRACT PHASE SEQUENCING

H02 CONTRACTOR SUBMITTALS

A. PLANNING PHASE SUBMITTALS

The following is a summary of the items that the Contractor must submit during the Planning Phase. All items must be received, reviewed and accepted by the COR before a Notice To Proceed (NTP) will be issued for the Engineering and Scheduling phases of the contract:

<u>SUBMITTAL ITEM</u>	<u>CONTRACT CLAUSE REFERENCE</u>
o Quality Control Plan	E03
o Authorized Contractor Representative List	E03
o Construction Plan	H06
o Procurement Plan	H08
o Subcontracting Plan	H09
o Engineering Qualifications	H09
o Submittal Schedule	H11
o Drawing Index	H12

B. ENGINEERING & SCHEDULING PHASE SUBMITTALS

The following is a summary of items that the Contractor must submit after a Notice To Proceed with the "ENGINEERING & SCHEDULING" phase of the contract is issued. All items must be received, reviewed, and approved by the COR before a Notice To Proceed with the "CONSTRUCT, TEST & DELIVER" phase of the contract will be issued. The following items are required:

<u>SUBMITTAL ITEM</u>	<u>CONTRACT CLAUSE REFERENCE</u>
o Weight Estimate	C115
o Damaged Stability Analysis	C150
o Test Memoranda & Agenda	E05
o Contractor Safety Plan	H07
o Material & Equipment Schedule	H10
o Engineering & Drawings	H13
o Standard Details	H13

C. CONSTRUCT, TEST, & DELIVER PHASE SUBMITTALS

The following is a summary of items that the Contractor must submit after a Notice To Proceed with the "CONSTRUCT, TEST, and DELIVER" phase of the contract is issued. All items must be received, reviewed and approved by the COR before Final Payment will be made. The following items are required:

<u>SUBMITTAL ITEM</u>	<u>CONTRACT CLAUSE REFERENCE</u>
o Test Schedule	E05
o Test Report	E05
o Inclining Report	E05
o Commercial Warranties	E09
o Purchase Orders\Specifications	H10
o As-Built Drawings	H14
o Manufacturer's or Subcontractor's Drawings and Manuals	H16
o Record Photographs	H18

H03 DESIGN REQUIREMENTS

The contractor shall develop the Final Design of the vessel.

During development of the Final Design, the Contractor may discover circumstances that dictate a need to change some of the equipment or materials specifically required by the contract. Examples of this situation might be that the item is no longer available, or the lead time is too great to meet the vessel delivery. Such circumstances shall be immediately identified to the COR by letter for resolution, along with a proposed solution. Adjustments to the contract required as a result of such circumstances, will be made under the "C HANGES" Clause.

The Contractor shall perform engineering such as development of structural details, foundations, complete material lists, Detailed Design drawings (refer to SNAME definition), shop drawings, construction details, regulatory submittals, "as-built drawings, and other technical details necessary to support his administration, operation, and production practices. Required drawing and document preparation and submittals are addressed in Clause H13 of this contract.

H04 NOT USEDH05 REVIEW OF CONTRACTOR SUBMITTALS

The Marine Design Center (MDC) will review the drawings, data and other material submitted by the Contractor in the various contract phases.

Submittals from the Contractor must be clear as to what the submittal represents and the action the Contractor requests the Government perform.

The Government's review is intended to be limited to the functional aspects of the submittals with limited technical review as necessary to ensure compliance with regulatory standards.

The Contractor shall comply with the requirements of the design embodied in the contract. It is implicit that Government acceptance of submittals will be contingent upon satisfactory fulfillment of those requirements.

Submittals found to be completely acceptable to the Contracting Officer's Representative without comment will be marked "ACCEPTED".

Submittals found to be generally acceptable to the Contracting Officer's Representative with qualifying comments will be marked "ACCEPTED WITH COMMENTS" but may or may not require resubmission depending on the COR's assessment of the criticality of the comments.

"ACCEPTED WITH COMMENTS" submittals being resubmitted will be reviewed only to ensure that the previous comments have been adequately incorporated. Resubmission requirements will be clearly marked on the return.

Submittals unacceptable to the Contracting Officer's Representative will be marked "NOT ACCEPTED". Submittals not accepted will always require full and complete resubmittal. Such resubmittal will result in a full and complete review as though it was a first submittal.

Submittals furnished for information only or for which the Contractor has not indicated the required review action will be marked "EXAMINED".

The Contractor shall insure that all review comments are incorporated in corrected submittal documents or are rebutted in separate correspondence. The Contractor is encouraged to completely discuss all submittal comments with the MDC author in order to insure complete and effective communication.

The Contractor will not use the drawing review or submittal process for contract deviations. Changes in equipment, materials, construction techniques or details must be the subject of separate, specific correspondence. Any such request made by the Contractor must be specific and clear as to what is contractually required, the proposed change, location and/or extent, benefits resulting from the change and effect on contract cost and delivery.

Submittals for review by the Government will be return mailed in accordance with the Phase Sequencing Graphic. Refer to Clause H01. Contractors shall plan their submittal schedules so as not to affect contract performance.

H06 CONSTRUCTION PLAN

After receipt of the Notice To Proceed with CLIN 0001A PLANNING, the Contractor shall develop and submit to the Contracting Officer's Representative the Contractor's proposed plan for the construction of the vessel.

The plan shall be prepared on USACE standard ENG Form 2454 (Construction Progress Chart) furnished by the Government. The plan will be a summary level view of the contract. The plan will show the Contractor's proposed starting date, duration in weeks, ending date, and percentage completion (both as planned and as achieved) for all of the major activities of the contract. The plan shall also show the amount of the total bid price (percent and actual dollars) associated with each activity. The plan will also have the progress "S" curve plotted (both as planned and as achieved).

The activities shown on the chart shall be developed by the Contractor and shall include, as a minimum, the following:

- Direct Construction Labor, separated into principal vessel areas
- Material Purchases separated into principal vessel areas
- Material Deliveries separated into principal vessel areas
- Engineering
- Construction of modules
- Test and Trials
- Delivery
- Overhead and Profit

In addition, milestone events shall be marked on the chart time-line.

After initial review and acceptance by the Government, the plan shall be updated and submitted monthly with the Progress Payment Request.

H07 CONTRACTOR'S SAFETY PLAN

After Notice To Proceed with CLIN 0001A ENGINEERING AND SCHEDULING, the Contractor shall submit a Safety Plan for the facility at which the work is to be performed.

The Contractor's Safety Plan shall outline the procedures used by the Contractor to ensure the safety of his employees and minimize lost-time accidents.

The Safety Plan shall identify by name and title the Contractor's Safety Officer who is responsible for enforcing the Contractor's safety rules and the Contractor's designated "Competent Person" (29 CFR 1915.7) who is responsible for testing the atmosphere in confined and enclosed spaces. In the event that the Contractor has no designated "competent person", a statement that a Marine Chemist will perform the tests and inspections which require a "competent person" shall be included with the Safety Plan, and the name of the Marine Chemist shall appear on the Subcontracting Plan (Clause H09).

H08 PROCUREMENT PLAN

After Notice To Proceed with PLANNING, the Contractor shall submit a Procurement Plan for the vessel.

The Procurement Plan shall identify the major or schedule controlling components and equipment in the contract, estimated delivery time for each, the selected vendor and planned date of ordering.

The Procurement Plan shall be in "spread sheet" format and will later be developed into the Material and Equipment Schedule of clause H10.

Upon written approval of the Procurement Plan by the COR, the contractor may commence procurement of any or all of those items on the plan.

Costs for long lead items and materials which are in the accepted procurement plan must be included on the bid schedule under line items 0001C & 0002C, CONSTRUCT TEST AND DELIVER. Progress payments will be made in accordance with Clause H21, PROGRESS PAYMENT BASED ON A PERCENTAGE OR STAGE OF COMPLETION.

H09 SUBCONTRACTING PLAN

After Notice To Proceed with "PLANNING", the Contractor shall submit a Subcontracting Plan for the contract. This should not be confused with the SUBCONTRACTING PLAN required of Large Business as a part of their affirmative action responsibilities.

The Subcontracting Plan shall identify the areas or features of the contract or vessel which will be performed, all or in part by subcontractors. The plan shall identify the scope of work, subcontractor firm's name, and reference the subcontractor's proposal or letter of intent.

The Contractor shall provide copies of all pre and post contract correspondence between themselves and their representatives and all potential subcontractors when requested by the Contracting Officer's Representative.

The Subcontracting Plan shall specifically address the Contractor's plan for design and engineering.

If any part of the Contractor's engineering is to be subcontracted, the Contractor shall also submit the subcontractor's qualifications, the scope of work and the contract, purchase order, or letter of intent.

If the engineering is to be performed by the Contractor's hired labor, the plan shall make that specifically clear. The Contractor shall provide a statement of qualifications for any "in house" engineering personnel.

All persons employed as naval architects or marine engineers, either by the Contractor or by any subcontractor, shall be professionally competent by virtue of education, training, experience or licensing.

The Subcontracting Plan shall be in "spread sheet" format and will be incorporated into the Material and Equipment Schedule of Clause H10.

Upon written approval of the Subcontracting Plan by the Contracting Officer's Representative, the Contractor is authorized to proceed to place the subcontracts on the plan.

H10 MATERIALS AND EQUIPMENT SCHEDULE

After Notice To Proceed with the "ENGINEERING & SCHEDULING" phase, the Contractor shall develop a schedule of all items, including major stock materials (excluding nuts, bolts, gaskets, consumables, etc.), to be used in the construction of the vessel. The schedule shall be prepared in "spread sheet" format and contain the following information:

- Component/equipment
- Quantity
- Vendor name and address
- Make, model, and options
- Drawing references (if appropriate)
- Purchase Order or Contract Number
- Scheduled order date
- Actual order date Scheduled (promised) receipt at shipyard
- Actual receipt at shipyard

After submittal, review, revision and approval by the COR, the schedule shall be updated and submitted to the Government monthly. Final submission to MDC shall include priced copies of all purchase orders, purchase specifications and receipts.

Upon written approval of the schedule by the Contracting Officer's Representative, the Contractor is authorized to proceed with procurement of all items and materials in the schedule.

At any time during the contract, the COR may request and the Contractor shall furnish, correspondence, telephone conversation records, priced copies of purchase orders, purchase specifications and material receipts or other records between the Contractor and the various subcontractors.

H11 SUBMITTAL SCHEDULE

After receipt of Notice To Proceed with CLIN 0001A PLANNING, the Contractor shall develop a submittal schedule for all Contractor submittals required by the contract (Refer to Clause H02). The schedule shall be in "spread sheet" format and contain the following minimum information:

- Drawing number (if any)
- Name or title of submittal
- Scheduled submittal date(s)
- Actual submittal date(s)
- Submittal letter number
- Reply letter number
- Reply letter date

For drawings or items with repetitive submittals (monthly, etc.) the schedule must allow for drawing review iterations or repetitive submissions.

After review, subsequent revision and approval by the COR, the schedule will be updated and submitted with the monthly Progress Payment Request for the life of the contract.

H12 DRAWING INDEX

After Notice To Proceed with CLIN 0001A PLANNING, the Contractor shall prepare an index of all drawings to be prepared by the Contractor as part of this contract. The list will be subdivided into two parts.

The first part shall list all the drawings the contractor intends or expects to prepare during the "ENGINEERING & SCHEDULING" phase of the contract. See Clause H13.

The second part shall list all As -Built drawings. The As -Built drawings shall consist of updated and corrected originals of all the drawings prepared by the Contractor (listed in the first part of this index) plus any standard drawings or details created by the Contractor during construction.

Both parts of this index shall be complete with drawing title, MDC Drawing Number, the Contractor's drawing number (if any) and scheduled submittal date.

After review, revision, assignment of MDC drawing numbers and approval by the COR the index will be updated and submitted monthly to the Contracting Officer's Representative.

H13 ENGINEERING AND DRAWINGS

A ENGINEERING

The Contractor will perform engineering (prepare calculations, drawings, etc) in order to:

- Develop the Final Design
- Develop detailed piping and cable routings
- Develop shop drawings
- Develop construction details
- Prepare complete bills of materials
- Obtain COR approval for NTP with Construction
- Complete As-Built drawings

All drawings and documents prepared by the Contractor or substantively modified by the Contractor shall be forwarded to the Marine Design Center for review, comment, and approval.

Three copies of each drawing, calculation, report, or document shall be furnished. One copy will be returned to the Contractor showing the Government review action.

It is the responsibility of the Contractor to schedule submission of the listed drawings/documents to allow for review by MDC, without adversely affecting the construction schedule (refer to Clause H02).

All drawings shall be prepared in CADD form, and shall conform to the American National Standards Institute (ANSI) Standard Y14. Drawings shall be in flat size, format A (horizontal or vertical) B, C, D or F as required by ANSI Y14.1. In no case will drawings in any other size or format be accepted. Title blocks shall conform to ANSI dimensions and shall be submitted to the Marine Design Center for approval.

B STANDARD DETAILS

It is not the intention of the Government to unnecessarily restrict the normal manufacturing and construction practices of the Contractor.

Prior to issuance of a NTP with "CONSTRUCT, TEST, & DELIVER", the Contractor may provide to the COR, for approval, a list of the standard details (brackets, gussets, small foundations, site fabricated fittings etc.) that the Contractor proposes to incorporate into the design. Such list shall be accompanied by the Contractor's standard detail drawings.

If accepted, the Contractor's Standard Details can be integrated into the Final Design drawings by reference and need not be resubmitted for review.

After issuance of a NTP for "CONSTRUCT, TEST, & DELIVER", requests for incorporation of standard details will be considered only in cases where contract performance or design features are improved.

C LEVEL OF DESIGN

The "ENGINEERING & SCHEDULING" phase design effort to complete the Final Design shall include the preparation of drawings, calculations, and reports that address the topics listed on the following guidance index. Note that a drawing or calculation may not be required if the system is not provided for the vessel. It is also acceptable to combine details and features on drawings.

<u>DRAWING NUMBER</u>	<u>TITLE</u>	<u>DELIVERABLE</u>
562-C105-01	LINES & OFFSETS	DRAWING
562-C115-01	WEIGHT ESTIMATE	REPORT
562-C130-01	TANK CAPACITY TABLES	DRAWING
562-C150-01	DAMAGED STABILITY	REPORT
562-C205-01	OUTBOARD PROFILE	DRAWING
562-C215-01	GENERAL ARRANGEMENT	DRAWING
562-C245-01	MACHINERY ARRANGEMENT	DRAWING
562-C305-01	SCANTLING PLANS	DRAWING
562-C309-01	HULL STRUCTURAL BULKHEADS	DRAWING
562-C315-01	SUPERSTRUCTURE	DRAWING
562-C320-01	TANK DETAILS	DRAWING
562-C330-01	FOUNDATIONS & MISC STRUCT DETAILS	DRAWING
562-C406-01	PAINT SCHEDULE	DRAWING
562-C410-01	HULL OUTFITTING	DRAWING
562-C415-01	DOORS, WINDOWS, HATCHES SCHEDULE	DRAWING
523-C435-01	INSULATION & SHEATHING	DRAWING
523-C460-01	HULL MARKINGS	DRAWING
523-C630-01	FUEL OIL SYSTEM	DRAWING
523-C670-01	VENTS, & SOUNDS	DRAWING
523-C685-01	HVAC SYSTEM	DRAWING
523-C720-01	ONE LINE DIAGRAM	DRAWING
523-C725-01	CABLE SCHEDULE	REPORT
523-C730-01	LIGHTING & RECEPTACLE PLAN	DRAWING
523-C740-01	SWITCHGEAR	DRAWING

H14 "AS-BUILT" DRAWINGS

In order to provide a record of the "As-Built" vessel the Contractor shall update the FINAL DESIGN drawings, calculations, and documents to clearly show the construction, details and systems of the vessel at the time of delivery.

All of the drawings and documents shown on the Submittal Schedule required by Clause H11 and the Drawing Index required by Clause H12 will be updated and corrected to form an "As -Built" record of the vessel.

The "As-built" materials shall be delivered as follows:

o Prior to FINAL INSPECTION, the Contractor shall submit one set of prints of the "As-Built" drawings for review and approval.

o Prior to FINAL ACCEPTANCE, the Contractor shall provide the following:

- One set of black or blue line prints of all "As -Built" drawings.
- One set of high quality (original) Mylar reproducible of all "As -Built" drawings.
- Two sets of 35 mm "Silver" microfilms of the "As -Built" drawings mounted on MDC Standard aperture cards (cards will be furnished by the COR upon request by the Contractor).
- Two sets of electronic files of all CADD prepared drawings. The files shall be provided on 4 -3/4 650 MB 74 min digital compact disk(CD) in AutoCAD R14 dwg file format or higher. Each drawing sheet shall be a separate electronic file with a filename which conforms to the file naming convention below. Compression utilities such as PKZIP may not be used.

Each complete set of files on CD shall be labeled, indexed in numerical order by filename furnished in protective plastic sleeves and on the CD cover sheet.

Files furnished on CD shall be encased in plastic jewel boxes.

Filenames: Drawing files shall be named based on the drawing phase, WBS number, task number, sheet number, and revision number. The following example will illustrate the naming convention:

For the third sheet of a multi-sheet drawing with a drawing number of 523 -A720-02 and a revision of C the drawing filename would be A720023C.

The direct relationship between the drawing number and the drawing filename is as follows:

	<u>Drawing Number</u>		<u>Drawing Filename</u>
<u>Design Phase</u>	The fourth character, A in the example.	The first character, A.	
<u>WBS Indicator</u>	The fifth through seventh characters, 720 in the example.	The second through fourth characters, 720.	
<u>Task Number</u>	The eighth and ninth characters, 02 in the example.	The fifth and sixth characters, 02.	
<u>Sheet Number</u>	The tenth character, 3 in the example.	The seventh character, 3.	
<u>Revision Indicator</u>	The eleventh character, C in the example.	The eighth character, C.	
<u>File Extension</u>			.DWG
=====			
<u>Dwg. Number</u>	A 720 - 02	<u>Sheet</u> 3	<u>Revision</u> C
<u>Dwg. Filename</u>	A 720 02	3	C .DWG

The Government shall have unlimited use of the drawings listed on the drawing index for repair and maintenance purposes only.

H15 SUBSTITUTIONS

"Substitution" as used in this clause, is an administrative action, not resulting in a contract change of cost or time.

Prior to issuance of a NTP with "Construct, Test and Deliver", the Contractor shall prepare and submit a comprehensive list and analysis of any Contractor proposed substitutions of the equipment and materials required in the contract.

The Substitution List shall be limited to equipment and materials specifically required by the contract. Equipment and Materials where the contractor has selection responsibility (i.e. "similar to") are not to be included in the list.

Each proposed substitution shall be accompanied with a detailed analysis and comparison of the equipment or materials specified and the equipment or materials proposed, including features, dimensions, performance characteristics, benefit to the Government, and the compelling reason why the substitution should be made. In the absence of compelling reasons for making the substitution, the contractor's proposal may be denied.

Should the substitution be accepted, the Contractor shall be responsible for integrating the substitution into the design at no increase in contract cost or no extension of contract completion. Such modifications to the design must be completed, submitted for approval, revised as necessary and accepted by the COR prior to issuing a NTP with Construct, Test and Deliver.

The Contractor bears ultimate responsibility for satisfactory performance of all systems impacted or affected by an accepted substitution as well as the operation of each completed vessel, as affected by the substitution.

Once a NTP with Construct, Test and Deliver has been issued, substitutions will not be considered.

H16 MANUFACTURER OR SUBCONTRACTOR DRAWINGS AND MANUALS

The Contractor shall provide two complete sets of drawings and manuals for each piece of machinery and equipment provided by the Contractor; that clearly describe the operation, construction, maintenance, repair, adjustment, lubrication, parts lists and "trouble shooting" of every item of machinery and equipment. This shall include Detailed Fabrication Drawings where they exist.

Manuals shall be in the English language with all dimensions in the foot -pound-second systems of units. Manuals shall be no larger than 8 inches x 11 inches, and bound in hard covers of durable materials.

Manufacturer's or subcontractor's drawings may be included in the manual but must be folded to page size.

Drawings not suitable for inclusion in the manuals must be considered as engineering and design drawings and shall be prepared and submitted in accordance with the requirements of Clause H13, ENGINEERING AND DRAWINGS.

Prior to FINAL INSPECTION, one set of the manuals shall be submitted to the Contracting Officer's Representative for review, comment and/or approval. This set of manuals will be returned to the Contractor with approval or comments.

Final submittal of the manuals shall consist of two sets of the manuals and must be completed prior to FINAL ACCEPTANCE.

If photocopies (Xerox or similar) of parts lists, text, diagrams, etc., are furnished, one of the sets shall be a "Master" and must be made up of all "original" sheets and be clearly identified as the "Master" copy. Photocopies will be clear with high black/white contrast, sharp lines, full sheet reproduction, and no background shadow or clutter.

Where catalog "cut-sheets" are provided, all information not pertinent to the equipment or machinery provided shall be obliterated.

H17 NOT USED

H18 RECORD PHOTOGRAPHS

A CONSTRUCTION PROGRESS PHOTOGRAPHS

The Contractor shall provide the services of a capable photographer to take monthly photographs deliverable in digital format. The photographs shall document the construction progress, the launching, and tests and trials of the vessel.

The photographs shall be provided on 4-3/4 650 MB 74 min digital compact disk (CD). Photographs shall be JPG file format of at least SVGA Resolution, 24-bit color depth, and at a compression ratio no greater than 25% (75% Quality).

Two copies shall be furnished monthly to the COR with a minimum of 40 photographs. The quantity of photographs shall be commensurate with the level of production.

B LAUNCHING VIDEO

The Contractor shall provide the services of a capable video photographer to take VHS format videotape of the launching and tests and trials of the vessel.

Two copies of the tape shall be furnished to the COR.

C RECORD PHOTOGRAPHS

The Contractor shall furnish the services of a competent photographer to take color photographs of each completed vessel.

A minimum of 24 different exterior and interior shots to include:

- Profile view of each side
- Profile view of each end
- Profile views of each vessel corner
- Views of the completed hull prior to launching
- Major machinery components
- Views space showing arrangement of the spaces and equipment layout. Shots shall be taken from various angles so as to display principal equipment and features.

The Contractor shall provide all negatives and two prints of each shot taken of each vessel. Prints shall be 8 inch x 10 inch.

In addition, the COR shall select two shots from the profile views. The two selected profile views shall be custom printed in 11 x 14 size, mounted, double matted and framed under clear glass in suitable wooden frame.

Three sets of these pictures shall be furnished to the Contracting Officer's Representative (Total of six matted & framed photos per vessel).

H19 NOT USED

H20 GOVERNMENT PROPERTY

All Government -Furnished equipment and equipment for which the Government has made payment or partial payment shall be considered Government Property.

The Contractor shall accept all risk for Government property in his possession.

The Contractor shall maintain an inventory of all Government Property, update and submit the inventory monthly.

The Contractor shall mark all Government property with the following information:

CELRH BLUESTONE LAKE DEBRIS MANAGEMENT VESSEL
U.S. Army Corps of Engineers
Contract DACW61-00-C-_____

Markings shall be in 3 -inch letters in paint of a contrasting color. The markings shall be placed on at least 3 sides of each piece of Government Property.

All Government Property shall be stored in enclosed, w eather tight secure, warehouse buildings. Security shall consist of restricted access, locked and fenced storage. Warehouse buildings shall be heated above freezing and ventilated to prevent condensation or sweating.

H21 PROGRESS PAYMENT BASED ON PERCENTAGE OR STAGE OF COMPLETION

The Government shall pay the Contractor the contract price as provided in this contract.

The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets standards of quality established under the contract, as accepted by the Contracting Officer. If requested by the Contracting Officer, the Contractor shall furnish a breakdown of the total contract price showing the amount included therein for each principal category of work, in such detail as requested, to provide a basis for determining progress payments. In the preparation of estimates, the Contracting Officer may authorize payment for material delivered to the site and at locations other than the site may also be taken into consideration if---

- Consideration is specifically authorized by this contract; and
- The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.

If the Contracting Officer finds that satisfactory progress was achieved during any period for which progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of fifteen percent (15%) of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all remaining withheld funds.

All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be considered as---

- Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or
- Waiving the right of the Government to require the fulfillment of all of the terms of the contract.

In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including co-insurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provision preceding shall not apply to that portion of progress payments attributed to bond premiums.

The Government shall pay the amount due the Contractor under this contract after---

- Completion and acceptance of all work; and
- Presentation of a properly executed voucher.

Notwithstanding any other provision of this contract, progress payments shall not exceed eighty percent (80%) on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes Clause, or funding and other administrative changes.

SECTION I Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

52.202-1 DEFINITIONS. (OCT 1995)

(a) "Head of the agency" (also called "agency head") or "Secretary" means the Secretary (or Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, including any deputy or assistant chief official of the agency, and the term "authorized representative" means any person, persons, or board (other than the Contracting Officer) authorized to act for the head of the agency or Secretary.

(b) Commercial component means any component that is a commercial item.

(c) Commercial item means --

(1) Any item, other than real property, that is of a type customarily used for nongovernmental purposes and that--

(i) Has been sold, leased, or licensed to the general public; or

(ii) Has been offered for sale, lease, or license to the general public;

(2) Any item that evolved from an item described in paragraph (c)(1) of this clause through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation;

(3) Any item that would satisfy a criterion expressed in paragraphs (c)(1) or (c)(2) of this clause, but for--

(i) Modifications of a type customarily available in the commercial marketplace; or

(ii) Minor modifications of a type not customarily available in the commercial marketplace made to meet Federal Government requirements. "Minor" modifications means modifications that do not significantly alter the nongovernmental function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is minor include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is minor;

(4) Any combination of items meeting the requirements of paragraphs (c)(1), (2), (3), or (5) of this clause that are of a type customarily combined and sold in combination to the general public;

(5) Installation services, maintenance services, repair services, training services, and other services if such services are procured for support of an item referred to in paragraphs (c)(1), (2), (3), or (4) of this clause, and if the source of such services--

(i) Offers such services to the general public and the Federal Government contemporaneously and under similar terms and conditions; and

(ii) Offers to use the same work force for providing the Federal Government with such services as the source uses for providing such services to the general public;

(6) Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed under standard commercial terms and conditions. This does not include services that are sold based on hourly rates without an established catalog or market price for a specific service performed;

(7) Any item, combination of items, or service referred to in subparagraphs (c)(1) through (c)(6), notwithstanding the fact that the item, combination of items, or service is transferred between or among separate divisions, subsidiaries, or affiliates of a Contractor; or

(8) A nondevelopmental item, if the procuring agency determines the item was developed exclusively at private expense and sold in substantial quantities, on a competitive basis, to multiple State and local Governments.

(d) Component means any item supplied to the Federal Government as part of an end item or of another component.

(e) Nondevelopmental item means--

(1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;

(2) Any item described in paragraph (e)(1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or

(3) Any item of supply being produced that does not meet the requirements of paragraph (e)(1) or (e)(2) solely because the item is not yet in use.

(f) "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(g) Except as otherwise provided in this contract, the term "subcontracts" includes, but is not limited to, purchase orders and changes and modifications to purchase orders under this contract.

52.203-3 GRATUITIES (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled --

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more

than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

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

52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)

(a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed \$100,000.

52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995)

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime

Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -

- (1) Providing or attempting to provide or offering to provide any kickback;
- (2) Soliciting, accepting, or attempting to accept any kickback; or
- (3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold, from sums owed a subcontractor under the prime contract, the amount of any kickback. The Contracting Officer may order the monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed \$100,000.

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the 1996 National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may--

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which--

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27 (a) or (b) of the Act for the purpose of either--

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsections 27(e)(1) of the Act.

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of subsection 27 (a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be --

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts--

- (i) The base fee established in the contract at the time of contract award;
 - (ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.
- (4) For fixed-price-incentive contracts, the Government may --
- (i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or
 - (ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.
- (5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.
- (c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.
 - (d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 1997)

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

- (1) The awarding of any Federal contract.
- (2) The making of any Federal grant.
- (3) The making of any Federal loan.
- (4) The entering into of any cooperative agreement.
- (5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

- (1) An individual who is appointed to a position in the Government under title 5, United States Code, including a position under a temporary appointment.
- (2) A member of the uniformed services, as defined in subsection 101(3), title 37, United States Code.
- (3) A special Government employee, as defined in section 202, title 18, United States Code.
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

(1) Section 1352 of title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions :

(i) Agency and legislative liaison by own employees.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action --

(1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95 -507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision (b)(3)(i) (A) of this clause are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(c) Disclosure.

(1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--

(i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

(ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

(iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.

(4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

52.204-4 PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER (JUN 1996)

(a) In accordance with Executive Order 12873, dated October 20, 1993, as amended by Executive Order 12995, dated March 25, 1996, the Offeror/Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed/copied double-sided on recycled paper that has at least 20 percent postconsumer material.

(b) The 20 percent standard applies to high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white woven envelopes, and other uncoated printed and writing paper, such as writing and office paper, book paper, cotton fiber paper, and cover stock. An alternative to meeting the 20 percent postconsumer material standard is 50 percent recovered material content of certain industrial by-products.

52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT. (JUL 1995)

(a) The Government suspends or debar Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the \$25,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.

(b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed \$25,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principles, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

52.214-26 AUDIT AND RECORDS--SEALED BIDDING. (OCT 1997)

(a) As used in this clause, records includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with the pricing of any modification to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of

the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to--

- (1) The proposal for the modification;
- (2) The discussions conducted on the proposal(s), including those related to negotiating;
- (3) Pricing of the modification; or
- (4) Performance of the modification.

(c) Comptroller General. In the case of pricing any modification, the Comptroller General of the United States, or an authorized representative, shall have the same rights as specified in paragraph (b) of this clause.

(d) Availability. The Contractor shall make available at its office at all reasonable times the materials described in reproduction, until 3 years after final payment under this contract, or for any other period specified in Subpart 4.7 of the Federal Acquisition Regulation (FAR). FAR Subpart 4.7, Contractor Records Retention, in effect on the date of this contract, is incorporated by reference in its entirety and made a part of this contract.

(1) If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement.

(2) Records pertaining to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to the performance of this contract shall be made available until disposition of such appeals, litigation, or claims.

(e) The Contractor shall insert a clause containing all the provisions of this clause, including this paragraph (e), in all subcontracts expected to exceed the threshold in FAR 15.403-4(a)(1) for submission of cost or pricing data.

52.214-27 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA - MODIFICATIONS - SEALED BIDDING. (OCT 1997)

(a) This clause shall become operative only for any modification to this contract involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed the threshold for the submission of cost or pricing data at FAR 15.403-4(a)(1), except that this clause does not apply to a modification if an exception under FAR 15.403-1(b) applies.

- (1) Based on adequate price competition;
- (2) Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or
- (3) Set by law or regulation.

(b) If any price, including profit, negotiated in connection with any modification under this clause, was increased by any significant amount because

- (1) the Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data;

(2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data; or

(3) any of these parties furnished data of any description that were not accurate, the price shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) above.

(c) Any reduction in the contract price under paragraph (b) above due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which:

(1) the actual subcontract; or

(2) the actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(d) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made:

(1) the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted;

(ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer;

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract; or

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2) Except as prohibited by subdivision (d)(2)(ii) of this clause:

(i) an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if:

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the date of agreement on the price of the contract (or price of the modification) and that the data were not submitted before such date.

(ii) An offset shall not be allowed if:

(A) The understated data was known by the Contractor to be understated when the Certificate of Current Cost or Pricing Data was signed; or (B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the date of agreement on price.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid:

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

(2) A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data which were incomplete, inaccurate, or noncurrent.

52.214-28 SUBCONTRACTOR COST OR PRICING DATA - MODIFICATIONS - SEALED BIDDING. (OCT 1997)

(a) The requirements of paragraphs (b) and (c) of this clause shall:

(1) become operative only for any modification to this contract involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed the threshold for submission of cost or pricing data at (FAR) 48 CFR 15.403-4(a)(1); and

(2) be limited to such modifications.

(b) Before awarding any subcontract expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4(a)(1), on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modifications involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed the threshold for submission of cost or pricing data at FAR 15.403 - 4(a)(1), the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless an exception under FAR 15.403 -1(b) applies.

(1) Based on adequate price competition;

(2) Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or

(3) Set by law or regulation.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in subsection 15.406-2 of the Federal Acquisition Regulation that, to the best of its knowledge and belief, the data submitted under paragraph (b) above were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that, when entered into, exceeds the threshold for submission of cost or pricing data at FAR 15.403 -4(a)(1).

52.217-6 OPTION FOR INCREASED QUANTITY (MAR 1989)

The Government may increase the quantity of supplies called for in the Schedule at the unit price specified. The Contracting Officer may exercise the option by written notice to the Contractor within 120 calendar days from receipt of Notice to Proceed for Clin 0001AC. Delivery of the added items shall continue at the same rate as the like items called for under the contract, unless the parties otherwise agree.

52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUL 1996)

(a) Definition.

"Small business concern," as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

(b) General. (1) Offers are solicited only from small business concerns. Offers received from concerns that are not small business concerns shall be considered nonresponsive and will be rejected.

(2) Any award resulting from this solicitation will be made to a small business concern.

(c) Agreement. A small business concern submitting an offer in its own name agrees to furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States. The term "United States" includes its territories and possessions, the Commonwealth of Puerto Rico, the Trust Territory of the Pacific Islands, and the District of Columbia. If this procurement is processed under simplified acquisition procedures and the total amount of this contract does not exceed \$25,000, a small business concern may furnish the product of any domestic firm. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 1999)

(a) It is the policy of the United States that small business concerns, HUBZone small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, and small business concerns owned and controlled by women shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, HUBZone small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, and small business concerns owned and controlled by women.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

(c) Definitions. As used in this contract (1) Small business concern means a small business as defined pursuant to section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

(2) HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(3) Small business concern owned and controlled by socially and economically disadvantaged individuals and small disadvantaged business concern mean a small business concern that represents, as part of its offer that--

(i) It has received certification as a small disadvantaged business concern consistent with 13 CFR 124, Subpart B;

(ii) No material change in disadvantaged ownership and control has occurred since its certification;

(iii) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(iv) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO -Net).

(4) Small business concern owned and controlled by women means a small business concern --

(i) Which is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(ii) Whose management and daily business operations are controlled by one or more women.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a HUBZone small business concern, a small business concern owned and controlled by socially and economically disadvantaged individuals, or a small business concern owned and controlled by women.

52.219-14 LIMITATIONS ON SUBCONTRACTING (DEC 1996)

(a) This clause does not apply to the unrestricted portion of a partial set-aside.

(b) By submission of an offer and execution of a contract, the Offeror/Contractor agrees that in performance of the contract in the case of a contract for--

(1) Services (except construction). At least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees of the concern.

(2) Supplies (other than procurement from a nonmanufacturer of such supplies). The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.

(3) General construction. The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.

(4) Construction by special trade contractors. The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees.

52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

52.222-3 CONVICT LABOR (AUG 1996)

The Contractor agrees not to employ in the performance of this contract any person undergoing a sentence of imprisonment which has been imposed by any court of a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands. This limitation, however, shall not prohibit the employment by the Contractor in the performance of this contract of persons on parole or probation to work at paid employment during the term of their sentence or persons who have been

pardoned or who have served their terms. Nor shall it prohibit the employment by the Contractor in the performance of this contract of persons confined for violation of the laws of any of the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands who are authorized to work at paid employment in the community under the laws of such juris diction, if--

- (a)(1) The worker is paid or is in an approved work training program on a voluntary basis;
- (2) Representatives of local union central bodies or similar labor union organizations have been consulted;
- (3) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services; and
- (4) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and

(b) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-20 WALSH-HEALEY PUBLIC CONTRACTS ACT (DEC 1996)

If this contract is for the manufacture or furnish ing of materials, supplies, articles or equipment in an amount that exceeds or may exceed \$10,000, and is subject to the Walsh -Healey Public Contracts Act, as amended (41 U.S.C. 35-45), the following terms and conditions apply:

- (a) All stipulations requir ed by the Act and regulations issued by the Secretary of Labor (41 CFR Chapter 50) are incorporated by reference. These stipulations are subject to all applicable rulings and interpretations of the Secretary of Labor that are now, or may hereafter, be in effect.
- (b) All employees whose work relates to this contract shall be paid not less than the minimum wage prescribed by regulations issued by the Secretary of Labor (41 CFR 50 -202.2). Learners, student learners, apprentices, and handicapped workers may be employed at less than the prescribed minimum wage (see 41 CFR 50-202.3) to the same extent that such employment is permitted under Section 14 of the Fair Labor Standards Act (41 U.S.C. 40).

52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

(a) Segregated facilities, as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreat ion or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policie s or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

52.222-26 EQUAL OPPORTUNITY (FEB 1999)

(a) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with subparagraphs (b)(1) through (11) of this clause. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(b) During performing this contract, the Contractor agrees as follows:

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of subparagraphs (b)(1) through (11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(c) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

52.222-35 AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (APR 1998)

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

All employment openings includes all positions except executive and top management, those positions that will be filled from within the contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days' duration, and part-time employment.

Appropriate office of the State employment service system means the local office of the Federal-State national system of public employment offices with assigned responsibility to serve the area where the employment opening is to be filled, including the District of Columbia, Guam, the Commonwealth of Puerto Rico, and the Virgin Islands.

Positions that will be filled from within the Contractor's organization means employment openings for which no consideration will be given to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings that the Contractor proposes to fill from regularly established "recall" lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization.

Veteran of the Vietnam era means a person who--

(1) Served on active duty for a period of more than 180 days, any part of which occurred between August 5, 1964, and May 7, 1975, and was discharged or released therefrom with other than a dishonorable discharge; or

(2) Was discharged or released from active duty for a service-connected disability if any part of such active duty was performed between August 5, 1964, and May 7, 1975.

(b) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against the individual because the individual is a disabled veteran or a veteran of the Vietnam era. The Contractor agrees to take affirmative action to employ, advance in

employment, and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veterans' status in all employment practices such as --

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion or transfer;
- (iv) Recruitment;
- (v) Advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, including apprenticeship.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended.

(c) Listing openings. (1) The Contractor agrees to list all employment openings existing at contract award or occurring during contract performance, at an appropriate office of the State employment service system in the locality where the opening occurs. These openings include those occurring at any Contractor facility, including one not connected with performing this contract. An independent corporate affiliate is exempt from this requirement.

(2) State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their employment openings with the appropriate office of the State employment service.

(3) The listing of employment openings with the State employment service system is required at least concurrently with using any other recruitment source or effort and involves the obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(4) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State employment service system, in each State where it has establishments, of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these terms and has so advised the State system, it need not advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this contract clause.

(d) Applicability. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, and the Virgin Islands.

(e) Postings. (1) The Contractor agrees to post employment notices stating (i) the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era, and (ii) the rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract

Compliance Programs, Department of Labor (Deputy Assistant Secretary), and provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Act, and is committed to take affirmative action to employ, and advance in employment, qualified disabled veterans and veterans of the Vietnam Era.

(f) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(g) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

52.222-37 EMPLOYMENT REPORTS ON DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (JAN 1999)

- (a) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on --
- (1) The number of disabled veterans and the number of veterans of the Vietnam era in the workforce of the contractor by job category and hiring location; and
 - (2) The total number of new employees hired during the period covered by the report, and of that total, the number of disabled veterans, and the number of veterans of the Vietnam era.
- (b) The above items shall be reported by completing the form entitled "Federal Contractor Veterans' Employment Report VETS-100."
- (c) Reports shall be submitted no later than September 30 of each year beginning September 30, 1988.
- (d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. Contractors may select an ending date: (1) As of the end of any pay period during the period January through March 1st of the year the report is due, or (2) as of December 31, if the contractor has previous written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).
- (e) The count of veterans reported according to paragraph (a) of this clause shall be based on voluntary disclosure. Each Contractor subject to the reporting requirements at 38 U.S.C. 4212 shall invite all disabled veterans and veterans of the Vietnam era who wish to benefit under the affirmative action program at 38 U.S.C. 4212 to identify themselves to the Contractor. The invitation shall state that the information is voluntarily provided; that the information will be kept confidential; that disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment; and that the information will be used only in accordance with the regulations promulgated under 38 U.S.C. 4212.
- (f) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary.

52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (APR 1998)

(a) Executive Order 12856 of August 3, 1993, requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA)(42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA)(42 U.S.C. 13101-13109).

(b) The Contractor shall provide all information needed by the Federal facility to comply with the emergency planning reporting requirements of Section 302 of EPCRA; the emergency notice requirements of Section 304 of EPCRA; the list of Material Safety Data Sheets required by Section 311 of EPCRA; the emergency and hazardous chemical inventory forms of Section 312 of EPCRA; the toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA; and the toxic chemical reduction goals requirements of Section 3-302 of Executive Order 12856.

52.223-6 DRUG-FREE WORKPLACE (JAN 1997)

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

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall -- within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration--

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about --

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

- (iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;
- (4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will --
- (i) Abide by the terms of the statement; and
- (ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.
- (5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;
- (6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:
- (i) Taking appropriate personnel action against such employee, up to and including termination; or
- (ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and
- (7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.
- (c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.
- (d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (OCT 1996)

- (a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.
- (b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if --

- (1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);
- (2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);
- (3) The facility does not meet the reporting thresholds of toxic chemicals established under of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);
- (4) The facility does not fall within Standard Industrial Classification Code (SIC) designations 20 through 39 as set forth in section 19.102 of the Federal Acquisition Regulation (FAR); or
- (5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt --

- (1) The Contractor shall notify the Contracting Officer; and
- (2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall (i) submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and (ii) continue to file the annual Form R for the life of the contract for such facility.
- (d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items, as defined in FAR Part 2, the Contractor shall --

- (1) For competitive subcontracts expected to exceed \$100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and
- (2) Include in any resultant subcontract exceeding \$100,000 (including all options), the substance of this clause, except this paragraph (e).

52.226-1 UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (FEB 2000)

(a) For Department of Defense contracts, this clause applies only if the contract includes a subcontracting plan incorporated under the terms of the clause at 52.219-9, Small Business Subcontracting Plan. It does not apply to contracts awarded based on a subcontracting plan submitted and approved under paragraph (g) of the clause at 52.219-9.

(b) Definitions. As used in this clause:

"Indian" means any person who is a member of any Indian tribe, band, group, pueblo or community which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c) and any "Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601).

"Indian organization" means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C., chapter 17.

"Indian-owned economic enterprise" means any Indian -owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership shall constitute not less than 51 percent of the enterprise.

"Indian tribe" means any Indian tribe, band, group, pueblo or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act , which is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1542(c).

"Interested party" means a prime contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

(c)The Contractor agrees to use its best efforts to give Indian organizations and Indian -owned economic enterprises (25 U.S.C. 1544) the maximum practicable opportunity to participate in the subcontracts it awards to the fullest extent consistent with efficient performance of its contract.

(1) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization or Indian -owned economic enterprise as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status. In the event of a challenge to the representation of a subcontractor, the Contracting Officer shall refer the matter to the U.S. Department of the Interior, Bureau of Indian Affairs (BIA), Attn: Chief, Division of Contracting and Grants Administration, 1849 C Street, NW, MS-334A-SIB, Washington, DC 20245. The BIA will determine the eligibility and notify the Contracting Officer. The 5 percent incentive payment will not be made within 50 working days of subcontract award or while a challenge is pending. If a subcontractor is determined to be an ineligible participant, no incentive payment will be made under the Indian Incentive Program.

(2) The Contractor may request an adjustment under the Indian Incentive Program to the following:

(i) The estimated cost of a cost-type contract.

(ii) The target cost of a cost-plus-incentive-fee prime contract.

(iii) The target cost and ceiling price of a fixed-price incentive prime contract.

(iv) The price of a firm-fixed-price prime contract.

(3) The amount of the equitable adjustment to the prime contract shall be 5 percent of the estimated cost, target cost or firm-fixed-price included in the subcontract initially awarded to the Indian organization or Indian-owned economic enterprise.

(4) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.

(d) T The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the amount paid to the subcontractor. The Contracting Officer will seek funding in accordance with agency procedures.

52.227-1 AUTHORIZATION AND CONSENT (JUL 1995)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold (however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.)

52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT
INFRINGEMENT (AUG 1996)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at (FAR) 2.101 to exceed the dollar amount set forth in 13.000 of the Federal Acquisition Regulation (FAR).

52.227-3 PATENT INDEMNITY (APR 1984)

(a) The Contractor shall indemnify the Government and its officers, agents, and employees against liability, including costs, for infringement of any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of the manufacture or delivery of supplies, the performance of services, or the construction, alteration, modification, or repair of real property (hereinafter referred to as "construction work") under this contract, or out of the use or disposal by or for the account of the Government of such supplies or construction work.

(b) This indemnity shall not apply unless the Contractor shall have been informed as soon as practicable by the Government of the suit or action alleging such infringement and shall have been given such opportunity as is afforded by applicable laws, rules, or regulations to participate in its defense. Further, this indemnity shall not apply to (1) an infringement resulting from compliance with specific written instructions of the Contracting Officer directing a change in the supplies to be delivered or in the materials or equipment to be used, or directing a manner of performance of the contract not normally used by the Contractor, (2) an infringement resulting from addition to or change in supplies or components furnished or construction work performed that was made subsequent to delivery or performance, or (3) a claimed infringement that is unreasonably settled without the consent of the Contractor, unless required by final decree of a court of competent jurisdiction.

52.227-14 RIGHTS IN DATA--GENERAL (JUN 1987)

(a) Definitions. "Computer software," as used in this clause, means computer programs, computer data bases, and documentation thereof.

"Data," as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

"Form, fit, and function data," as used in this clause, means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, as well as data identifying source, size, configuration, mating, and attachment characteristics, functional characteristics, and performance requirements; except that for computer software it means data identifying source, functional characteristics,

and performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software.

"Limited rights," as used in this clause, means the rights of the Government in limited rights data as set forth in the Limited Rights Notice of subparagraph (g)(2) if included in this clause.

"Limited rights data," as used in this clause, means data (other than computer software) that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications thereof.

"Restricted computer software," as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software, including minor modifications of such computer software.

"Restricted rights," as used in this clause, means the rights of the Government in restricted computer software, as set forth in a Restricted Rights Notice of subparagraph (g)(3) if included in this clause, or as otherwise may be provided in a collateral agreement incorporated in and made part of this contract, including minor modifications of such computer software.

"Technical data," as used in this clause, means data (other than computer software) which are of a scientific or technical nature.

"Unlimited rights," as used in this clause, means the right of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) Allocation of rights.

(1) Except as provided in paragraph (c) of this clause regarding copyright, the Government shall have unlimited rights in --

(i) Data first produced in the performance of this contract;

(ii) Form, fit, and function data delivered under this contract;

(iii) Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this contract; and

(iv) All other data delivered under this contract unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) of this clause.

(2) The Contractor shall have the right to--

(i) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, unless provided otherwise in paragraph (d) of this clause;

(ii) Protect from unauthorized disclosure and use those data which are limited rights data or restricted computer software to the extent provided in paragraph (g) of this clause;

(iii) Substantiate use of, add or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) of this clause; and

Establish claim to copyright subsisting in data first produced in the performance of this contract to the extent provided in subparagraph (c)(1) of this clause.

(c) Copyright.

(1) Data first produced in the performance of this contract. Unless provided otherwise in paragraph (d) of this clause, the Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings or similar works. The prior, express written permission of the Contracting Officer is required to establish claim to copyright subsisting in all other data first produced in the performance of this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. For data other than computer software the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Contractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government.

(2) Data not first produced in the performance of this contract. The Contractor shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contains the copyright notice of 17 U.S.C. 401 or 402, unless the Contractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause; provided, however, that if such data are computer software the Government shall acquire a copyright license as set forth in subparagraph (g)(3) of this clause if included in this contract or as otherwise may be provided in a collateral agreement incorporated in or made part of this contract.

(3) Removal of copyright notices. The Government agrees not to remove any copyright notices placed on data pursuant to this paragraph (c), and to include such notices on all reproductions of the data.

(d) Release, publication and use of data.

(1) The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided in this paragraph of this clause or expressly set forth in this contract.

(2) The Contractor agrees that to the extent it receives or is given access to data necessary for the performance of this contract which contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the Contracting Officer.

(e) Unauthorized marking of data.

(1) Notwithstanding any other provisions of this contract concerning inspection or acceptance, if any data delivered under this contract are marked with the notices specified in subparagraph (g)(2) or (g)(3) of this clause and use of such is not authorized by this clause, or if such data bears any other restrictive or limiting markings not authorized by this contract, the Contracting Officer may at any time either return the data to the Contractor, or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer shall make written inquiry to the Contractor affording the Contractor 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Contractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii) If the Contractor provides written justification to substantiate the propriety of the markings within the period set in subdivision (e)(1)(i) of this clause, the Contracting Officer shall consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Contractor shall be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer shall furnish the Contractor a written determination, which determination shall become the final agency decision regarding the appropriateness of the markings unless the Contractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government shall continue to abide by the markings under this subdivision (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination becoming final (in which instance the Government shall thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in subparagraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(3) This paragraph (e) does not apply if this contract is for a major system or for support of a major system by a civilian agency other than NASA and the U.S. Coast Guard agency subject to the provisions of Title III of the Federal Property and Administrative Services Act of 1949.

(4) Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Contractor is not precluded by this paragraph (e) from bringing a claim under the Contract Disputes Act, including pursuant to the Disputes clause of this contract, as applicable, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this contract.

(f) Omitted or incorrect markings.

(1) Data delivered to the Government without either the limited rights or restricted rights notice as authorized by paragraph (g) of this clause, or the copyright notice required by paragraph (c) of this clause, shall be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use, or reproduction of such data. However, to the extent the data has not been disclosed without restriction outside the Government, the Contractor may request, within 6 months (or a longer time approved by the Contracting Officer for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Contractor's expense, and the Contracting Officer may agree to do so if the Contractor--

(i) Identifies the data to which the omitted notice is to be applied;

(ii) Demonstrates that the omission of the notice was inadvertent;

(iii) Establishes that the use of the proposed notice is authorized; and

(iv) Acknowledges that the Government has no liability with respect to the disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.

(2) The Contracting Officer may also (i) permit correction at the Contractor's expense of incorrect notices if the Contractor identifies the data on which correction of the notice is to be made, and demonstrates that the

correct notice is authorized, or (ii) correct any incorrect notices.

(g) Protection of limited rights data and restricted computer software.

(1) When data other than that listed in subdivisions (b)(1)(i), (ii), and (iii) of this clause are specified to be delivered under this contract and qualify as either limited rights data or restricted computer software, if the Contractor desires to continue protection of such data, the Contractor shall withhold such data and not furnish them to the Government under this contract. As a condition to this withholding, the Contractor shall identify the data being withheld and furnish form, fit, and function data in lieu of hereof. Limited rights data that are formatted as a computer data base for delivery to the Government are to be treated as limited rights data and not restricted computer software.

(2) Reserved.

(3) Reserved.

(h) Subcontracting. The Contractor has the responsibility to obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this contract. If a subcontractor refuses to accept terms affording the Government such rights, the Contractor shall promptly bring such refusal to the attention of the Contracting Officer and not proceed with subcontract award without further authorization.

Relationship to patents. Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

52.228-1 BID GUARANTEE (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted. -

(c) The amount of the bid guarantee shall be 20 percent of the bid price or \$ n/a, whichever is less. -

(d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default. -

(e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

52.228-2 ADDITIONAL BOND SECURITY (OCT 1997)

The Contractor shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this contract if--

(a) Any surety upon any bond, or issuing financial institution for other security, furnished with this contract

becomes unacceptable to the Government.

- (b) Any surety fails to furnish reports on its financial condition as required by the Government;
- (c) The contract price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer; or
- (d) An irrevocable letter of credit (ILC) used as security will expire before the end of the period of required security. If the Contractor does not furnish an acceptable extension or replacement ILC, or other acceptable substitute, at least 30 days before an ILC's scheduled expiration, the Contracting officer has the right to immediately draw on the ILC.

52.228-11 PLEDGES OF ASSETS (FEB 1992)

(a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond--

(1) Pledge of assets; and

(2) Standard Form 28, Affidavit of Individual Surety.

(b) Pledges of assets from each person acting as an individual surety shall be in the form of --

(1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form) and/or;

(2) A recorded lien on real estate. The offeror will be required to provide--

(i) Evidence of title in the form of a certificate of title prepared by a title insurance company approved by the United States Department of Justice. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);

(ii) Evidence of the amount due under any encumbrance shown in the evidence of title;

(iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999)

(a) "Irrevocable letter of credit" (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and --

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to the Miller Act, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d) Only federally insured financial institutions rated investment grade or higher shall issue or confirm the ILC. The offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institution has the required rating(s) as of the date of issuance of the ILC. Unless the financial institution issuing the ILC had letter of credit business of less than \$25 million in the past year, ILCs over \$5 million must be confirmed by another acceptable financial institution that had letter of credit business of less than \$25 million in the past year.

(e) The following format shall be used by the issuing financial institution to create an ILC:

[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date _____

IRREVOCABLE LETTER OF CREDIT NO. _____

Account party's name _____

Account party's address _____

For Solicitation No. _____(for reference only)

TO: [U.S. Government agency]

[U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States \$ _____. This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on _____, or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution, if any, otherwise state of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

[Confirming Financial Institution's Letterhead or Name and Address]

(Date) _____

Our Letter of Credit Advice Number _____

Beneficiary: _____ [U.S. Government agency]

Issuing Financial Institution: _____

Issuing Financial Institution's LC No.: _____

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by _____ [name of issuing financial institution] for drawings of up to United States dollars _____/U.S. \$_____ and expiring with our close of business on _____ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at _____.

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGHT DRAFT

[City, State]

(Date) _____

[Name and address of financial institution]

Pay to the order of _____ [Beneficiary Agency] _____ the sum of United States \$_____. This draft is drawn under Irrevocable Letter of Credit No.

[Beneficiary Agency]

By: _____

52.228-16 PERFORMANCE AND PAYMENT BONDS--OTHER THAN CONSTRUCTION (SEP 1996)

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

Contract price means the total amount of the contract for the term of the contract (excluding options, if any) or, for requirements contracts, the price payable for the estimated quantity; or for indefinite -delivery type contracts, the price payable for the specified minimum quantity.

(b) The Contractor shall furnish a performance bond (Standard Form 1418) for the protection of the Government in an amount equal to 100 percent of the contract price and a payment bond (Standard Form 1416) in an amount equal to 50 percent of the contract price.

(c) The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within 10 days, but in any event, before starting work.

(d) The Government may require additional performance bond protection when the contract price is increased. The Government may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(e) The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register, or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, NW., 2nd Floor, West Wing, Washington, DC 20227.

52.229-3 FEDERAL, STATE, AND LOCAL TAXES (JAN 1991)

(a) "Contract date," as used in this clause, means the date set for bid opening or, if this is a negotiated

contract or a modification, the effective date of this contract or modification.

"All applicable Federal, State, and local taxes and duties," as used in this clause, means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

"After-imposed Federal tax," as used in this clause, means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.

"After-relieved Federal tax," as used in this clause, means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

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

(c) The contract price shall be increased by the amount of any after -imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.

(d) The contract price shall be decreased by the amount of any after -relieved Federal tax.

(e) The contract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.

(g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(h) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

52.232-1 PAYMENTS (APR 1984)

The Government shall pay the Contractor, upon the submission of proper invoices or vouchers, the prices stipulated in this contract for supplies delivered and accepted or services rendered and accepted, less any deductions provided in this contract. Unless otherwise specified in this contract, payment shall be made on partial deliveries accepted by the Government if --

(a) The amount due on the deliveries warrants it; or

(b) The Contractor requests it and the amount due on the deliveries is at least \$1,000 or 50 percent of the total contract price.

52.232-8 DISCOUNTS FOR PROMPT PAYMENT (MAY 1997)

(a) Discounts for prompt payment will not be considered in the evaluation of offers. However, any offered discount will form a part of the award, and will be taken if payment is made within the discount period indicated in the offer by the offeror. As an alternative to offering a prompt payment discount in conjunction with the offer, offerors awarded contracts may include prompt payment discounts on individual invoices.

(b) In connection with any discount offered for prompt payment, time shall be computed from the date of the invoice. If the Contractor has not placed a date on the invoice, the due date shall be calculated from the date the designated billing office receives a proper invoice, provided the agency annotates such invoice with the date of receipt at the time of receipt. For the purpose of computing the discount earned, payment shall be considered to have been made on the date that appears on the payment check or, for an electronic funds transfer, the specified payment date. When the discount date falls on a Saturday, Sunday, or legal holiday when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day.

52.232-9 LIMITATION ON WITHHOLDING OF PAYMENTS (APR 1984)

If more than one clause or Schedule term of this contract authorizes the temporary withholding of amounts otherwise payable to the Contractor for supplies delivered or services performed, the total of the amounts withheld at any one time shall not exceed the greatest amount that may be withheld under any one clause or Schedule term at that time; provided, that this limitation shall not apply to --

- (a) Withholdings pursuant to any clause relating to wages or hours of employees;
- (b) Withholdings not specifically provided for by this contract;
- (c) The recovery of overpayments; and
- (d) Any other withholding for which the Contracting Officer determines that this limitation is inappropriate.

52.232-11 EXTRAS (APR 1984)

Except as otherwise provided in this contract, no payment for extras shall be made unless such extras and the price therefore have been authorized in writing by the Contracting Officer.

52.232-17 INTEREST (JUNE 1996)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid. reproduce, prepare derivative works, distribute copies to the public, and (b) Amounts shall be due at the earliest of the following dates:

- (1) The date fixed under this contract.
- (2) The date of the first written demand for payment consistent with this contract, including any demand

resulting from a default termination.

(3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.

(4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.

(c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614 -2 of the Federal Acquisition Regulation in effect on the date of this contract.

52.232-25 PROMPT PAYMENT (JUN 1997)

Notwithstanding any other payment clause in this contract, the Government will make invoice payments and contract financing payments under the terms and conditions specified in this clause. Payment shall be considered as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in section 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(4) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments. (1) Due date--(i) Except as indicated in subparagraph (a)(2) and paragraph (c) of this clause, the due date for making invoice payments by the designated payment office shall be the later of the following two events:

(A) The 30th day after the designated billing office has received a proper invoice from the Contractor (except as provided in subdivision (a)(1)(ii) of this clause).

(B) The 30th day after Government acceptance of supplies delivered or services performed by the Contractor. On a final invoice where the payment amount is subject to contract settlement actions, acceptance shall be deemed to have occurred on the effective date of the contract settlement.

(ii) If the designated billing office fails to annotate the invoice with the actual date of receipt at the time of receipt, the invoice payment due date shall be the 30th day after the date of the Contractor's invoice; provided a proper invoice is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) Certain food products and other payments. (i) Due dates on Contractor invoices for meat, meat food products, or fish; perishable agricultural commodities; and dairy products, edible fats or oils, and food products prepared from edible fats or oils are--

(A) For meat or meat food products, as defined in section 2(a)(3) of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)), and as further defined in Pub. L. 98-181, including any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, and any perishable egg product, as close as possible to, but not later than, the 7th day after product delivery.

(B) For fresh or frozen fish, as defined in section 204(3) of the Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)), as close as possible to, but not later than, the 7th day after product delivery.

(C) For perishable agricultural commodities, as defined in section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(4)), as close as possible to, but not later than, the 10th day after product delivery, unless another date is specified in the contract.

(D) For dairy products, as defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (7

U.S.C. 4502(e)), edible fats or oils, and food products prepared from edible fats or oils, as close as possible to, but not later than, the 10th day after the date on which a proper invoice has been received. Liquid milk, cheese, certain processed cheese products, butter, yogurt, ice cream, mayonnaise, salad dressings, and other similar products, fall within this classification. Nothing in the Act limits this classification to refrigerated products. When questions arise regarding the proper classification of a specific product, prevailing industry practices will be followed in specifying a contract payment due date. The burden of proof that a classification of a specific product is, in fact, prevailing industry practice is upon the Contractor making the representation.

(ii) If the contract does not require submission of an invoice for payment (e.g., periodic lease payments), the due date will be as specified in the contract.

(3) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in subdivisions (a)(3)(i) through (a)(3)(viii) of this clause. If the invoice does not comply with these requirements, it shall be returned within 7 days after the date the designated billing office received the invoice (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, edible fats or oils, and food products prepared from edible fats or oils), with a statement of the reasons why it is not a proper invoice. Untimely notification will be taken into account in computing any interest penalty owed to the Contractor in the manner described in subparagraph (a)(5) of this clause.

(i) Name and address of the Contractor.

(ii) Invoice date. (The Contractor is encouraged to date invoices as close as possible to the date of the mailing or transmission.)

(iii) Contract number or other authorization for supplies delivered or services performed (including order number and contract line item number).

(iv) Description, quantity, unit of measure, unit price, and extended price of supplies delivered or services performed.

(v) Shipping and payment terms (e.g., shipment number and date of shipment, prompt payment discount terms). Bill of lading number and weight of shipment will be shown for shipments on Government bills of lading.

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to be notified in the event of a defective invoice.

(viii) Any other information or documentation required by the contract (such as evidence of shipment).

(ix) While not required, the Contractor is strongly encouraged to assign an identification number to each invoice.

(4) Interest penalty. An interest penalty shall be paid automatically by the designated payment office, without request from the Contractor, if payment is not made by the due date and the conditions listed in subdivisions (a)(4)(i) through (a)(4)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day without incurring a late payment interest penalty.

(i) A proper invoice was received by the designated billing office.

(ii) A receiving report or other Government documentation authorizing payment was processed, and there was no disagreement over quantity, quality, or Contractor compliance with any contract term or condition.

(iii) In the case of a final invoice for any balance of funds due the Contractor for supplies delivered or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(5) Computing penalty amount. The interest penalty shall be at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the day after the due date, except where the interest penalty is prescribed by other governmental authority (e.g., tariffs). This rate is referred to as the "Renegotiation Board Interest Rate," and it is published in the Federal Register semiannually on or about January 1 and July 1. The interest penalty shall accrue daily on the invoice principal payment amount approved by the Government until the payment date of such approved principal amount; and will be compounded in 30 -day increments inclusive from the first day after the due date through the payment date. That is, interest accrued at the end of any 30-day period will be added to the approved invoice principal payment amount and will be subject to interest penalties if not paid in the succeeding 30-day period. If the designated billing office failed to notify the Contractor of a defective invoice within the periods prescribed in subparagraph (a)(3) of this clause, the due date on the corrected invoice will be adjusted by subtracting from such date the number of days taken beyond the prescribed notification of defects period. Any interest penalty owed the Contractor will be based on this adjusted due date. Adjustments will be made by the designated payment office for errors in calculating interest penalties.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance shall be deemed to have occurred constructively on the 7th day (unless otherwise specified in this contract) after the Contractor delivered the supplies or performed the services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. In the event that actual acceptance occurs within the constructive acceptance period, the determination of an interest penalty shall be based on the actual date of acceptance. The constructive acceptance requirement does not, however, compel Government officials to accept supplies or services, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The following periods of time will not be included in the determination of an interest penalty:

(A) The period taken to notify the Contractor of defects in invoices submitted to the Government, but this may not exceed 7 days (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, dairy products, edible fats or oils, and food products prepared from edible fats or oils).

(B) The period between the defects notice and resubmission of the corrected invoice by the Contractor.

(C) For incorrect electronic funds transfer (EFT) information, in accordance with the EFT clause of this contract.

(iii) Interest penalties will not continue to accrue after the filing of a claim for such penalties under the clause at 52.233-1, Disputes, or for more than 1 year. Interest penalties of less than \$1 need not be paid.

(iv) Interest penalties are not required on payment delays due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance or on amounts temporarily withheld or retained in accordance with the terms of the contract. Claims involving disputes, and any interest that may be payable, will be resolved in accordance with the clause at 52.233 -1, Disputes.

(6) Prompt payment discounts. An interest penalty also shall be paid automatically by the designated payment office, without request from the Contractor, if a discount for prompt payment is taken improperly. The interest penalty will be calculated as described in subparagraph (a)(5) of this clause on the amount of discount taken for the period beginning with the first day after the end of the discount period through the date when the Contractor is paid.

(7) Additional interest penalty. (i) If this contract was awarded on or after October 1, 1989, a penalty amount, calculated in accordance with subdivision (a)(7)(iii) of this clause, shall be paid in addition to the interest penalty amount if the Contractor--

(A) Is owed an interest penalty of \$1 or more;

(B) Is not paid the interest penalty within 10 days after the date the invoice amount is paid; and

(C) Makes a written demand to the designated payment office for additional penalty payment, in accordance with subdivision (a)(7)(ii) of this clause, postmarked not later than 40 days after the invoice amount is paid.

(ii)(A) Contractors shall support written demands for additional penalty payments with the following data. No additional data shall be required. Contractors shall --

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) Demands must be postmarked on or before the 40th day after payment was made, except that--

(1) If the postmark is illegible or nonexistent, the demand must have been received and annotated with the date of receipt by the designated payment office on or before the 40th day after payment was made; or

(2) If the postmark is illegible or nonexistent and the designated payment office fails to make the required annotation, the demand's validity will be determined by the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.

(iii)(A) The additional penalty shall be equal to 100 percent of any original late payment interest penalty, except--

(1) The additional penalty shall not exceed \$5,000;

(2) The additional penalty shall never be less than \$25; and

(3) No additional penalty is owed if the amount of the underlying interest penalty is less than \$1.

(B) If the interest penalty ceases to accrue in accordance with the limits stated in subdivision (a)(5)(iii) of this clause, the amount of the additional penalty shall be calculated on the amount of interest penalty that would have accrued in the absence of these limits, subject to the overall limits on the additional penalty specified in subdivision (a)(7)(iii)(A) of this clause.

(C) For determining the maximum and minimum additional penalties, the test shall be the interest penalty due on each separate payment made for each separate contract. The maximum and minimum additional penalty shall not be based upon individual invoices unless the invoices are paid separately. Where payments are consolidated for disbursing purposes, the maximum and minimum additional penalty determination shall be made separately for each contract therein.

(D) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).

(b) Contract financing payments. (1) Due dates for recurring financing payments. If this contract provides

for contract financing, requests for payment shall be submitted to the designated billing office as specified in this contract or as directed by the Contracting Officer. Contract financing payments shall be made on the 30th day after receipt of a proper contract financing request by the designated billing office. In the event that an audit or other review of a specific financing request is required to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the due date specified.

(2) Due dates for other contract financing. For advance payments, loans, or other arrangements that do not involve recurring submissions of contract financing requests, payment shall be made in accordance with the corresponding contract terms or as directed by the Contracting Officer.

(3) Interest penalty not applicable. Contract financing payments shall not be assessed an interest penalty for payment delays.

(c) Fast payment procedure due dates. If this contract contains the clause at 52.213-1, Fast Payment Procedure, payments will be made within 15 days after the date of receipt of the invoice.

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (MAY 1999)

(a) Method of payment. (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either--

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Contractor EFT arrangements. If the Contractor has identified multiple payment receiving points (i.e., more than one remittance address and/or EFT information set) in the CCR database, and the Contractor has not notified the Government of the payment receiving point applicable to this contract, the Government shall make payment to the first payment receiving point (EFT information set or remittance address as applicable) listed in the CCR database.

(f) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for --

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and--

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(g) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(h) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register in the CCR database and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(i) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(j) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.

52.233-1 DISPUTES. (DEC 1998)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting

parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified as required by subparagraph (d)(2) of this clause. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) The contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim -

(A) Exceeding \$100,000; or

(B) Regardless of the amount claimed, when using -

(1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or

(2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in (FAR) 48 CFR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer

receives the claim and then at the rate applicable for each 6 -month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

52.233-3 PROTEST AFTER AWARD (AUG. 1996)

(a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either --

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop -work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

52.242-13 BANKRUPTCY. (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

52.242-17 GOVERNMENT DELAY OF WORK (APR 1984)

(a) If the performance of all or any part of the work of this contract is delayed or interrupted (1) by an act of the Contracting Officer in the administration of this contract that is not expressly or impliedly authorized by this contract, or (2) by a failure of the Contracting Officer to act within the time specified in this contract, or within a reasonable time if not specified, an adjustment (excluding profit) shall be made for any increase in the cost of performance of this contract caused by the delay or interruption and the contract shall be modified in writing accordingly. Adjustment shall also be made in the delivery or performance dates and any other contractual term or condition affected by the delay or interruption. However, no adjustment shall be made under this clause for any delay or interruption to the extent that performance would have been delayed or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an adjustment is provided or excluded under any other term or condition of this contract.

(b) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved, and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the delay or interruption, but not later than the day of final payment under the contract.

52.243-1 CHANGES--FIXED-PRICE (APR 1984)

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

(1) Drawings, designs, or specifications when the supplies to be furnished are to be specially manufactured for the Government in accordance with the drawings, designs, or specifications.

(2) Method of shipment or packing.

(3) Place of delivery.

(b) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(d) If the Contractor's proposal includes the cost of property made obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (OCT 1998)

(a) Definitions.

"Commercial item", as used in this clause, has the meaning contained in the clause at 52.202-1, Definitions.

"Subcontract", as used in this clause, 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) Notwithstanding any other clause of this contract, the Contractor is not required to include any FAR provision or clause, other than those listed below to the extent they are applicable and as may be required to establish the reasonableness of prices under Part 15, in a subcontract at any tier for commercial items or commercial components:

(1) 52.222-26, Equal Opportunity (E.O. 11246);

(2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212(a));

(3) 52.222-36, Affirmative Action for Workers with Disabilities (29 U.S.C. 793); and

(4) 52.247-64, Preference for Privately-Owned U.S.-Flagged Commercial Vessels (46 U.S.C. 1241)(flow down not required for subcontracts awarded beginning May 1, 1996).

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

52.246-18 WARRANTY OF SUPPLIES OF A COMPLEX NATURE (APR 1984)

(a) Definitions.

"Acceptance," as used in this clause, means the act of an authorized representative of the Government by which the Government assumes for itself, or as an agent of another, ownership of existing and identified supplies, or approves specific services rendered, as partial or complete performance of the contract.

"Correction," as used in this clause, means the elimination of a defect.

"Supplies," as used in this clause, means the end items furnished by the Contractor and related services required under this contract. The word does not include "data."

(b) Contractor's obligations. (1) The Contractor warrants that for 365 calendar day after final acceptance all supplies furnished under this contract will be free from defects in material and workmanship and will conform with all requirements of this contract; provided, however, that with respect to Government - furnished property, the Contractor's warranty shall extend only to its proper installation, unless the Contractor performs some modification or other work on the property, in which case the Contractor's warranty shall extend to the modification or other work.

(2) Any supplies or parts thereof corrected or furnished in replacement shall be subject to the conditions of this clause to the same extent as supplies initially delivered. This warranty shall be equal in duration to that set forth in paragraph (b)(1) of this clause and shall run from the date of delivery of the corrected or replaced supplies.

(3) The Contractor shall not be obligated to correct or replace supplies if the facilities, tooling, drawings, or other equipment or supplies necessary to accomplish the correction or replacement have been made unavailable to the Contractor by action of the Government. In the event that correction or replacement has been directed, the Contractor shall promptly notify the Contracting Officer, in writing, of the nonavailability.

(4) The Contractor shall also prepare and furnish to the Government data and reports applicable to any correction required (including revision and updating of all affected data called for under this contract) at no increase in the contract price.

(5) When supplies are returned to the Contractor, the Contractor shall bear the transportation costs from the place of delivery specified in the contract (irrespective of the f.o.b. point or the point of acceptance) to the Contractor's plant and return.

(6) All implied warranties of merchantability and "fitness for a particular purpose" are excluded from any obligation contained in this contract.

(c) Remedies available to the Government. (1) In the event of a breach of the Contractor's warranty in paragraph (b)(1) of this clause, the Government may, at no increase in contract price --

(i) Require the Contractor, at the place of delivery specified in the contract (irrespective of the f.o.b. point or the point of acceptance) or at the Contractor's plant, to repair or replace, at the Contractor's election, defective or nonconforming supplies; or

(ii) Require the Contractor to furnish at the Contractor's plant the materials or parts and installation instructions required to successfully accomplish the correction.

(2) If the Contracting Officer does not require correction or replacement of defective or nonconforming supplies or the Contractor is not obligated to correct or replace under paragraph (b)(3) of this clause, the Government shall be entitled to an equitable reduction in the contract price.

(3) The Contracting Officer shall notify the Contractor in writing of any breach of the warranty in paragraph (b) of this clause within 30 days of receipt of such breach. The Contractor shall submit to the Contracting Officer a written recommendation within 10 calendar days after receipt of notice of the breach as to the corrective action required to remedy the breach. After the notice of breach, but not later than 30 calendar days after receipt of the Contractor's recommendation for corrective action, the Contracting Officer may, in writing, direct correction or replacement as in paragraph (c)(1) of this clause, and the Contractor shall, notwithstanding any disagreement regarding the existence of a breach of warranty, comply with this direction. If it is later determined that the Contractor did not breach the warranty in paragraph (b)(1) of this clause, the contract price will be equitably adjusted.

(4) If supplies are corrected or replaced, the period for notification of a breach of the Contractor's warranty in paragraph (c)(3) of this clause shall be 30 calendar days from the furnishing or return by the Contractor to the Government of the corrected or replaced supplies or parts thereof, or, if correction or replacement is effected by the Contractor at a Government or other activity, for 30 calendar days thereafter.

(5) The rights and remedies of the Government provided in this clause are in addition to and do not limit any rights afforded to the Government by any other clause of the contract.

52.247-64 PREFERENCE FOR PRIVATELY OWNED U.S. - FLAG COMMERCIAL VESSELS (JUN 1997)

(a) The Cargo Preference Act of 1954 (46 U.S.C. 1241(b)) requires that Federal departments and agencies shall transport in privately owned U.S.-flag commercial vessels at least 50 percent of the gross tonnage of equipment, materials, or commodities that may be transported in ocean vessels (computed separately for dry bulk carriers, dry cargo liners, and tankers). Such transportation shall be accomplished when any equipment, materials, or commodities, located within or outside the United States, that may be transported by ocean vessel are--

- (1) Acquired for a U.S. Government agency account;
- (2) Furnished to, or for the account of, any foreign nation without provision for reimbursement;
- (3) Furnished for the account of a foreign nation in connection with which the United States advances funds or credits, or guarantees the convertibility of foreign currencies; or
- (4) Acquired with advance of funds, loans, or guaranties made by or on behalf of the United States.

(b) The Contractor shall use privately owned U.S.-flag commercial vessels to ship at least 50 percent of the gross tonnage involved under this contract (computed separately for dry bulk carriers, dry cargo liners, and tankers) whenever shipping any equipment, materials, or commodities under the conditions set forth in paragraph (a) above, to the extent that such vessels are available at rates that are fair and reasonable for privately owned U.S.-flag commercial vessels.

(c)(1) The Contractor shall submit one legible copy of a rated on-board ocean bill of lading for each shipment to both (i) the Contracting Officer, and (ii) the Division of National Cargo, Office of Market Development, Maritime Administration, U.S. Department of Transportation, Washington, DC 20590. Subcontractor bills of lading shall be submitted through the Prime Contractor.

(2) The Contractor shall furnish these bill of lading copies (i) within 20 working days of the date of loading for shipments originating in the United States, or (ii) within 30 working days for shipments originating outside the United States. Each bill of lading copy shall contain the following information:

- (A) Sponsoring U.S. Government agency.
- (B) Name of vessel.
- (C) Vessel flag of registry.
- (D) Date of loading.
- (E) Port of loading.
- (F) Port of final discharge.
- (G) Description of commodity.
- (H) Gross weight in pounds and cubic feet if available.
- (I) Total ocean freight revenue in U.S. dollars.

(d) Except for contracts at or below the simplified acquisition threshold, the Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts or purchase orders under this contract.

(e) The requirement in paragraph (a) does not apply to--

- (1) Contracts at or below the simplified acquisition threshold;
- (2) Cargoes carried in vessels of the Panama Canal Commission or as required or authorized by law or treaty;
- (3) Ocean transportation between foreign countries of supplies purchased with foreign currencies made available, or derived from funds that are made available, under the Foreign Assistance Act of 1961 (22 U.S.C. 2353); and
- (4) Shipments of classified supplies when the classification prohibits the use of non-Government vessels.

(f) Guidance regarding fair and reasonable rates for privately owned U.S. -flag commercial vessels may be obtained from the Division of National Cargo, Office of Costs and Rates, Maritime Administration, 400 Seventh Street, SW, Washington, DC 20590, Phone: 202-366-4610.

52.248-1 VALUE ENGINEERING (FEB 2000)

(a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any net acquisition savings realized from accepted VECP's, in accordance with the incentive sharing rates in paragraph (f) below.

(b) Definitions. "Acquisition savings," as used in this clause, means savings resulting from the application of a VECP to contracts awarded by the same contracting office or its successor for essentially the same unit. Acquisition savings include --

- (1) Instant contract savings, which are the net cost reductions on this, the instant contract, and which are equal to the instant unit cost reduction multiplied by the number of instant contract units affected by the VECP, less the Contractor's allowable development and implementation costs;
- (2) Concurrent contract savings, which are net reductions in the prices of other contracts that are definitized and ongoing at the time the VECP is accepted; and
- (3) Future contract savings, which are the product of the future unit cost reduction multiplied by the number of future contract units in the sharing base. On an instant contract, future contract savings include savings on increases in quantities after VECP acceptance that are due to contract modifications, exercise of options, additional orders, and funding of subsequent year requirements on a multiyear contract.

"Collateral costs," as used in this clause, means agency cost of operation, maintenance, logistic support, or Government-furnished property.

"Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

"Contracting office" includes any contracting office that the acquisition is transferred to, such as another branch of the agency or another agency's office that is performing a joint acquisition action.

"Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

"Future unit cost reduction," as used in this clause, means the instant unit cost reduction adjusted as the Contracting Officer considers necessary for projected learning or changes in quantity during the sharing period. It is calculated at the time the VECP is accepted and applies either (1) throughout the sharing period, unless the Contracting Officer decides that recalculation is necessary because conditions are significantly different from those previously anticipated or (2) to the calculation of a lump-sum payment, which cannot later be revised.

"Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistics support. The term does not include the normal administrative costs of processing the VECP or any increase in this contract's cost or price resulting from negative instant contract savings.

"Instant contract," as used in this clause, means this contract, under which the VECP is submitted. It does not include increases in quantities after acceptance of the VECP that are due to contract modifications, exercise of options, or additional orders. If this is a multiyear contract, the term does not include quantities funded after VECP acceptance. If this contract is a fixed-price contract with prospective price redetermination, the term refers to the period for which firm prices have been established.

"Instant unit cost reduction" means the amount of the decrease in unit cost of performance (without deducting any Contractor's development or implementation costs) resulting from using the VECP on this, the instant contract. If this is a service contract, the instant unit cost reduction is normally equal to the number of hours per line-item task saved by using the VECP on this contract, multiplied by the appropriate contract labor rate.

"Negative instant contract savings" means the increase in the cost or price of this contract when the acceptance of a VECP results in an excess of the Contractor's allowable development and implementation costs over the product of the instant unit cost reduction multiplied by the number of instant contract units affected.

"Net acquisition savings" means total acquisition savings, including instant, concurrent, and future contract savings, less Government costs.

"Sharing base," as used in this clause, means the number of affected end items on contracts of the contracting office accepting the VECP.

Sharing period, as used in this clause, means the period beginning with acceptance of the first unit incorporating the VECP and ending at a calendar date or event determined by the contracting officer for each VECP.

"Unit," as used in this clause, means the item or task to which the Contracting Officer and the Contractor agree the VECP applies.

"Value engineering change proposal (VECP)" means a proposal that--

- (1) Requires a change to this, the instant contract, to implement; and
- (2) Results in reducing the overall projected cost to the agency without impairing essential functions or characteristics; provided, that it does not involve a change--
 - (i) In deliverable end item quantities only;
 - (ii) In research and development (R&D) end items or R&D test quantities that is due solely to results of previous testing under this contract; or
 - (iii) To the contract type only.

(c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (1) through (8) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

(1) A description of the difference between the existing contract requirement and the proposed requirement, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, the effect of the change on the end item's performance, and any pertinent objective test data.

(2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

(3) Identification of the unit to which the VECP applies.

(4) A separate, detailed cost estimate for (i) the affected portions of the existing contract requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under the Subcontracts paragraph of this clause, below.

(5) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(6) A prediction of any effects the proposed change would have on collateral costs to the agency.

(7) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(8) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) Submission. The Contractor shall submit VECP's to the Contracting Officer, unless this contract states otherwise. If this contract is administered by other than the contracting office, the Contractor shall submit a copy of the VECP simultaneously to the Contracting Officer and to the Administrative Contracting Officer.

(e) Government action. (1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45 -day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it shall not be liable for any delay in acting upon a VECP.

(2) If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(3) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause and made either before or within a reasonable time after contract performance is completed. Until such a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(f) Sharing rates. If a VECP is accepted, the Contractor shall share in net acquisition savings according to the percentages shown in the table below. The percentage paid the Contractor depends upon (1) this

contract's type (fixed-price, incentive, or cost-reimbursement), (2) the sharing arrangement specified in paragraph (a) above (incentive, program requirement, or a combination as delineated in the Schedule), and (3) the source of the savings (the instant contract, or concurrent and future contracts), as follows:

Contractor's Share of Net Acquisition Savings
[Figures in Percent]

Sharing arrangement				
Incentive (voluntary)	Program requirement (mandatory)		Contract type	
Instant contract rate	Concurrent and future contract rate	Instant contract rate	Concurrent and future contract rate	
Fixed-price (includes fixed -price-award-fee; \1\ 50 excludes other fixed-price incentive contracts).....	\1\ 50	\1\ 50	25	25
Incentive (fixed-price or cost) (other than award fee).....	(2)	\1\ 50	(2)	25
Cost-reimbursement (includes cost -plus-award-fee; excludes other cost-type incentive contracts).....	\3\ 25	\3\ 25	15	15

\1\ The Contracting Officer may increase the Contractor's sharing rate to as high as 75 percent for each VECP.

\2\ Same sharing arrangement as the contract's profit or fee adjustment formula.

\3\ The Contracting Officer may increase the Contractor's sharing rate to as high as 50 percent for each VECP.

(g) Calculating net acquisition savings.

(1) Acquisition savings are realized when (i) the cost or price is reduced on the instant contract, (ii) reductions are negotiated in concurrent contracts, (iii) future contracts are awarded, or (iv) agreement is reached on a lump-sum payment for future contract savings (see subparagraph (i)(4) below). Net acquisition savings are first realized, and the Contractor shall be paid a share, when Government costs and any negative instant contract savings have been fully offset against acquisition savings.

(2) Except in incentive contracts, Government costs and any price or cost increases resulting from negative instant contract savings shall be offset against acquisition savings each time such savings are realized until they are fully offset. Then, the Contractor's share is calculated by multiplying net acquisition savings by the appropriate Contractor's percentage sharing rate (see paragraph (f) above). Additional Contractor shares of net acquisition savings shall be paid to the Contractor at the time realized.

(3) If this is an incentive contract, recovery of Government costs on the instant contract shall be deferred and offset against concurrent and future contract savings. The Contractor shall share through the contract incentive structure in savings on the instant contract items affected. Any negative instant contract savings shall be added to the target cost or to the target price and ceiling price, and the amount shall be offset against concurrent and future contract savings.

(4) If the Government does not receive and accept all items on which it paid the Contractor's share, the Contractor shall reimburse the Government for the proportionate share of these payments.

(h) Contract adjustment. The modification accepting the VECP (or a subsequent modification issued as soon as possible after any negotiations are completed) shall --

(1) Reduce the contract price or estimated cost by the amount of instant contract savings, unless this is an incentive contract;

(2) When the amount of instant contract savings is negative, increase the contract price, target price and ceiling price, target cost, or estimated cost by that amount;

(3) Specify the Contractor's dollar share per unit on future contracts, or provide the lump-sum payment;

(4) Specify the amount of any Government costs or negative instant contract savings to be offset in determining net acquisition savings realized from concurrent or future contract savings; and

(5) Provide the Contractor's share of any net acquisition savings under the instant contract in accordance with the following:

(i) Fixed-price contracts--add to contract price.

(ii) Cost-reimbursement contracts--add to contract fee.

(i) Concurrent and future contract savings.

(1) Payments of the Contractor's share of concurrent and future contract savings shall be made by a modification to the instant contract in accordance with subparagraph (h)(5) above. For incentive contracts, shares shall be added as a separate firm-fixed-price line item on the instant contract. The Contractor shall maintain records adequate to identify the first delivered unit for 3 years after final payment under this contract.

(2) The Contracting Officer shall calculate the Contractor's share of concurrent contract savings by (i) subtracting from the reduction in price negotiated on the concurrent contract any Government costs or negative instant contract savings not yet offset and (ii) multiplying the result by the Contractor's sharing rate.

(3) The Contracting Officer shall calculate the Contractor's share of future contract savings by (i) multiplying the future unit cost reduction by the number of future contract units scheduled for delivery during the sharing period, (ii) subtracting any Government costs or negative instant contract savings not yet offset, and (iii) multiplying the result by the Contractor's sharing rate.

(4) When the Government wishes and the Contractor agrees, the Contractor's share of future contract savings may be paid in a single lump sum rather than in a series of payments over time as future contracts are awarded. Under this alternate procedure, the future contract savings may be calculated when the VECP is accepted, on the basis of the Contracting Officer's forecast of the number of units that will be delivered during the sharing period. The Contractor's share shall be included in a modification to this contract (see subparagraph (h)(3) above) and shall not be subject to subsequent adjustment.

(5) Alternate no-cost settlement method. When, in accordance with subsection 48.104-4 of the Federal Acquisition Regulation, the Government and the Contractor mutually agree to use the no-cost settlement method, the following applies:

(i) The Contractor will keep all the savings on the instant contract and on its concurrent contracts only.

(ii) The Government will keep all the savings resulting from concurrent contracts placed on other sources, savings from all future contracts, and all collateral savings.

(j) Collateral savings. If a VECP is accepted, the Contracting Officer will increase the instant contract amount, as specified in paragraph (h)(5) of this clause, by a rate from 20 to 100 percent, as determined by the Contracting Officer, of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of

collateral savings will not exceed the contract's firm -fixed-price, target price, target cost, or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer will be the sole determiner of the amount of collateral savings.

(k) Relationship to other incentives. Only those benefits of an accepted VECP not rewardable under performance, design -to-cost (production unit cost, operating and support costs, reliability and maintainability), or similar incentives shall be rewarded under this clause. However, the targets of such incentives affected by the VECP shall not be adjusted because of VECP acceptance. If this contract specifies targets but provides no incentive to surpass them, the value engineering sharing shall apply only to the amount of achievement better than target.

(l) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of \$100,000 or more and may include one in subcontracts of lesser value. In calculating any adjustment in this contract's price for instant contract savings (or negative instant contract savings), the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs, and any value engineering incentive payments to a subcontractor, clearly resulting from a VECP accepted by the Government under this contract. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that the payments shall not reduce the Government's share of concurrent or future contract savings or collateral savings.

(m) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

"These data, furnished under the Value Engineering clause of contract , shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations."

If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in Part 27 of the Federal Acquisition Regulation.)

52.249-1 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (SHORT FORM) (APR 1984)

The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the rights, duties, and obligations of the parties, including compensation to the Contractor, shall be in accordance with Part 49 of the Federal Acquisition Regulation in effect on the date of this contract.

52.249-8 DEFAULT (FIXED-PRICE SUPPLY AND SERVICE) (APR 1984)

(a)(1) The Government may, subject to paragraphs (c) and (d) of this clause, by written notice of default to the Contractor, terminate this contract in whole or in part if the Contractor fails to--

(i) Deliver the supplies or to perform the services within the time specified in this contract or any extension;

(ii) Make progress, so as to endanger performance of this contract (but see subparagraph (a)(2) of this clause); or

(iii) Perform any of the other provisions of this contract (but see subparagraph (a)(2) below).

(2) The Government's right to terminate this contract under subdivisions (a)(1)(ii) and (1)(iii) of this clause, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure.

(b) If the Government terminates this contract in whole or in part, it may acquire, under the terms and in the manner the Contracting Officer considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the Government for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.

(c) Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance the failure to perform must be beyond the control and without the fault or negligence of the Contractor.

(d) If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery schedule.

(e) If this contract is terminated for default, the Government may require the Contractor to transfer title and deliver to the Government, as directed by the Contracting Officer, any (1) completed supplies, and (2) partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (collectively referred to as "manufacturing materials" in this clause) that the Contractor has specifically produced or acquired for the terminated portion of this contract. Upon direction of the Contracting Officer, the Contractor shall also protect and preserve property in its possession in which the Government has an interest.

(f) The Government shall pay contract price for completed supplies delivered and accepted. The Contractor and Contracting Officer shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause. The Government may withhold from these amounts any sum the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lien holders.

(g) If, after termination, it is determined that the Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.

(h) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or 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> for Federal Acquisition Regulations

<http://www.acq.osd.mil/dar/dfars> for Defense Federal Acquisition Regulations

52.214-5000 APPARENT CLERICAL MISTAKES (MAR 1995)--EFARS

(a) For the purpose of initial evaluations of bids, the following will be utilized in the resolving arithmetic discrepancies found on the face of bidding schedule as submitted by the bidder:

- (1) Obviously misplaced decimal points will be corrected;
- (2) Discrepancy between unit price and extended price, the unit price will govern;
- (3) Apparent errors in extension of unit prices will be corrected;
- (4) Apparent errors in addition of lump-sum and extended prices will be corrected.

(b) For the purpose of bid evaluation, the government will proceed on the assumption that the bidder intends his bid to be evaluated on basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.

(c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.

52.232-5001 Continuing Contracts (ALTERNATE) (MAR 1995) – EFARS

(a) Funds are not available at the inception of this contract to cover the entire contract price. The sum of \$150,000.00 has been reserved for this contract and is available for payment to the contractor during the current fiscal year. It is expected that Congress will make appropriations for future fiscal years from which additional funds, together with funds provided by one or more non-federal project sponsors will be reserved for this contract. The liability of the United States for payments beyond the funds reserved for this contract is contingent upon the reservation of additional funds.

(b) Failure to make payments in excess of the amount currently reserved, or that may be reserved from time to time, shall not be considered a breach of this contract, and shall not entitle the contractor to a price adjustment under the terms of this contract except as specifically provided in paragraphs (e) and (h) below.

(c) The Government may at any time reserve additional funds available for such purpose. The contracting officer will promptly notify the contractor of any additional funds reserved for the contract by issuing an administrative modification to the contract.

(d) If earnings will be such that funds reserved for the contract will be exhausted before the end of any fiscal year, the contractor shall give written notice to the contracting officer of the estimated date of exhaustion and the amount of additional funds which will be needed to meet payments due or to become due under this contract during that fiscal year. This notice shall be given not less than 45, nor more than 60 days, prior to the estimated date of exhaustion.

(e) No payments will be made after exhaustion of funds except to the extent that additional funds are reserved for the contract. If, and when, sufficient additional funds are reserved, the contractor shall be entitled to simple interest on any payment that the contracting officer determines was actually earned under the terms of this contract and would have been made except for exhaustion of funds. Interest shall be computed from the time such payment would otherwise have been made until actually or constructively made, and shall be at the rate established by the Secretary of the Treasury pursuant to Public Law 92-41, 85 STAT 97, or as in effect on the first day of the delay in such payment.

(f) Any suspension, delay, or interruption of work arising from exhaustion or anticipated exhaustion of funds shall not constitute a breach of this contract and shall not entitle the contractor to any price adjustment under a "Suspension of Work" or similar clause or in any other manner under this contract.

(g) An equitable adjustment in performance time shall be made for any increase in the time required for performance of any part of the work arising from exhaustion of funds or the reasonable exhaustion of funds.

(h) If, upon the expiration of sixty (60) days after the beginning of the fiscal year following an exhaustion of funds, the Government has failed to reserve sufficient additional funds to cover payments otherwise due, the contractor, by written notice delivered to the contracting officer at any time before such additional funds are reserved, may elect to treat his right to proceed with the work as having been

terminated. Such a termination shall be at no cost to the Government, except that to the extent that additional funds to make payment therefore are allocated to this contract, it may be treated as a termination for convenience of the Government.

- (i) If at any time it becomes apparent that the funds reserved for any fiscal year are in excess of the funds required to meet all payments due or to become due, the contractor because of work performed and to be performed under this contract during the fiscal year, the Government reserves the right, after notice to the contractor, to reduce said reservation by the amount of such excess.
- (j) The term "Reservation" means monies that have been set aside and made available for payments under this contract.

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-
CONTRACT-RELATED FELONIES (MAR 1999)

(a) Definitions. As used in this clause —

(1) "Arising out of a contract with the DoD" means any act in connection with—

(i) Attempting to obtain;

(ii) Obtaining, or

(iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

(2) "Conviction of fraud or any other felony" means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of nolo contendere, for which sentence has been imposed.

(3) "Date of conviction" means the date judgment was entered against the individual.

(b) Any individual who is convicted after September 29, 1988, of fraud or any other felony arising out of a contract with the DoD is prohibited from serving--

(1) In a management or supervisory capacity on any DoD contract or first-tier subcontract;

(2) On the board of directors of any DoD contractor or first-tier subcontractor;

(3) As a consultant, agent, or representative for any DoD contractor or first-tier subcontractor; or

(4) In any other capacity with the authority to influence, advise, or control the decisions of any DoD contractor or subcontractor with regard to any DoD contract or first-tier subcontract.

(c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.

(d) 10 U.S.C. 2408 provides that a defense contractor or first-tier subcontractor shall be subject to a criminal penalty of not more than \$500,000 if convicted of knowingly —

(1) Employing a person under a prohibition specified in paragraph (b) of this clause; or

(2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.

(e) In addition to the criminal penalties contained in 10 U.S.C. 2408, the Government may consider other available remedies, such as —

- (1) Suspension or debarment;
 - (2) Cancellation of the contract at no cost to the Government; or
 - (3) Termination of the contract for default.
- (f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify —
- (1) The person involved;
 - (2) The nature of the conviction and resultant sentence or punishment imposed;
 - (3) The reasons for the requested waiver; and
 - (4) An explanation of why a waiver is in the interest of national security.
- (g) The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first -tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial items or components.
- (h) Pursuant to 10 U.S.C. 2408(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone (202) 616-3507.

252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the contractor.

252.225-7001 BUY AMERICAN ACT AND BALANCE OF PAYMENTS PROGRAM (MAR 1998)

(a) Definitions.

As used in this clause --

- (1) Components means those articles, materials, and supplies directly incorporated into end products.
- (2) Domestic end product means--
 - (i) An unmanufactured end product that has been mined or produced in the United States; or
 - (ii) An end product manufactured in the United States if the cost of its qualifying country components and its components that are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. The cost of components shall include transportation costs to the place of incorporation into the end product and U.S. duty (whether or not a duty-free entry certificate may be issued). A component shall be considered to have been mined, produced, or manufactured in the United

States (regardless of its source in fact) if the end product in which it is incorporated is manufactured in the United States and the component is of a class or kind--

(A) Determined to be not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality; or

(B) That the Secretary concerned determines would be inconsistent with the public interest to apply the restrictions of the Buy American Act.

(3) End product means those articles, materials, and supplies to be acquired for public use under the contract. For this contract, the end products are the line items to be delivered to the Government (including supplies to be acquired by the Government for public use in connection with service contracts, but excluding installation and other services to be performed after delivery).

(4) Nonqualifying country end product means an end product that is neither a domestic end product nor a qualifying country end product.

(5) Qualifying country means any country set forth in subsection 225.872 -1 of the Defense Federal Acquisition Regulation Supplement.

(6) Qualifying country component means an item mined, produced, or manufactured in a qualifying country.

(7) Qualifying country end product means --

(i) An unmanufactured end product mined or produced in a qualifying country; or

(ii) An end product manufactured in a qualifying country if the cost of the components mined, produced, or manufactured in the qualifying country and its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components.

(b) This clause implements the Buy American Act (41 U.S.C. Section 10a -d) in a manner that will encourage a favorable international balance of payments by providing a preference to domestic end products over other end products, except for end products which are qualifying country end products.

(c) The Contractor agrees that it will deliver only domestic end products unless, in its offer, it specified delivery of other end products in the Buy American Act --Balance of Payments Program Certificate provision of the solicitation. An offer certifying that a qualifying country end product will be supplied requires the Contractor to deliver a qualifying country end product or a domestic end product.

(d) The offered price of qualifying country end products should not include custom fees or duty. The offered price of nonqualifying country end products, and products manufactured in the United States that contain nonqualifying country components, must include all applicable duty. The award price will not include duty for end products or components that are to be accorded duty-free entry. Generally, when the Buy American Act is applicable, each nonqualifying country offer is adjusted for the purpose of evaluation by adding 50 percent of the offer, inclusive of duty.

252.225-7002 QUALIFYING COUNTRY SOURCES AS SUBCONTRACTORS (DEC 1991)

Subject to the restrictions in section 225.872 of the Defense FAR Supplement, the Contractor shall not preclude qualifying country sources and U.S. sources from competing for subcontracts under this contract.

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PART II
LIST OF DOCS, EXHIBITS AND ATTACHMENTS
SECTION J

LIST OF ATTACHMENTS

<u>CLAUSE</u>	<u>PAGE</u>
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J04 PERFORMANCE EVALUATION FOR SERVICE & SUPPLY CONTRACTS	9
J05 COMMUNICATION MARK	9

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J01 CONTRACT DRAWINGS

The following drawings shall form a part of this solicitation. Please note that Drawings will be provided to the successful bidder in electronic file form:

<u>DRAWING NO.</u>	<u>TITLE</u>	<u>FORMAT</u>
562-B205-01	Outboard Profile and Arrangement	DRAWING

J02 MISCELLANEOUS SKETCHES

The miscellaneous sketches that form a part of this contract are enclosed in the following pages and are listed as follows.

Drawing Number	Revision	Title
Figure 1	0	Plate Fairness
Figure 2	0	Plate Fairness
Notes to Figures 1 & 2		

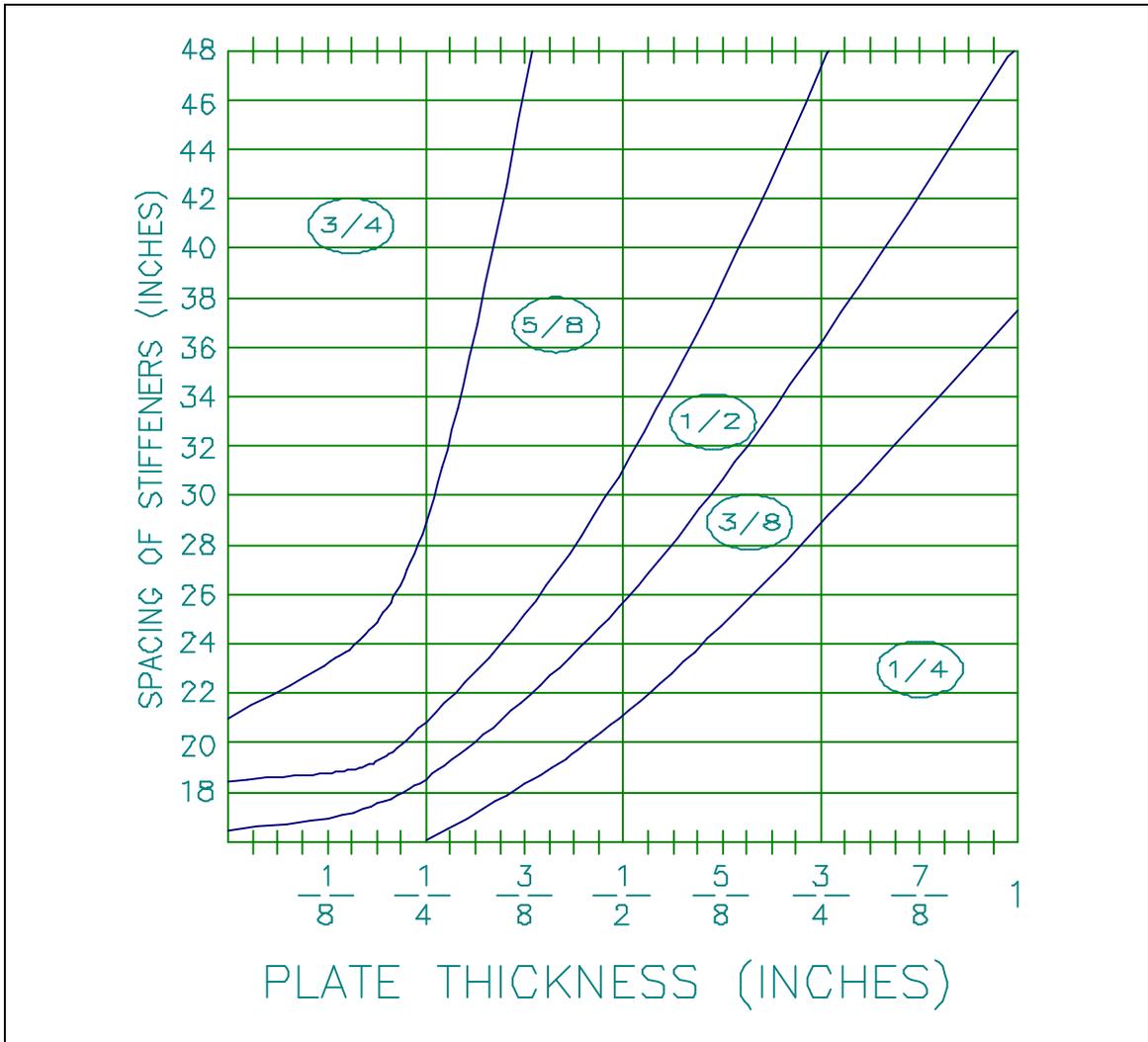


FIGURE 1
Permissible Unfairness in Steel Welded Structure

NOTE: Numbers in circles represent maximum distortion for steel plate.

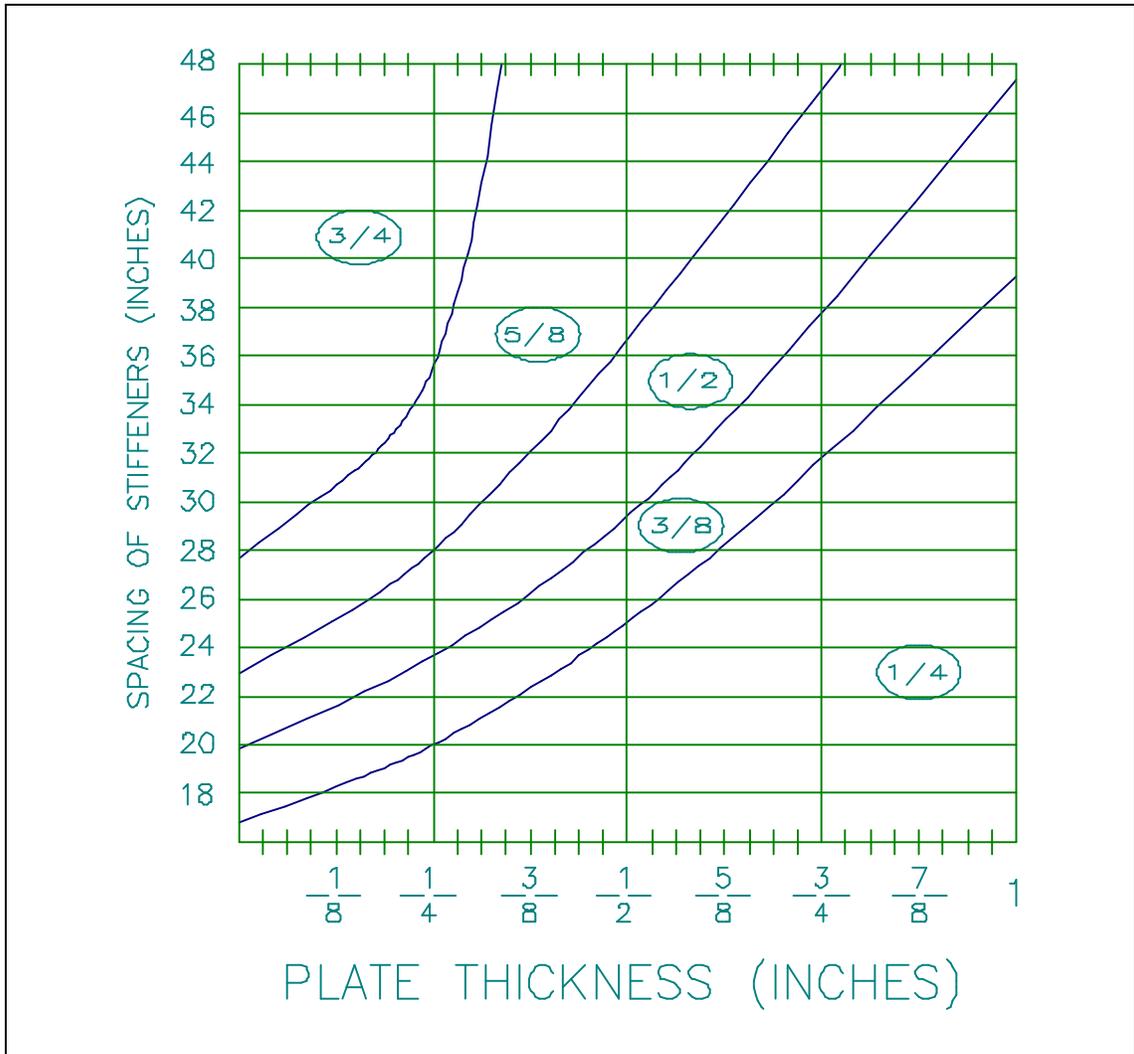


FIGURE 2
Permissible Unfairness in Steel Welded Structure

NOTE: Numbers in circles represent maximum distortion for steel plate.

NOTES TO FIGURES 1 AND 2

1. If aid is necessary in determining the acceptability of the fairness of welded structure, a measurement of the unfairness of plating may be made in the area of interest. In such cases, the measurement shall be made across the minor dimension of the panel. The tolerances specified are plus or minus dimensions from a fair line.

2. Applicability of Tolerances

A. Figure 2 is applicable as follows:

- Entire shell.
- Uppermost strength deck.
- Longitudinal strength structure within the midships 3/5 length which includes inner -bottom tank top and the deck next below the uppermost strength deck if continuous above a machinery space.
- In transversely framed ships, the permissible unfairness for structure noted above is reduced by 1/8 -inch.
- Bulwarks and exterior superstructure bulkheads.

B. Figure 1 is applicable in the following areas except where Figure 2 governs.

- Structural bulkheads forming a boundary of a living space (stateroom, office, berthing, messing, or lounge areas) and passageways contiguous to such spaces.
- Decks within the hull and superstructure in way of the above living spaces.
- Decks exposed to weather.
- Tank and main transverse bulkheads.
- Inner-bottom plate longitudinals.

C. For other structural bulkheads and decks, the unfairness as permitted by Figure 1 may be increased by 1/8 inch.

D. For stiffener spacings greater than those provided in Figures 1 and 2, the curves shall be extrapolated proportionately. For material thickness greater than 1 inch, the tolerances for 1 inch material in Figures 1 and 2 are applicable.

J03 ENG FORM 2454

The Contractor shall utilize the ENG Form 2454 for the Construction Plan required by Clause H06.

J04 PERFORMANCE EVALUATION FOR SERVICE & SUPPLY CONTRACTS

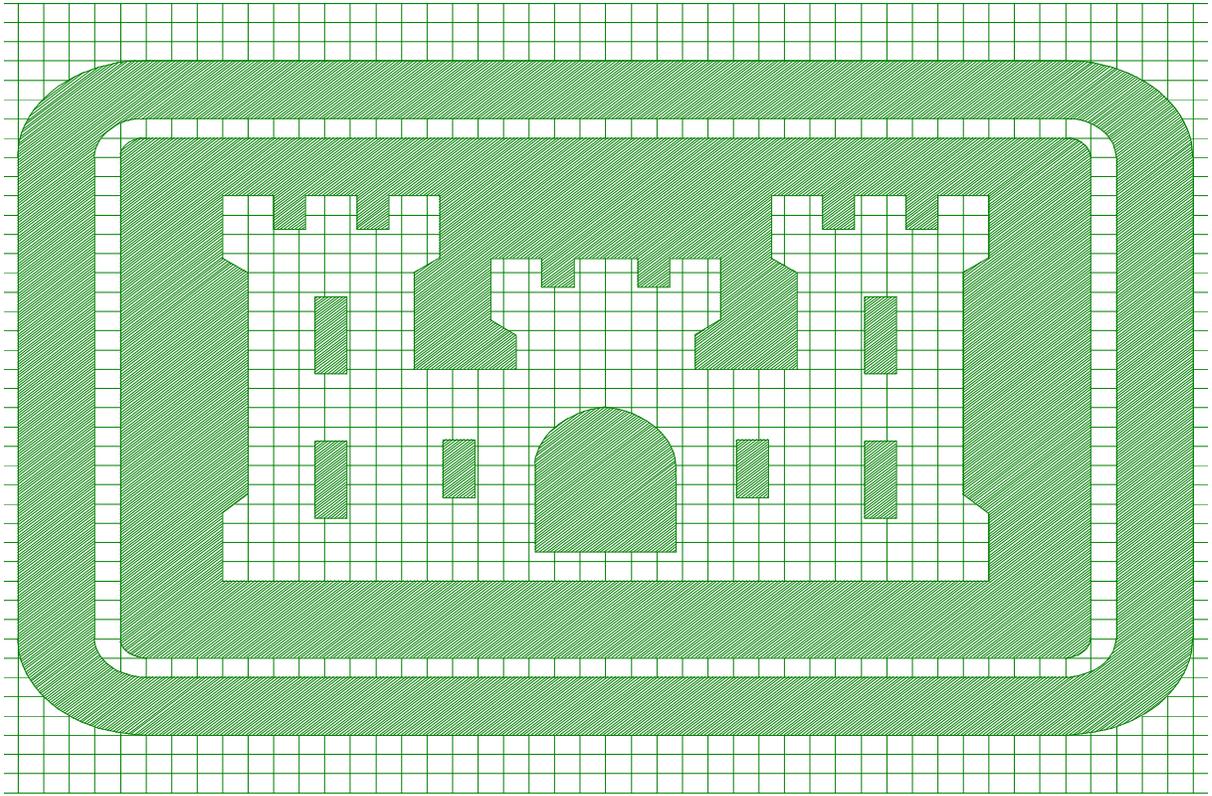
In accordance with Federal Acquisition Regulation 42.15 and Engineer Regulation 715 -1-19 dated July 5, 1996, this contract action is subject to the requirement for Contractor performance evaluation in the elements listed on the attached form.

At a minimum, the performance evaluation shall be completed within 45 days of completion of each years performance. Additional (interim) evaluations may be prepared if any element listed is being performed unsatisfactorily.

The period of evaluation will begin on the date of acknowledgment of receipt of the Notice To Proceed and will run concurrent with the performance period of the contract.

J05 COMMUNICATION MARK

The contractor shall utilize the template provide of the following page when fabricating the Corps Communication Mark as required in Clause C460.



COMMUNICATION MARK

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SECTION K Representations, Certifications and Other Statements of Offerors

CLAUSES INCORPORATED BY FULL TEXT

52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)

(a) The offeror certifies that --

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to (i) those prices, (ii) the intention to submit an offer, or (iii) the methods of factors used to calculate the prices offered:

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory --

(1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contradictory to subparagraphs (a)(1) through (a)(3) above; or

(2) (i) Has been authorized, in writing, to act as an agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above _____ (insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above.

(c) If the offeror deletes or modifies subparagraph (a)(2) above, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

(a) Definitions.

Common parent, as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

Taxpayer Identification Number (TIN), as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).

___ TIN:-----

___ TIN has been applied for.

___ TIN is not required because:

___ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

___ Offeror is an agency or instrumentality of a foreign government;

___ Offeror is an agency or instrumentality of the Federal Government.

(e) Type of organization.

___ Sole proprietorship;

___ Partnership;

___ Corporate entity (not tax-exempt);

___ Corporate entity (tax-exempt);

___ Government entity (Federal, State, or local);

___ Foreign government;

___ International organization per 26 CFR 1.6049-4;

___ Other-----

(f) Common parent.

___ Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.

___ Name and TIN of common parent:

Name-----

TIN-----

(End of provision)

52.203-11 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (APR 1991)

(a) The definitions and prohibitions contained in the clause, at FAR 52.203 -12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this Certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (MAY 1999) ALTERNATE I (NOV 1999)

(a)(1) The standard industrial classification (SIC) code for this acquisition is 3731.

(2) The small business size standard is 1000 employees.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) Representations. (1) The offeror represents as part of its offer that it () is, () is not a small business concern.

(2) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it () is, () is not a small disadvantaged business concern as defined in 13 CFR 124 -1002.

(3) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it () is, () is not a women-owned small business concern.

(4) (Complete only if offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, as part of its offer, that--

(i) It ____ is, ____ is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR Part 126; and

(ii) It ____ is, ____ is not a joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (b)(4)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. [The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: _____.] Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(c) Definitions. "Joint venture," for purposes of a small disadvantaged business (SDB) set -aside or price evaluation preference (as prescribed at 13 CFR 124.321), is a concern that is owned and controlled by one or more socially and economically disadvantaged individuals entering into a joint venture agreement with one or more business concerns and is considered to be affiliated for size purposes with such other concern(s). The combined annual receipts or employees of the concerns entering into the joint venture must meet the applicable size standard corresponding to the SIC code designated for the contract. The majority of the venture's earnings must accrue directly to the socially and economically disadvantaged individuals in the SDB concern(s) in the joint venture. The percentage of the ownership involvement in a joint venture by disadvantaged individuals must be at least 51 percent.

"Small business concern," as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

"Small disadvantaged business concern," as used in this provision, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and (2) has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR Part 124.

"Women-owned small business concern," as used in this provision, means a small business concern --

(1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Notice. (1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set -aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall --

(i) Be punished by imposition of fine, imprisonment, or both;

(ii) Be subject to administrative remedies, including suspension and debarment; and

(iii) Be ineligible for participation in programs conducted under the authority of the Act.

52.219-2 EQUAL LOW BIDS. (OCT 1995)

(a) This provision applies to small business concerns only.

(b) The bidder's status as a labor surplus area (LSA) concern may affect entitlement to award in case of tie bids. If the bidder wishes to be considered for this priority, the bidder must identify, in the following space, the LSA in which the costs to be incurred on account of manufacturing or production (by the bidder or the first-tier subcontractors) amount to more than 50 percent of the contract price.

(c) Failure to identify the labor surplus area as specified in paragraph (b) of this provision will preclude the bidder from receiving priority consideration. If the bidder is awarded a contract as a result of receiving priority consideration under this provision and would not have otherwise received award, the bidder shall perform the contract or cause the contract to be performed in accordance with the obligations of an LSA concern.

52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)

The offeror represents that --

(a) It has, has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;

(b) It has, has not, filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

52.222-25 AFFIRMATIVE ACTION COMPLIANCE (FEB 1984)

The offeror represents that

(a) it has developed and has on file, has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60 -1 and 60-2), or

(b) has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

52.226-2 HISTORICALLY BLACK COLLEGE OR UNIVERSITY AND MINORITY INSTITUTION REPRESENTATION (MAY 1997)

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

"Historically Black College or University" means an institution determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. For the Department of Defense, the National Aeronautics and Space Administration, and the Coast Guard, the term also includes any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

"Minority Institution" means an institution of higher education meeting the requirements of Section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)) which, for the purpose of this provision, includes a Hispanic - serving institution of higher education as defined in Section 316(b)(1) of the Act (20 U.S.C. 1059c(b)(1)).

(b) Representation. The offeror represents that it--

is is not a Historically Black College or University;

is is not a Minority Institution.

252.225-7000 BUY AMERICAN ACT--BALANCE OF PAYMENTS PROGRAM CERTIFICATE (SEP 1999)

(a) Definitions. Domestic end product, qualifying country, qualifying country end product, and qualifying country end product have the meanings given in the Buy American Act and Balance of Payments Program clause of this solicitation.

(b) Evaluation. Offers will be evaluated by giving preference to domestic end products and qualifying country end products over nonqualifying country end products.

(c) Certifications. (1) The Offeror certifies that --

(i) Each end product, except those listed in paragraphs (c) (2) or (3) of this provision, is a domestic end product; and

(ii) Components of unknown origin are considered to have been mined, produced, or manufactured outside the United States or a qualifying country.

(2) The Offeror certifies that the following end products are qualifying country end products:

Qualifying Country End Products

Line Item Number

Country of Origin

(List only qualifying country end products.)

(3) The Offeror certifies that the following end products are nonqualifying country end products:

Nonqualifying Country End Products

Line Item Number

Country of Origin (If known)

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SECTION L Instructions, Conditions and Notices to Bidders

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52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (JUN 99)

(a) Contractor identification is essential for complying with statutory contractor reporting requirements. Therefore, the offeror is requested to enter, in the block with its name and address on the Standard Form 33 or similar document, the annotation "DUNS" followed by the DUNS number which identifies the offeror's name and address exactly as stated in the offer.

(b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. A DUNS number will be provided immediately by telephone at no charge to the offeror. For information on obtaining a DUNS number, the offeror, if located within the United States, should call Dun and Bradstreet at 1-800-333-0505. The offeror should be prepared to provide the following information:

- (1) Company name.
- (2) Company address.
- (3) Company telephone number.
- (4) Line of business.
- (5) Chief executive officer/key manager.
- (6) Date the company was started.
- (7) Number of people employed by the company.
- (8) Company affiliation.

(c) Offerors located outside the United States may obtain the location and phone number of the local Dun and Bradstreet Information Services office from the Internet Home Page at <http://www.customerservice@dnb.com/>. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at globalinfo@dnb.com.

52.214-1 SOLICITATION DEFINITIONS--SEALED BIDDING (JUL 1987)

"Government" means United States Government.

"Offer" means "bid" in sealed bidding.

"Solicitation" means an invitation for bids in sealed bidding.

52.214-3 AMENDMENTS TO INVITATIONS FOR BIDS (DEC 1989)

(a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

(b) Bidders shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date in the space provided for this purpose on the form for submitting a bid, (3) by letter or telegram, or (4) by facsimile, if facsimile bids are authorized in the solicitation. The Government must receive the acknowledgment by the time and at the place specified for receipt of bids.

52.214-4 FALSE STATEMENTS IN BIDS (APR 1984)

Bidders must provide full, accurate, and complete information as required by this solicitation and its attachments. The penalty for making false statements in bids is prescribed in 18 U.S.C. 1001.

52.214-5 SUBMISSION OF BIDS (MAR 1997)

(a) Bids and bid modifications shall be submitted in sealed envelopes or packages (unless submitted by electronic means) (1) addressed to the office specified in the solicitation, and (2) showing the time and date specified for receipt, the solicitation number, and the name and address of the bidder.

(b) Bidders using commercial carrier services shall ensure that the bid is addressed and marked on the outermost envelope or wrapper as prescribed in subparagraphs (a)(1) and (2) of this provision when delivered to the office specified in the solicitation.

(c) Telegraphic bids will not be considered unless authorized by the solicitation ; however, bids may be modified or withdrawn by written or telegraphic notice.

(d) Facsimile bids, modifications, or withdrawals, will not be considered unless authorized by the solicitation.

(e) Bids submitted by electronic commerce shall be considered only if the electronic commerce method was specifically stipulated or permitted by the solicitation.

52.214-6 EXPLANATION TO PROSPECTIVE BIDDERS (APR 1984)

Any prospective bidder desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing soon enough to allow a reply to reach all prospective bidders before the submission of their bids. Oral explanations or instructions given before the award of a contract will not be binding. Any information given a prospective bidder concerning a solicitation will be furnished promptly to all other prospective bidders as an amendment to the solicitation, if that information is necessary in submitting bids or if the lack of it would be prejudicial to other prospective bidders.

52.214-7 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS (NOV 1999)

(a) Bidders are responsible for submitting bids, and any modifications or withdrawals, so as to reach the Government office designated in the invitation for bids (IFB) by the time specified in the IFB. If no time is specified in the IFB, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that bids are due.

(b)(1) Any bid, modification, or withdrawal received at the Government office designated in the IFB after the exact time specified for receipt of bids is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late bid would not unduly delay the acquisition; and --

(i) If it was transmitted through an electronic commerce method authorized by the IFB, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of bids; or

(ii) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of bids and was under the Government's control prior to the time set for receipt of bids.

(2) However, a late modification of an otherwise successful bid that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(c) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the bid wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(d) If an emergency or unanticipated event interrupts normal Government processes so that bids cannot be received at the Government office designated for receipt of bids by the exact time specified in the IFB and urgent Government requirements preclude amendment of the IFB, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(e) Bids may be withdrawn by written notice received at any time before the exact time set for receipt of bids. If the IFB authorizes facsimile bids, bids may be withdrawn via facsimile received at any time before the exact time set for receipt of bids, subject to the conditions specified in the provision at 52.214 -31, Facsimile Bids. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for receipt of bids, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid.

52.214-9 FAILURE TO SUBMIT BID. (JUL 1995)

Recipients of this solicitation not responding with a bid should not return this solicitation, unless it specifies otherwise. Instead, they should advise the issuing office by letter, postcard, or established electronic commerce methods, whether they want to receive future solicitations for similar requirements.

52.214-10 CONTRACT AWARD--SEALED BIDDING (JUL 1990)

(a) The Government will evaluate bids in response to this solicitation without discussions and will award a contract to the responsible bidder whose bid, conforming to the solicitation, will be most advantageous to the Government considering only price and the price-related factors specified elsewhere in the solicitation.

(b) The Government may (1) reject any or all bids, (2) accept other than the lowest bid, and (3) waive informalities or minor irregularities in bids received.

(c) The Government may accept any item or group of items of a bid, unless the bidder qualifies the bid by specific limitations. Unless otherwise provided in the Schedule, bids may be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit prices offered, unless the bidder specifies otherwise in the bid.

(d) A written award or acceptance of a bid mailed or otherwise furnished to the successful bidder within the time for acceptance specified in the bid shall result in a binding contract without further action by either party.

(e) The Government may reject a bid as nonresponsive if the prices bid are materially unbalanced between line items or subline items. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable

doubt that the bid will result in the lowest overall cost to the Government even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advance payment.

52.214-12 PREPARATION OF BIDS (APR 1984)

- (a) Bidders are expected to examine the drawings, specifications, Schedule, and all instructions. Failure to do so will be at the bidder's risk.
- (b) Each bidder shall furnish the information required by the solicitation. The bidder shall sign the bid and print or type its name on the Schedule and each continuation sheet on which it makes an entry. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.
- (c) For each item offered, bidders shall (1) show the unit price, including, unless otherwise specified, packaging, packing, and preservation and (2) enter the extended price for the quantity of each item offered in the "Amount" column of the Schedule. In case of discrepancy between a unit price and an extended price, the unit price will be presumed to be correct, subject, however, to correction to the same extent and in the same manner as any other mistake.
- (d) Bids for supplies or services other than those specified will not be considered unless authorized by the solicitation.
- (e) Bidders must state a definite time for delivery of supplies or for performance of services, unless otherwise specified in the solicitation.
- (f) Time, if stated as a number of days, will include Saturdays, Sundays, and holidays.

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a firm, fixed price contract resulting from this solicitation.

52.233-2 SERVICE OF PROTEST (AUG 1996)

- (a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from: Robert Sharamatew, US Army Engineer District Philadelphia, Attn: CENAP -CT, 100 Penn Square East, Wanamaker Bldg, Rm 643, Philadelphia, PA 19107-3390
- (b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://farsite.hill.af.mil> for Federal Acquisition Regulations

<http://www.acq.osd.mil/dar/dfars> for Defense Federal Acquisition Regulations

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SECTION M Evaluation Factors for Award

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M01 52.217-5 EVALUATION OF OPTIONS (JUL 1990)

(a) Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(b) The Government may reject an offer as nonresponsive if it is materially unbalanced as to prices for the basic requirement and the option quantities. An offer is unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.

M02 LOWEST, RESPONSIVE AND RESPONSIBLE BIDDER

Award will be made as a whole to the lowest, responsive and responsible bidder whose total bid conforms to the Invitation For Bids.

M03 DELIVERY SCHEDULE

Bids which indicate inability to meet the deliver as set forth in Section F, will be rejected as non-responsive.

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