

AWARD/CONTRACT		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)		RATING DO-A2		PAGE OF PAGES 1 166		
2. CONTRACT (Proc. Inst. Ident.) NO. NAS8-00016		3. EFFECTIVE DATE See B.1		4. REQUISITION/PURCHASE REQUEST/PROJECT NO. 000160000(1F),00016L000(2F)				
5. ISSUED BY Procurement Office George C. Marshall Space Flight Center National Aeronautics and Space Administration Marshall Space Flight Center, AL 35812		CODE PS42		6. ADMINISTERED BY (If other than Item 6) PS42I/M. Heidelberg/256-544-2373		CODE PS42		
7. NAME AND ADDRESS OF CONTRACTOR (No. street, county, state and ZIP Code) Lockheed Martin Corporation P. O. Box 29304 New Orleans, LA 70189				8. DELIVERY <input checked="" type="checkbox"/> FOB ORIGIN <input type="checkbox"/> OTHER (See below)		9. DISCOUNT FOR PROMPT PAYMENT 0%		
CODE 01539		FACILITY CODE		10. SUBMIT INVOICES (2 copies unless otherwise specified) TO THE ADDRESS SHOWN IN:		ITEM 12		
11. SHIP TO/MARK FOR See Section F, Clause F-3		CODE		12. PAYMENT WILL BE MADE BY Financial Management Office George C. Marshall Space Flight Center, NASA Marshall Space Flight Center, AL 35812		CODE RS23		
13. AUTHORITY FOR USING OTHER FULL AND OPEN COMPETITION: <input checked="" type="checkbox"/> 10 U.S.C. 2304(c)(1) <input type="checkbox"/> 41 U.S.C. 253(c)()				14. ACCOUNTING AND APPROPRIATION DATA NA				
15A. ITEM NO.		15B. SUPPLIES/SERVICES		15C. QUANTITY		15D. UNIT		
15E. UNIT PRICE		15F. AMOUNT						
See Section B, Clause B-1		"CONTRACT TYPE: CPIF/AF"						
15G. TOTAL AMOUNT OF CONTRACT						\$1,097,384,958		
16. TABLE OF CONTENTS								
(✓) SEC.	DESCRIPTION			PAGE(S)	(✓) SEC.	DESCRIPTION		
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES				
X	A	SOLICITATION/CONTRACT FORM		1	X	I	CONTRACT CLAUSES	
X	B	SUPPLIES OR SERVICES AND PRICE/COST		5	PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.			
X	C	DESCRIPTION/SPECS./WORK STATEMENT		1	X	J	LIST OF ATTACHMENTS	
X	D	PACKAGING AND MARKING		1	PART IV - REPRESENTATIONS AND INSTRUCTIONS			
X	E	INSPECTION AND ACCEPTANCE		2	X	K	REPRESENTATIONS, CERTIFICATIONS	
X	F	DELIVERIES OR PERFORMANCE		2	X	L	AND OTHER STATEMENTS OF OFFERORS	
X	G	CONTRACT ADMINISTRATION DATA		6		L	INSTRS., CONDS., AND NOTICES TO OFFERORS	
X	H	SPECIAL CONTRACT REQUIREMENTS		13		M	EVALUATION FACTORS FOR AWARD	
CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE								
17. <input checked="" type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return <u>3</u> copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)				18. <input type="checkbox"/> AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number _____, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.				
19A. NAME AND TITLE OF SIGNER (Type or print) Dennis R. Deel, President and General Manager Michoud Operations, Space Systems Company				20A. NAME OF CONTRACTING OFFICER Stephen P. Beale Procurement Officer				
19B. NAME OF CONTRACTOR		19C. DATE SIGNED		20B. UNITED STATES OF AMERICA		20C. DATE SIGNED		
original signed by (Signature of person authorized to sign)		10/27/00		BY original signed by (Signature of Contracting Officer)		10/27/00		

SECTION B

SUPPLIES OR SERVICES AND PRICE/COSTS

B.1 SUPPLIES AND/OR SERVICES TO BE FURNISHED

a. Consistent with NASA's most important core value of safety — safety of the public, safety of the astronauts and pilots, safety of our workforce, and safety of our equipment and property: The Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to furnish the items below in accordance with the Description/Specifications/Work Statement in Sections A through J, inclusive:

b. This contract includes the effort required from September 27, 1999 through December 1, 2008 for the Production of External Tanks ET-122 through ET-156, and the Michoud Assembly Facility (MAF) Operations and Maintenance. It also includes the effort required from September 16, 1997 through September 30, 2009 for the Procurement of Sixty Ship Sets of Flight Hardware and Material.

c. This contract definitizes and supersedes letter Contract NAS8-00016L dated September 27, 1999.

(End of Clause)

B.2 ESTIMATED COST AND CONTRACT FEES

B.2.a **Production of External Tanks - ET-122 through ET-156** for the period of September 27, 1999 through December 1, 2008 the Target Cost, Target Fee, Performance Incentive Fee, Fixed Fee, Earned Award Fee, Contract Value, Potential Award Fee, and Potential Employee Motivation Program Cost are as follows:

	<u>Target Cost</u>	<u>Employee Motivation Program Cost</u>	<u>Target Fee</u>
Previous Amount	\$ 1,086,164,227	\$ 460,184	\$ 21,701,484
This Action	\$ <u>140,400</u>	\$ <u>-0-</u>	\$ <u>2,805</u>
Total	\$ 1,086,304,627	\$ 460,184	\$ 21,704,289

	<u>Performance Incentive Fee</u>	<u>Fixed Fee</u>	<u>Earned Award Fee</u>
Previous Amount	\$ 41,168,468	\$ 780,300	\$ 8,940,022
This Action	\$ <u>5,329</u>	\$ <u>-0-</u>	\$ <u>-0-</u>
Total	\$ 41,173,797	\$ 780,300	\$ 8,940,022

	<u>Contract Value</u>	<u>Potential Award Fee</u>	<u>Potential Employee Motivation Program Cost</u>
Previous Amount	\$ 1,159,214,685	\$ 39,999,297	\$ 3,199,279
This Action	\$ <u>148,534</u>	\$ <u>6,311</u>	\$ <u>702</u>
Total	\$ 1,159,363,219	\$ 40,005,608	\$ 3,199,981

B.2.b.1 MAF Operations and Maintenance - Basic - for the period of September 27, 1999 through December 1, 2008 the Target Cost, Target Fee, Earned Award Fee, Fixed Fee, Contract Value and Potential Award Fee are as follows:

	<u>Target Cost</u>	<u>Target Fee</u>	<u>Earned Award Fee</u>
Previous Amount	\$ 282,317,643	\$ 5,641,343	\$ 2,159,382
This Action	\$ 20,119	\$ 402	\$ -0-
Total	\$ 282,337,762	\$ 5,641,745	\$ 2,159,382

	<u>Fixed Fee</u>	<u>Contract Value</u>	<u>Potential Award Fee</u>
Previous Amount	\$ 194,844	\$290,313,212	\$ 11,657,285
This Action	\$ -0-	\$ 20,521	\$ 1,005
Total	\$ 194,844	\$290,333,733	\$ 11,658,290

B.2.b.2 MAF Operations and Maintenance – Shuttle Hardware Relocation - for the period of February 4, 2003 through August 4, 2003 the Target Cost, Performance Incentive Fee, Earned Award Fee, Contract Value and Potential Award Fee are as follows:

	<u>Target Cost</u>	<u>Performance Incentive Fee</u>	<u>Earned Award Fee</u>
Previous Amount	\$ 813,156	\$ 16,241	\$ -0-
This Action	\$ -0-	\$ -0-	\$ -0-
Total	\$ 813,156	\$ 16,241	\$ -0-

	<u>Contract Value</u>	<u>Potential Award Fee</u>
Previous Amount	\$ 829,397	\$ 40,603
This Action	\$ -0-	\$ -0-
Total	\$ 829,397	\$ 40,603

B.2.b.3 MAF Operations and Maintenance – Summary - B.2.b.1 and B.2.b.2 Target Cost, Target Fee, Performance Incentive Fee, Earned Award Fee, Fixed Fee, Contract Value, and Potential Award Fee are as follows:

	<u>Target Cost</u>	<u>Target Fee</u>	<u>Performance Incentive Fee</u>
Previous Amount	\$ 283,130,799	\$ 5,641,343	\$ 16,241
This Action	\$ 20,119	\$ 402	\$ -0-
Total	\$ 283,150,918	\$ 5,641,745	\$ 16,241

	<u>Earned Award Fee</u>	<u>Fixed Fee</u>	<u>Contract Value</u>
Previous Amount	\$ 2,159,382	\$ 194,844	\$ 291,142,609
This Action	\$ -0-	\$ -0-	\$ 20,521
Total	\$ 2,159,382	\$ 194,844	\$ 291,163,130

	<u>Potential Award Fee</u>
Previous Amount	\$ 11,697,888
This Action	\$ 1,005
Total	\$ 11,698,893

B.2.c Procurement of Sixty Ship Sets of Flight Hardware and Material - for the period September 16, 1997 through September 30, 2009, the Target Cost, Target Fee, Performance Incentive Fee, Special Sustained Performance Incentive Fee and Contract Value associated with Attachment J-5-C are as follows:

	<u>Target Cost</u>	<u>Target Fee</u>	<u>Performance Incentive Fee</u>	<u>Special Sustained Performance Incentive Fee</u>
Previous Amount	\$ 677,774,508	\$ 21,359,749	\$26,094,179	\$3,378,950
This Action	\$ -0-	\$ -0-	\$ -0-	\$ -0-
Total	\$ 677,774,508	\$ 21,359,749	\$26,094,179	\$3,378,950

	<u>Contract Value</u>
Previous Amount	\$ 728,607,386
This Action	\$ -0-
Total	\$ 728,607,386

B.2.d Shuttle Upgrades – for the period of May 1,2000 through May 31, 2004 the Target Cost, Performance Incentive Fee, Earned Award Fee, Contract Value and Potential Award Fee are as follows:

	<u>Target Cost</u>	<u>Target Fee</u>	<u>Performance Incentive Fee</u>
Previous Amount	\$ 17,046,000	\$ -0-	\$ 985,000
This Action	\$ -0-	\$ -0-	\$ -0-
Total	\$ 17,046,000	\$ -0-	\$ 985,000

	<u>Fixed Fee</u>	<u>Earned Award Fee</u>	<u>Contract Value</u>
Previous Amount	\$ -0-	\$ 780,947	\$ 18,811,947
This Action	\$ -0-	\$ -0-	\$ -0-
Total	\$ -0-	\$ 780,947	\$ 18,811,947

	<u>Potential Award Fee</u>
Previous Amount	\$ -0-
This Action	\$ -0-
Total	\$ -0-

B.2.e **Summary** of Target Cost, Employee Motivation Program Cost, Target Fee, Performance Incentive Fee, Fixed Fee, Earned Award Fee, Special Sustained Performance Incentive Fee, Contract Value, Potential Award Fee and Potential Employee Motivation Program Cost are as follows:

	<u>Target Cost</u>	<u>Employee Motivation Program Cost</u>	<u>Target Fee</u>
Previous Amount	\$2,064,255,934	\$ 460,184	\$ 48,705,381
This Action	\$ 20,119	\$ -0-	\$ 402
Total	\$2,064,276,053	\$ 460,184	\$ 48,705,783

	<u>Performance Incentive Fee</u>	<u>Fixed Fee</u>	<u>Earned Award Fee</u>
Previous Amount	\$ 68,269,217	\$ 975,144	\$ 11,880,351
This Action	\$ -0-	\$ -0-	\$ -0-
Total	\$ 68,269,217	\$ 975,144	\$ 11,880,351

	<u>Special Sustained Performance Incentive Fee</u>	<u>Contract Value</u>	<u>Potential Award Fee</u>
Previous Amount	\$ 3,378,950	\$2,197,925,161	\$ 51,703,496
This Action	\$ -0-	\$ 20,521	\$ 1,005
Total	\$ 3,378,950	\$2,197,945,682	\$ 51,704,501

	<u>Potential Employee Motivation Program Cost</u>
Previous Amount	\$ 3,199,981
This Action	\$ -0-
Total	\$ 3,199,981

(End of Clause)

B.3 CONTRACT FUNDING

(a) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is \$730,033,511. This allotment is for all effort and covers the following estimated period of performance: September 16, 1997 through August 15, 2003.

(b) An additional amount of \$67,836,300 is obligated under this contract for payment of fee.

(c) Recapitulation of funding is as follows:

	<u>Previous</u>	<u>This Action</u>	<u>Total</u>
Estimated Cost	\$ 727,430,785	\$ 2,602,726	\$ 730,033,511
Fee	<u>\$ 67,836,300</u>	<u>\$ -0-</u>	<u>\$ 67,836,300</u>
Total	\$ 795,267,085	\$ 2,602,726	\$ 797,869,811

(End of Clause)

B.4 AWARD, PERFORMANCE INCENTIVE, TARGET, COST INCENTIVE AND FIXED FEES

The fee structure for this contract is described in Attachment J-5-A for External Tank Production, Attachment J-5-B for MAF Operations and Maintenance, Attachment J-5-C for Procurement of Sixty Ship Sets of Flight Hardware and Material and Attachment J-5-D for Shuttle Upgrades.

(End of Clause)

B.5 CATASTROPHIC FAILURE

1.1 In the event of any Critical "Category I" or "Category II" failures (Reference Appendix A: Glossary of Terms, NHB 5300.4 (1D-2), "Safety, Reliability, Maintainability and Quality Provisions for the Space Shuttle Program" and as further defined herein) on any of the STS Missions using ET-122 through ET-156, the Contractor shall be assessed a fee reduction of \$10 million for a Category I failure or \$5 million for a Category II failure.

1.2 Definitions: The definitions in this subparagraph are only applicable to this paragraph B.5, Catastrophic Failure, and Attachment J-5-A Flight Success of External Tank Performance Incentive Fee of this contract.

1.2.1 "Category I" failure is an incident directly caused by External Tank Hardware that results in death of a crewmember of the Shuttle Orbiter or "total loss of the Shuttle Orbiter Vehicle."

1.2.2 “Category II” failure is an incident directly caused by External Tank Hardware that results in a “mission failure.”

1.2.3 “Mission Failure” is inability to achieve the planned orbit and/or deliver the payload to its planned orbit.

1.2.4 External Tank Hardware is flight hardware, procured pursuant to this contract, excluding Government Furnished Property, that has not been modified or altered in an unauthorized manner subsequent to its acceptance by the Government (DD Form 250 at MAF), and has not been improperly serviced or maintained.

1.2.5 “Total Loss of the Shuttle Orbiter Vehicle” is the destruction or physical loss of the vehicle such that it could not be returned to usable repair.

1.3 To determine if a Category I or II failure has occurred, a Failure Investigation Board (hereinafter the “Board”) will be convened and conducted in accordance with the requirements of NASA Management Instruction NMI 8621.1 (latest revision). The Contractor will be notified in order to attend as an observer, but not participate, in board hearings. All evidence relied upon and a copy of the official transcript/record will be furnished to the Contractor if the board’s determination is adverse.

1.4 In the event the Board determines that failure as defined in paragraph B.5, subparagraph 1.2 of this contract has occurred, these findings will be officially conveyed to the Contractor by the Contracting Officer with a determination of assessment of the fee reduction for that specific flight.

1.4.1 Within 60 days of receipt by the Contractor of the Contracting Officer’s determination, the Contractor will respond with acceptance of the determination, or the Contractor may appeal the Board’s finding(s) and the Contracting Officer’s determination on fee. This appeal must be presented to the next level of NASA Management higher than the NASA Official convening the Board, but not above the NASA Administrator, within 60 days of receipt of the Contracting Officer’s determination.

1.4.2 Said NASA Official shall consider the Contractor's appeal and the finding(s) of the Board, make a final determination of cause of failure or loss of hardware, and issue a decision on the assessment or non-assessment of the fee reduction for that specific mission. Said decision will be subject to the Disputes Clause.

1.4.3 No fee will be reduced under this clause during any appeal process initiated by the Contractor.

B.6 EMPLOYEE MOTIVATION PROGRAM

(a) Beginning October 1, 2001, the Contractor shall provide from the dollars identified in Paragraph B.2.a, an Employee Motivation Program (EMP) as a cost element to this contract whereby the employees will be rewarded from each pool below in which the Production Award Fee Composite Rating, as identified in Attachment J-5-A Enclosure (1), is greater than or equal to 84% during that period. A period is composed of the March 31 and September 30 Performance Evaluation Board (PEB) Reports for each fiscal year identified in B.6.(b) below. For example, Period FY2002 is composed of PEB scores from March 31, 2002 and September 30, 2002.

(b) The FY period pools available for award to employees are as follows:

Period	Previous EMP Cost	Increase/ Decrease	Total Available EMP Cost	Employee Award	Dollars Not Awarded
FY2002	\$ 575,230	\$ 0	\$ 0	\$ 460,184	\$ 115,046
FY2003	\$ 617,056	\$ 702	\$ 617,758		
FY2004	\$ 569,553	\$ 0	\$ 569,553		
FY2005	\$ 569,553	\$ 0	\$ 569,553		
FY2006	\$ 569,553	\$ 0	\$ 569,553		
FY2007	\$ 569,553	\$ 0	\$ 569,553		
FY2008	\$ 304,011	\$ 0	\$ 304,011		
Totals	\$3,774,509	\$ 702	\$ 3,199,981	\$ 460,184	\$ 115,046

(c) The amount of the Total Available EMP Cost identified in paragraph (b) above to be awarded will be determined by the composite Production Award Fee Score, as identified in Attachment J-5-A, Enclosure (1) calculated as follows:

Production Award Fee Dollars earned for the FY period divided by Production Award Fee Dollars available for the FY period equals composite score percent (rounded to the nearest tenth).

- (d) The Composite Score determined above will be used in the following table to determine the percentage of EMP Pool dollars available for award during the FY period. No award will be made for a composite score less than 84%.

<u>Composite score</u>	<u>Percent of EMP Pool to be Awarded</u>
84% - 85.4%	20%
85.5% - 86.9%	30%
87% - 88.4%	40%
88.5% - 89.9%	50%
90% - 91.4%	60%
91.5% - 92.9%	70%
93% - 94.4%	80%
94.5% - 95.9%	90%
96% - 100%	100%

Example:

The Composite Score for the FY2003 Period equals 91.6% as determined in Paragraph (c).

91.6% composite score equals 70% Percent of EMP Pool to be Awarded.

Pool Value for FY2003 equals \$884,397

\$884,397 times 70% equals \$619,078

\$619,078 is available for Employee Motivation Awards for the FY2003 Period.

- (e) Upon conclusion of each period, a bilateral modification will be executed to recognize as contract value the amount to be awarded as defined in B.6.(c) and B.6.(d) above.
- (f) Data Requirement MA92 identifies the methodology for the administration of this Employee Motivation Program. Modification No. 043
- (g) This EMP cost is not subject to the cost incentive calculations identified in Attachment J-5-A, Paragraph 3.
- (h) Any dollars not awarded in a period may be reallocated via modification to this contract at the discretion of the External Tank Project Manager and Contracting Officer.

(End of Clause)

[END OF SECTION]

SECTION C

DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C.1 STATEMENT OF WORK

The Contractor shall, on the terms and conditions hereinafter more particularly set forth, furnish the necessary management, labor, and materials (except as specified herein to be furnished by the Government) and do all things necessary and/or incidental to performance of the work set forth in the Attachments contained in Section J of this contract.

(End of clause)

C.2 SPECIFICATIONS, STANDARDS AND PROCEDURES

The work delineated herein shall be performed for the production of External Tanks 122 through 156 in accordance with the Prime External Tank Equipment Detail Specification (CPT01M09A), Part I and Part II, for the Space Shuttle Program. Part I, entitled "Performance and Design Specification", dated April 9, 1980, (through latest revision), and Part II, entitled "Product Configuration Specification", dated May 3, 1983, (through latest revision), shall reference the required specifications, standards, procedures and plans. Deviations, exceptions and changes to specifications, standards, procedures and plans will be specifically tracked and incorporated into the appropriate documents.

(End of clause)

(END OF SECTION)

SECTION D

PACKAGING AND MARKING

D.1 PACKING AND PACKAGING

(a) Packing, packaging, identification and marking, and preparation for shipment of all hardware items to be delivered under the terms of this contract shall be in accordance with the Safety, Reliability and Quality Requirements and Implementation Document for the External Tank (MMC-ET-RA03-C and NPG 6000.1E). Packaging shall be labeled with a warning if potentially hazardous or delicate material is involved.

(b) Shipping Instructions not provided elsewhere herein will be furnished by the Contracting Officer or his duly authorized representative. The Contractor shall request same no later than 30 days prior to the date item(s) are ready for shipment.

(End of clause)

(END OF SECTION)

SECTION E

INSPECTION AND ACCEPTANCE

E.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following clause is hereby incorporated by reference:

52.246-3 Inspection of Supplies -- Cost-Reimbursement (Apr 1984)

(End of Clause)

E.2 MATERIAL INSPECTION AND RECEIVING REPORT (18-52.246-72)
(JUN 1995)

(a) At the time of each delivery to the government under this contract, the Contractor shall furnish to the Government a Material Inspection and Receiving Report (DD Form 250 series). The Contractor shall distribute the DD Form 250 series as follows:

<u>Distribution to:</u>	<u>No. Copies</u>
Safety and Mission Assurance Office	1
DCMA Administrative Officer (or other appropriately named Government Inspection Office)	2
Contracting Officer	1
Transportation Officer	1
ET Project Manager	1
ET Resident Office Manager	1
Shuttle Configuration Management	1
Consignee	1
Attached to shipment (on Box #1)	4

(b) The Contractor shall prepare the DD Form 250 in accordance with NASA FAR Supplement 18-46.672-1. The Contractor shall enclose the copies of the DD Form 250 in the package or seal them in a waterproof envelope, which shall be securely attached to the exterior of the package in the most protected location.

(c) When more than one package is involved in a shipment, the Contractor shall list on the DD Form 250, as additional information, the quantity of packages and the package numbers. The Contractor shall forward the DD Form 250 with the lowest numbered package of the shipment and print the words "CONTAINS DD FORM 250" on the package.

(End of clause)

E.3 PLACE OF FINAL INSPECTION AND ACCEPTANCE

The place of final inspection and acceptance for the work called for under this contract shall be the Michoud Assembly Facility, New Orleans, Louisiana. Inspection and acceptance of any deliverable reports will be accomplished by the Contracting Officer or designee at the prescribed destination for such reports.

(End of clause)

(END OF SECTION)

SECTION F

DELIVERIES OR PERFORMANCE

F.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following clause is hereby incorporated by reference:

52.242-15 Stop-Work Order (Aug 1989) -- Alternate I (Apr 1984)

(End of clause)

F.2 PERIOD OF PERFORMANCE

(a) The Contractor shall perform the effort required to manufacture, assemble, test, and deliver 35 External Tanks and the MAF Operations and Maintenance as identified under Section J, Attachments J-1-A and J-1-B, respectively of this contract during the period of performance September 27, 1999 and continuing through December 1, 2008.

(b) The Contractor shall perform the effort required to procure sixty ship sets of flight hardware and material as identified in Attachment J-1-C of this contract during the period of performance September 16, 1997 and continuing through September 30, 2009.

(End of clause)

F.3 PLACE OF PERFORMANCE

Work under this contract will be performed at the following locations: NASA Michoud Assembly Facility, Subcontractor plants, John F. Kennedy Space Center, and George C. Marshall Space Flight Center.

(End of clause)

F.4 F.O.B. POINT

FOR DATA:* George C. Marshall Space Flight Center
Marshall Space Flight Center, AL 35812

or

John F. Kennedy Space Center (KSC)
John F. Kennedy Space Center, FL 32899

*Destination to be specified in data requirement or will be provided by the Contracting Officer

FOR SUPPLIES: NASA Michoud Assembly Facility
New Orleans, LA 70129

(End of clause)

F.5 FLIGHT HARDWARE DELIVERY

The Contractor shall perform all effort as defined in Section J-x-A of this contract that is necessary to produce and deliver External Tanks in accordance with the delivery schedule in Attachment J-7-A of this Contract. It is contemplated that External Tanks will be shipped to the launch site within 45 days after acceptance (DD-250). Any change to this plan will be subject to separate contractual action pursuant to the clause of this contract entitled "Changes – Cost Reimbursement".

(End of clause)

(END OF SECTION)

SECTION G

CONTRACT ADMINISTRATION DATA

G.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following clause is hereby incorporated by reference:

1852.242-73 NASA Contractor Financial Management Reporting (Jul 2000)

(End of clause)

G.2 SUBMISSION OF VOUCHERS FOR PAYMENT (1852.216-87) (MAR 1998)

(a) The designated billing office for cost vouchers for purposes of the Prompt Payment clause of this contract is indicated below. Public vouchers for payment of costs shall include a reference to the number of this contract.

(b) (1) If the Contractor is authorized to submit interim cost vouchers directly to the NASA paying office, the original voucher should be submitted to:

RS23/Financial Management Office
George C. Marshall Space Flight Center, NASA
Marshall Space Flight Center, AL 35812

(2) For any period that the Defense Contract Audit Agency has authorized the Contractor to submit interim cost vouchers directly to the Government paying office, interim vouchers are not required to be sent to the Auditor, and are considered to be provisionally approved for payment, subject to final audit.

(3) Copies of vouchers should be submitted as directed by the Contracting Officer.

(c) If the Contractor is not authorized to submit interim cost vouchers directly to the paying office as described in paragraph (b), the Contractor shall prepare and submit vouchers as follows:

(1) One original Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment.

(2) Five copies of SF 1034, SF 1035A, or equivalent Contractor's attachment to the following offices by insertion in the memorandum block of their names and addresses:

- (i) Copy 1 NASA Contracting Officer;
- (ii) Copy 2 Auditor
- (iii) Copy 3 Contractor;
- (iv) Copy 4 Contract administration office; and
- (v) Copy 5 Project management office.

(3) The Contracting Officer may designate other recipients as required.

(d) Public vouchers for payment of fee shall be prepared similarly to the procedures in paragraphs (b) or (c) of this clause, whichever is applicable, and be forwarded to:

National Aeronautics and Space Administration
George C. Marshall Space Flight Center
PS42/Procurement Office
Marshall Space Flight Center, AL 35812

This is the designated billing office for fee vouchers for purposes of the Prompt Payment clause of this contract.

(e) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.

(End of clause)

G.3 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (1852.227-72) (JUL 1997)

(a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights -- Retention by the Contractor (Short Form)," whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

New Technology Representative
Mail Code CD30
George C. Marshall Space Flight Center
National Aeronautics and Space Administration
Marshall Space Flight Center, AL 35812

Patent Representative
Chief, Intellectual Property Counsel
Mail Code LS01
George C. Marshall Space Flight Center
National Aeronautics and Space Administration
Marshall Space Flight Center, AL 35812

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquiries or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause or "Patent Rights --Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 1827.305-370 of the NASA FAR Supplement.

(End of clause)

G.4 CONTRACTOR EMPLOYEE BADGING AND EMPLOYMENT TERMINATION CLEARANCE (MSFC 52.204-90) (APR 1994)

(a) It is anticipated that performance of the requirements of this contract will require employee access to and picture badging by the Marshall Space Flight Center. Contractor requests for badging of employees shall be by MSFC Form 1739, Contractor Badge/Decal Application. Requests for badging shall be submitted to the NASA for proper processing in accordance with MSFC procedures.

(b) The Contractor shall establish procedures to ensure that each badged employee is properly cleared in accordance with MSFC Form 383-1, "Contractor Employee Clearance Document," prior to finalization of employment termination.

(c) Requests for copies of MSFC Forms 383-1, and 1739 shall be directed to the MSFC Security Division, Marshall Space Flight Center, Alabama 35812.

(End of clause)

G.5 TECHNICAL DIRECTION (1852.242-70) (SEP 1993)

(a) Performance of the work under this contract is subject to the written technical direction of the Contracting Officer's Technical Representative (COTR), who shall be specifically appointed by the Contracting Officer in writing in accordance with NASA FAR Supplement 1842.270. "Technical direction" means a directive to the Contractor that approves approaches, solutions, designs, or

refinements; fills in details or otherwise completes the general description of work or documentation items; shifts emphasis among work areas or tasks; or furnishes similar instruction to the Contractor. Technical direction includes requiring studies and pursuit of certain lines of inquiry regarding matters within the general tasks and requirements in Section J of this contract.

(b) The COTR does not have the authority to, and shall not, issue any instruction purporting to be technical direction that --

- (1) Constitutes an assignment of additional work outside the statement of work;
- (2) Constitutes a change as defined in the changes clause;
- (3) Constitutes a basis for any increase or decrease in the total estimated contract cost, the fixed fee (if any), or the time required for contract performance;
- (4) Changes any of the expressed terms, conditions, or specifications of the contract; or
- (5) Interferes with the Contractor's rights to perform the terms and conditions of the contract.

(c) All technical direction shall be issued in writing by the COTR.

(d) The Contractor shall proceed promptly with the performance of technical direction duly issued by the COTR in the manner prescribed by this clause and within the COTR's authority. If, in the Contractor's opinion, any instruction or direction by the COTR falls within any of the categories defined in paragraph (b) above, the Contractor shall not proceed but shall notify the Contracting Officer in writing within 15 working days after receiving it and shall request the Contracting Officer to take action as described in this clause. Upon receiving this notification, the Contracting Officer shall either issue an appropriate contract modification within a reasonable time or advise the Contractor in writing within 30 days that the instruction or direction is --

- (1) Rescinded in its entirety; or
- (2) Within the requirements of the contract and does not constitute a change under the Changes clause of the contract, and that the Contractor should proceed promptly with its performance.

(e) A failure of the Contractor and Contracting Officer to agree that the instruction or direction is both within the requirements of the contract and does not constitute a change under the Changes clause, or a failure to agree upon the contract action to be taken with respect to the instruction or direction, shall be subject to the Disputes clause of this contract.

(f) Any action(s) taken by the Contractor in response to any direction given by any person other than the Contracting Officer or the COTR shall be at the Contractor's risk.

(End of clause)

G.6 FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS (1852.245-73) (SEP 1996)

(a) The Contractor shall submit annually a NASA Form (NF) 1018, NASA Property in the Custody of Contractors, in accordance with 1845.505-14, the instructions on the form, and subpart 1845.71. Subcontractor use of NF 1018 is not required by this clause; however, the Contractor shall include data on property in the possession of subcontractors in the annual NF 1018.

(b) If administration of this contract has been delegated to the Department of Defense, the original of NASA Form 1018 shall be submitted to the NASA installation Financial Management Officer and three copies shall be sent concurrently through the DOD Property Administrator to the NASA office identified below. If the contract is administered by NASA, the original of NASA Form 1018 shall be submitted to the installation Financial Management Officer and three copies shall be sent concurrently to the following NASA office:

PS12/Contract Property
National Aeronautics and Space Administration
George C. Marshall Space Flight Center
Marshall Space Flight Center, AL 35812

(c) The annual reporting period shall be from October 1 of each year to September 30 of the following year. The report shall be submitted in time to be received by October 31. The information contained in these reports is entered into the NASA accounting system to reflect current asset values for agency financial statement purposes. Therefore, it is essential that required reports be received no later than October 31. The Contracting Officer may, in the Government's interest, withhold payment until a reserve not exceeding \$25,000 or 5 percent of the amount of the contract, whichever is less, has been set aside, if the Contractor fails to submit annual NF 1018 reports when due. Such reserve shall be withheld until the Contracting Officer has determined that the required reports have been received by the Government. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government right.

(d) A final report is required within 30 days after disposition of all property subject to reporting when the contract performance period is complete.

(End of clause)

G.7 GOVERNMENT PROVIDED FACILITIES, PROPERTY AND SERVICES

Pursuant to the contract clause entitled "Government Property," NASA will provide to the Contractor in performance of this contract at no charge those Facilities, Special Tools, Special Test Equipment, miscellaneous Government property and Government Provided Services referenced in Attachment J-4-A and J-4-B (Government Provided Facilities, Property and Services) which is attached hereto and hereby made a part of this contract. The subcontractors/ suppliers identified in Attachment J-4-A and J-4-B, Appendix I Supplier List are authorized "no charge" use of "by item listed" Government Provided Property/Services in the performance of their subcontracts.

(End of clause)

G.8 INFORMATION RELEASES AND PUBLICATIONS

During the performance of this contract, if data relating to this contract are proposed to be used in oral or written presentations at professional meetings, seminars, and symposia, or in articles to be published in professional, scientific, and technical journals, or similar media, the Contractor will request a review by the Marshall Space Flight Center of such publications. Such requests should be forwarded to the Marshall Space Flight Center's Public Affairs Office at least 4 weeks in advance of the desired MSFC response date, to provide sufficient time for review and comments to the Contractor.

(End of clause)

[END OF SECTION]

SECTION H

SPECIAL CONTRACT REQUIREMENTS

H.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following clauses are hereby incorporated by reference:

52.250-1	Indemnification Under Public Law 85-804 (Apr 1984)
1852.208-81	Restrictions on Printing and Duplicating (Aug 1993)
1852.228-72	Cross-Waiver of Liability for Space Shuttle Services (Sep 1993)

(End of clause)

H.2 MAKE-OR-BUY PROGRAM

The Make-or-Buy Plan contemplated by the clause of this contract entitled "Changes or Additions to Make-or-Buy Program" shall be as described in Attachments J-2-A and J-2-B attached hereto and hereby made a part of this contract.

(End of clause)

H.3 SPECIAL PROVISION FOR CONTRACT CHANGES

(a) The parties agree that, notwithstanding the provisions of the "Changes -- Cost Reimbursement -- Alternate V" clause of this contract, no change made under this contract shall give rise to an equitable adjustment in the estimated cost, fee, delivery or any other contract provisions, when said change causes an increase or decrease of \$350,000 or less in the estimated cost of the change, regardless of the allocation of cost between contracts. Each change shall be controlling in making this determination and such change shall not be added to any other change(s). The parties recognize that several changes may be grouped together for definitization; however, the dollar value of each individual change will be controlling in determining whether or not an equitable adjustment is in order. The foregoing shall not limit the rights of either party to an equitable adjustment to the extent specifically provided for in any provision of this contract other than the "Changes -- Cost Reimbursement -- Alternate V" clause.

(b) Engineering Change Proposals (ECP's) or Project Change Proposals (PCP's) affecting configuration changes with an initial estimated cost within the dollar threshold stipulated in (a) above and which do not change contract language shall be approved and transmitted to the Contractor by written directive signed by the NASA Contracting Officer Technical Representative or his designated alternate.

(End of clause)

H.4 SUBMITTAL OF DPD DATA ITEMS

(a) Data Procurement Document. The Contractor shall furnish all data items identified and described by Data Procurement Document (DPD) 660. Each data item shall be prepared in accordance with the requirement stated by the appropriate Data Requirement (DR) which shall govern the format, content, number of copies, frequency of revision, etc. In addition, the DPD will contain provisions for unit cost reporting.

(b) The Contractor shall comply with all data requirements of this contract whether or not listed in the DPD.

(c) Distribution of DPD Data Items

- (1) Type I and II data items shall be submitted to the George C. Marshall Space Flight Center, Marshall Space Flight Center, Alabama 35812, utilizing either electronic media or microfilm.
- (2) Balance of Distribution – Unless otherwise directed by contractual provisions, the remaining copies of the DPD Data items shall be distributed as provided in the DPD

(End of clause)

H.5 FINANCIAL MANAGEMENT REPORTING

Financial Management Reports shall be submitted in accordance with the clause of this contract entitled “NASA Contractor Financial Management Reporting” (NFS 1852.242-73) – (July 2000).

The contractor’s automated printout reports may be substituted for the NASA Form 533 reporting formats by the mutual agreement of the External Tank Project Office and the contractor.

(End of clause)

H.6 HANDLING OF DATA

(a) It is anticipated that in performance of this contract, the Contractor may have access to and use of the following type of information and data:

- (1) NASA’s Financial and Management information and such information of other parties contained in or furnished under NASA contracts or agreements.
- (2) Proposals, both solicited and unsolicited, submitted to NASA by other parties.

- (3) Data submitted to NASA with restrictive legends.
- (4) Personal information on employees.

(b) Therefore, in furtherance of NASA's data handling policies to protect the interest of the Government and other parties with respect to such information and data, the Contractor agrees:

- (1) Not to knowingly disclose the above types of data and information to the public; and,
- (2) To abide by the conditions of restrictive legends contained on any data in the above categories.

(c) These restrictions do not limit the Contractor's right to use and disclose any data and information obtained from another source without restriction.

(End of clause)

H.7 OBSERVANCE OF REGULATIONS (AT MSFC)

In performing any capacity while on site at MSFC, MAF and such other locations as may be approved by the Contracting Officer, the Contractor will comply with security, safety and all applicable MSFC regulations and procedures, and those of Redstone Army Arsenal, Alabama which also apply to MSFC Government and Contractor personnel.

(End of clause)

H.8 SUBCONTRACTING PLAN FOR SMALL/SMALL DISADVANTAGED AND WOMEN OWNED SMALL BUSINESS CONCERNS

The Contractor shall implement a Small Business and Small Disadvantaged Business Subcontracting Program in accordance with Attachments J-3-A and J-3-B entitled, "Small/Small Disadvantaged & Women Owned Small Business Subcontracting Plan", attached hereto and hereby made a part of this contract.

(End of clause)

H.9 KEY PERSONNEL AND FACILITIES (1852.235-71) (MAR 1989)

(a) The personnel and/or facilities listed below are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel or facilities, the Contractor shall (1) notify the Contracting Officer reasonably in advance and (2) submit justification (including proposed substitution) in sufficient detail to permit evaluation of the impact on this contract.

(b) The Contractor shall make no diversion without the Contracting Officer's written consent; provided that the Contracting Officer may ratify in writing the proposed change, and such ratification shall constitute the Contracting Officer's consent required by this clause.

(c) The list of personnel and/or facilities shown below may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel and/or facilities.

KEY PERSONNEL

POSITION/TITLE

(b)(4)

(End of clause)

H.10 LIABILITY FOR GOVERNMENT-OWNED PROPERTY

In the event that any of the Contractor's employees are authorized or required to perform work on any Government-owned property (other than "Government-Furnished Property" as defined in the Government Property Clause of this contract) in connection with the performance of work under this contract, the Contractor will be held responsible for said property, to the same extent and in the same manner as is described in FAR Clause 52.245-5 dated January 1986 entitled "Government Property (Cost-Reimbursement, Time-and-Material, or Labor-Hour Contracts)."

(End of clause)

H.11 CLOSEOUT EFFORT

The parties hereto agree that the estimated cost and fee of this contract does not include administrative effort to transfer to a successor Contractor and does not include any provision for "closeout effort". In the event such effort is required, or in the event of termination, and to the extent such costs may be allowable pursuant to Part 31 of the Federal Acquisition Regulation (FAR) and the NASA FAR Supplement, the extent of such effort and the costs and any fee associated therewith shall be the subject of a separate contractual action. If there is not to be a successor contract to this contract for delivery of additional External Tanks beginning with ET-157, the contractor will be notified in writing no later than 10 days following the DD-250 date of ET-142. Within 60 days following receipt of the notification that there will not be a successor contract to this contract, the Contractor will submit a plan and a proposal for closeout and, provided funds are available, the Contract shall be equitably adjusted. Notwithstanding any other provisions of this contract, no effort for disposition of Government Property will be required beyond the period of performance of this contract as set forth in Section F, except delivery to the Government of the Contractor's current inventory records.

(End of clause)

H.12 DELIVERY ADJUSTMENTS

The parties agree that the Contracting Officer, may by written order, in accordance with the requirements of this article, make changes in the completion or delivery dates of this contract. If any such changes cause an increase or decrease in the estimated cost of this contract, or otherwise affects any other provision of this contract, whether changed or not changed by any such order, an equitable adjustment shall be made (i) in the estimated cost, (ii) in the amount of any fee to be paid to the Contractor, (iii) in such provisions of the contract as may be affected, and the contract shall be modified in writing accordingly. Any claim by the Contractor for adjustment under this clause must be asserted within sixty (60) days from the date of receipt by the contractor of the notification of change; provided, however, that the Contracting Officer, if he decides that the facts justify such action, may receive and act upon such claim asserted any time prior to final payment under this contract. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes". However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

(End of clause)

H.13 ENVIRONMENTAL COMPLIANCE

(a) Upon completion of the Period of Performance of Contract NAS8-36200 the Contractor shall obtain, and keep effective, all permits and licenses required for performance of this contract in accordance with the terms of this contract. Such permits and licenses shall include, but not be limited to, those required by the Federal, State, or Local Government authorities, or Subdivision thereof, or of any other duly constituted public authority.

(b) Any new regulations, change to existing regulations and or additional enforcement above current compliance levels of these regulations above the agreed to level in Document MMC-ET-MA89, "NASA/Lockheed Martin Corporation Responsibilities for Environmental Laws Compliance" will be the subject of a separate contractual modification and equitable adjustment of the contract.

(End of clause)

H.14 ET SHUTTLE PROCESSING AT KSC

The Contractor shall maintain appropriate interfaces with the Space Flight Operations Contractor (SFOC) and shall have the contractual right to reasonably observe the External Tank processing at KSC to ensure that it is not incorrectly serviced or maintained and that it is not modified or serviced in an unauthorized manner.

(End of clause)

H.15 SAFETY AND HEALTH

(a) The Contractor shall establish and maintain a safety and health program to satisfy the requirements of NFS clause 1852.223-70 (July 2000) entitled "Safety and Health". The plans and changes thereto shall be submitted to the NASA for approval.

(b) The Contractor shall ensure compliance, as applicable, with the safety and health standards, specifications and issuances, effective as of the date of this contract, set forth below:

FEDERAL

- (1) 10 CFR, Energy, 1996 Edition.
- (2) 29 CFR, part 1904, Record keeping guidelines for Occupational Injuries and Illnesses, 1986 Edition.
- (3) 29 CFR, Part 1910, OSHA Standards for General Industry, 1996 Edition.
- (4) 29 CFR, Part 1926, OSHA Standards for the Construction Industry, 1996 Edition.
- (5) 33 CFR, Navigation and Navigable Waters, 1996 Edition.

- (6) 40 CFR, Protection of the Environment, 1987 Edition.
- (7) 49 CFR, Transportation, 1987 Edition.
- (8) NHB 7320.1, Facilities Engineering Handbook (From Superintendent of Documents, Government Printing Office, Washington, D. C. 20402).

NATIONAL CONSENSUS STANDARDS

- (1) National Fire Code, Volumes I-XII, 1996 Edition.
 - (2) American National Standards Institute (ANSI) Safety Standards, as Referenced in 29 CFR 1910 and 1926.
 - (3) American Society of Mechanical Engineers, Boiler and Unified Pressure Vessel Code, as referenced in 29 CFR 1910 and 1926.
 - (4) The International Civil Aviation Organization (ICAO) Technical Instruction/International Air Transport Association (IATA) Dangerous Goods Regulations of 1996.
- (c) Accident, illness and incident reporting shall be in accordance with MPG 1700.1.
- (d) The Contractor shall also furnish any medical reports of investigations involving industrial illness, which may develop in employees as a result of their work under this contract.
- (e) The provision of the "Safety and Health" Clause requiring a statement of acceptable threshold limits applicable to the contamination of property does not apply to effort under this contract.
- (f) The Contractor shall establish and maintain a health information management system, a comprehensive medical tracking system. The Contractor will provide employee medical data for reports or historical information as required.

(End of clause)

H.16 MINIMUM INSURANCE COVERAGE (1852.228-75)(OCT 1988)

The Contractor shall ensure insurance coverage is obtained and maintained as follows for the performance of this contract:

- (a) Worker's compensation and employer's liability insurance as required by applicable Federal and State Workers' Compensation and Occupational Disease Statutes. If "Occupational Diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with the Contractor's commercial operations that it would not be practical. The employer's liability coverage shall be at least \$100,000, except in states with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

(b) Comprehensive general (bodily injury) liability insurance of at least \$500,000 per occurrence.

(c) Motor vehicle liability insurance written on the comprehensive form of policy which provides for bodily injury and property damage liability covering the operation of all motor vehicles used in connection with performing the contract. Policies covering motor vehicles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury liability and \$20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

(d) Comprehensive general and motor vehicle liability policies shall contain a provision worded as follows:

“The insurance company waives any right of subrogation against the United States of America which may arise by reason of any payment under the policy.”

(e) When aircraft are used in connection with performing the contract, aircraft public and passenger liability insurance of at least \$200,000 per person and \$500,000 per occurrence for bodily injury, other than passenger liability, and \$200,000 per occurrence for property damage. Coverage for passenger liability bodily injury shall be at least \$200,000 multiplied by the number of seats or passengers, whichever is greater.

(f) Vessel liability - minimum limit of \$200,000 per person and \$500,000 per occurrence for bodily injury.

(End of clause)

H.17 CREDIT FOR INVENTORY

(a) The Contractor shall transfer applicable residual inventory and associated allowable and allocable cost from Contract NAS8-36200, no later than its expiration, to this contract.

(b) In the event of a follow-on contract to this contract, the Contractor shall transfer applicable residual inventory and associated allowable and allocable cost to the successor contract.

(End of clause)

H.18 SHARING OF COMMON SUPPORT EFFORT

In the event that performance of common support effort under Contract NAS8-39243(F), or its successor(s), or this contract is interrupted during the period of performance of this contract, or, in the event such contracts are terminated totally or in part, or if there is no follow-on contract to this contract awarded to this Contractor on or before 12 months prior to start of production of ET-156, the

Contracting Officer shall, upon written request of the Contractor, equitably adjust the estimated cost, fees, and any other provision of this contract which may be affected as a result of the loss of sharing of the sustaining effort. Failure to agree to any adjustments as defined herein shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled, "Disputes - Alternate I".

(End of clause)

H.19 FOLLOW-ON PROCUREMENTS

(a) As a follow-on to the work called for under this contract and in order to preserve a full and free competitive environment, the Government may solicit offers to perform subsequent work from responsible firms as determined by the Contracting Officer. Nothing contained in this clause or elsewhere within this contract shall restrict the right of the Contractor to compete with other firms solicited for the subsequent work.

(b) The parties hereto mutually agree that should the Government elect to solicit such proposals from other firms, the Contractor shall support such action to the maximum extent possible without jeopardizing the competitive rights of the Contractor. To that end, the following principles shall govern:

(1) The Contractor shall develop and deliver a current "Recompetition Technical Data Package" in accordance with the requirements of Data Procurement Document DPD 660, Data Requirement (DR) No. SE-18. DR SE-18 shall not contain any limited rights data. The Contractor shall develop performance criteria in lieu of providing limited rights data in DR SE-18.

(2) In the event that the Contractor is not awarded subsequent increments of the Space Shuttle External Tank Program and such increments are awarded to other companies, the Contractor shall prepare and submit to the Contracting Officer a transitional phase in plan for the successor Contractor. Such phase in plan shall identify and schedule the events necessary for an orderly transition of the successor Contractor with minimum interruption of the overall program production schedules of the predecessor Contractor. All effort associated with the preparation and implementation of such a transitional phase in plan shall be directed by the Contracting Officer in accordance with the "Changes -- Cost Reimbursement -- Alternate V (April 1984)" clause of this contract.

(End of Clause)

H.20 PROPERTY, USE AND SALES TAXES

The contract price does not include any amount for:

(a) Any property taxes assessed on the Contractor's possession of, interest in, or use of property, title to which is vested in the Government; nor

(b) Any state sales or use taxes for direct purchases under this contract.

(c) If either is imposed against the Contractor as a result of performance of this contract, the NASA Contracting Officer shall be notified promptly. If the Contractor is required to render payment for any such taxes, said payment shall be made under protest and such event shall be the basis for an adjustment in price. At the direction of the NASA Contracting Office, the Contractor agrees to contest any such tax and to cooperate fully in any action instituted by the NASA in opposition of such tax. The Contractor agrees to credit the NASA, Marshall Space Flight Center for any refunds it may receive from such taxes determined to be erroneously paid.

(End of clause)

H.21 ALLOWABLE INDEPENDENT RESEARCH AND DEVELOPMENT/BID AND PROPOSAL COST

The allowable Independent Research and Development/Bid and Proposal Cost under this contract shall be limited to those costs incurred by the Lockheed Martin Space Systems Company – Michoud Operations and the Michoud Operations allocable share of the cost incurred by Lockheed Martin Corporation's Research Laboratory.

(End of clause)

H.22 UNIT PRICING

This contract is based upon the production of thirty-five (35) External Tanks and is not subject to unit price regulations. Should this contract be modified to require unit prices per ET, the Contractor shall be entitled to an equitable adjustment to the Contract under FAR Clause 52.243-2 entitled "Changes -- Cost Reimbursement -- Alternate V (April 1984)".

(End of clause)

H.23 ENERGY COST REDUCTION

(a) The Contractor will operate an Energy Cost Reduction Program for the Michoud Assembly Facility in accordance with Attachment J-7-B of this contract, entitled "Energy Cost Reduction Program" attached hereto and made a part hereof.

b) Pursuant to provisions of this Attachment J-7-B for Incentive Energy Usage Reduction at MAF, the Contractor's goals for reduction of energy cost are set forth therein. Pursuant to the extent that the Contractor underruns such goals in the reduction of energy usage, the Contractor shall receive an additional Award Fee in accordance with the fee schedule provisions stated in Attachment J-7-B. Performance against the goals will be on an annual basis and measured in accordance with the formula established in Paragraph C of said attachment. Within 60 days subsequent to each fiscal year-end, the Contractor will provide the data to the Contracting Officer to support the Contractor's performance against annual goals, as identified in Attachment J-7-B of this contract will be changed to reflect the additional Award Fee earned, if any, and payable to the Contractor pursuant to Section B.

(c) Pursuant to the provisions of this Attachment J-7-B for Special Energy Reduction Projects, Section B will be amended on an annual basis to reflect the KOR (Contractor's) Earned Share of the savings for these projects. This share shall be in accordance with guidelines established in paragraph D of Attachment J-7-B

(d) Pursuant to the provisions of Attachment J-7-B for Contractor and third party Energy Cost Reduction projects, Section B will be amended to reflect the KOR Share earned by the Contractor on a semi-annual basis. This share shall be in accordance with guidelines established in paragraphs E and F of Attachment J-7-B.

(e) Contractor Shares earned in accordance with Paragraphs (c) and (d) above are payable upon receipt of a fully executed contract modification and do not constitute profit or fee within the limitations as established in Section B.

(f) This clause shall become effective October 1, 2001 or upon completion of contract NAS8-36200.

(End of clause)

H.24 INDEMNIFICATION

The contractor has requested and been granted "Indemnification under Public Law 85-804," Far Clause 52.250-1. Pursuant to Far Clause 52.250-1, the following is the definition of unusually hazardous risks:

"The unusually hazardous risks associated with the External Tank for which indemnification is authorized are risks arising from or in connection with the burning, explosion, or detonation of Space Transportation System (STS) flight elements or components, including (but not limited to) the External Tank or ground support equipment; uncontrolled or accidental releases or spills of hazardous chemicals or gases; and the landfall of STS or elements, components, or fragments thereof; any or all of which may result in liability for personal injury or death, loss of or damage to property, or loss of use of property. The risk period begins solely when such products or services are provided to the U.S. Government installation for or in connection with one or more shuttle launches, and products are actually used

or services actually performed in connection with NASA's space activities. These risks are considered unusually hazardous in the sense that the potential occurrence of such risks may result in a catastrophic accident with potential liability that could be substantially in excess of the insurance coverage NASA contractors could reasonably be expected to purchase and maintain, considering the availability, cost, terms and conditions of such insurance.”

(End of clause)

H.25 PRODUCIBILITY CANDIDATES

Contractor-initiated “no cost” or “cost savings” producibility changes will be considered as part of the contract baseline and will not adjust the Contract Value.

Government initiated producibility changes will adjust the Contract Value accordingly.

(End of Clause)

H.26 ASBESTOS MATERIAL (MSFC 52.223-90)(MAR 1993)

During performance of this contract, Contractor personnel performing work in MSFC buildings may come in contact with materials containing asbestos. MSFC Building 4200, 4201, 4202, 4663, and 4666 are of special concern since they are known to contain a sprayed-on fire insulation on or above the ceiling, usually located on the metal or concrete structure of the buildings. These buildings and all other MSFC buildings may contain asbestos in floor tile, pipe and lagging insulation, exterior siding, roofing felt, and many other building materials. Prior to disturbing suspected asbestos material in any manner, the Contractor shall notify representatives of the Environmental Health Office, an office within the MSFC Medical Center, for guidance. The Contractor shall be responsible for ensuring that all Contractor personnel working onsite are made aware of and comply with this clause.

(End of clause)

H.27 NATIONAL CENTER FOR ADVANCED MANUFACTURING (NCAM)

NASA, the University of New Orleans (UNO), and the State of Louisiana have joined together to develop, implement and operate the National Center for Advanced Manufacturing (NCAM) through a memorandum of understanding. The Louisiana element of the NCAM will be located on the NASA owned Michoud Assembly Facility (MAF). At MAF, the Contractor shall perform administration functions for all NCAM activities, which are further defined in the MAF Operational Plan Document as transmitted by Lockheed Martin Letter Number 02MO-0041. The Contractor shall serve as NCAM integrator, facilitating the acquisition of additional equipment, performing routine facilities, safety, maintenance, master planning, tenant coordination, and etc. for NCAM designated space. The Contractor may also enter into third party agreements in furtherance of the NCAM effort with NASA concurrence.

(End of Clause)

H.28 SUPPORT OF FIELD PERSONNEL

(a) The Contractor shall provide, at any Contractor-furnished place of performance, adequate office space and office equipment to accommodate resident Government Personnel deemed necessary by the Contracting Officer and/or Technical Manager, designated pursuant to Clause G-5.

(b) The Government will provide adequate office space and equipment, warehouse, work areas, shop facilities, and supporting services to contractor personnel required to be located at an associated Contractor-operated facility for the proper performance of the work and services required to be furnished under this contract.

(c) The Contractor shall, insofar as possible, avoid incurring direct or indirect costs in duplicating work or support capacity available at or through any NASA installation involved in the performance of this contract or any major subcontract hereunder. Therefore, the Contractor agrees to utilize or cause to be utilized all available Government or Government-controlled working space, equipment, supplies, materials, services, or other support (including communication services) at or available through any NASA installation where work under this contract is performed on a no-charge-for-use basis. The Contractor shall not purchase or otherwise furnish any requirement covered by this clause, or authorize others to do so, without written approval of the Contracting Officer of the terms of the proposed purchase or other arrangement.

(End of clause)

H.29 SPACE FLIGHT MOTIVATIONAL AWARENESS PROGRAM

The contractor shall maintain a product oriented motivational awareness program in accordance with NASA Policy 8710.2B and NSTS 5300.4 (1D-2) and MMC-ET-RA03-C, "External Tank Project Safety Reliability and Quality Requirements and Implementation Document." The program objective shall be the prevention of human error by instilling in individuals performing the contract and on critical subcontracts thereunder, an awareness of their personal responsibility for Space Shuttle External Tank Mission Success and flight crew safety, by assuring the manufacture of quality hardware and motivating the exemplary performance necessary to achieve this success.

(End of clause)

H.30 METHODOLOGY FOR THE ALLOCATION OF SUPPORT COSTS

The parties hereby agree the External Tank direct support costs will be allocated between the Buy 6 Contract NAS8-00016 and the Buy 5 Contract NAS8-36200 for the Production and MAF Operations and Maintenance scope of work and between the Buy 6 Contract NAS8-00016 and the Buy 7 Follow-on Contract (TBD) for the Production scope of work only, if applicable. The parties agree that the contractor will allocate the direct support costs as identified in the Allocation of Cost Methodology concurrence letter dated October 23, 2000 (Lockheed Martin reference: 00MO-0727). This clause is not applicable to the Shuttle Upgrade Statement of Work identified in Attachment J-1-D of this contract. ECP B02063A entitled, "Implementation of Digital X-Ray", - Non-recurring cost will be charged to the NAS8-00016 Contract. Cost associated with approved Industrial Engineering for Safety (IES) Initiatives as identified in Attachment J-1-A, Paragraph 2.6 will be charged to the Buy 6 Contract NAS8-00016. Cost associated with Project Change Proposals B81694B and B81694C, Implementation of Paperless Manufacturing Execution System (PMES) as identified in Attachment J-1-A, Paragraph 2.7 will be charged to the Buy 6 Contract NAS8-00016. Costs associated with Project Change Proposal B81734 and B81734A will be charged solely to Buy 6 Contract NAS8-00016.

(End of clause)

H.31 TECHNOLOGY UTILIZATION/TRANSFER

Whereas, as stipulated in NASA FAR Supplement Part 18-27, Subpart 18-27.3, Paragraph 18-27.372 entitled "Policy", an objective of any NASA contract subject to Section 305 of the National Aeronautics and Space Act of 1958, as amended (42 U. S. C. 2457) is to obtain in regard to any invention, discovery, improvement and innovation, the prompt reporting thereof in order to provide their widest practicable and appropriate dissemination, early utilization, expeditious development, and continued availability for the benefit of the scientific, industrial and commercial interest and the general public. In addition, NASA policy is to promote utilization of inventions to ensure full and open competition and to promote commercialization and public availability of inventions.

Therefore, in implementation of the stated NASA policy and pursuant to the provisions of NASA FAR Supplement Clause 18-52.227-70 entitled, "New Technology", the Contractor shall provide Technology Utilization/Transfer services in accordance with the provisions of Attachment J-11-A of this contract for ET Technology.

(End of Clause)

H.32 INFORMATION TECHNOLOGY (IT) SECURITY COMPLIANCE

NASA/MSFC and Lockheed Martin have reviewed the IT Security System in place at MAF as documented in Lockheed Martin Letter 01M0-0723. It was determined that this system complies with the requirements of the NASA FAR Supplement Clause 1852.204-76 dated July 2000 based on implementation of the effort scoped in this letter. Enclosures (1) and (2) to 01M0-0723, outlining the NPG 2810.1 summary and NPG 2810.1 details respectively, identifies the security level of compliance required by NASA/MSFC. Any determination that any element of this agreement is non-compliant may result in a contract change and equitable adjustment to the contract.

(End of Clause)

H.33 EXPORT OF TECHNICAL DATA, COMPUTER SOFTWARE, OR HARDWARE

(a) During the conduct of this contract, NASA may have a need to deliver, disclose, or transfer to a foreign entity or person ("export") technical data, computer software, or hardware developed, used or required to be delivered by the Contractor in the performance of this contract. When such a need arises, NASA may exercise the applicable exemptions, general licenses, existing NASA export licenses or other approvals available to a Federal agency under the US export control laws, and may affect the export of such technical data, computer software, or hardware for NASA by direction to the Contractor.

(b) When directed in writing by the Contracting Officer, the Contractor, for purposes of export control, shall export on behalf of NASA specifically identified technical data, computer software, or hardware to a named foreign entity or person, in the manner and under the conditions provided for in the direction.

(c) Any export made in accordance with this clause shall be limited to only that technical data, computer software, and hardware which NASA specifically identifies and authorizes the Contractor to export, in the manner and under the conditions provided in the authorization. All other exports of technical data, computer software and hardware by the Contractor, whether related to the performance of this contract or otherwise, are subject to the applicable requirements of the US export control laws and regulations.

(d) Nothing contained in this clause shall affect the protection or allocation of rights to technical data or computer software between NASA and the Contractor or any subcontractors as provided for in this contract or subcontract hereunder, nor shall this clause imply any license or affect the scope of any license otherwise granted to the Government or the recipient of the transferred or disclosed technical data or computer software.

(e) The Contractor shall include this clause in all subcontracts at any tier (suitably modified to reflect the relationship of the parties), the performance of which may require the development, delivery, or use of technical data, computer software, or hardware, and the Contractor may direct an export on behalf of NASA, subject to the limitations of paragraphs (c) and (d) above, by subcontractors. Alternately, any such direction may be given by the Contracting Officer or his/her designated representative directly to a subcontractor at any tier (with notice by NASA to the Contractor).

(End of Clause)

H.34 TRANSFER OF SPECIFIC PROPERTY FROM NAS8-36200

(a) Utilizing the DD1149 process, the Contractor shall transfer, for accountability purposes, the property identified in Lockheed Martin letter 02MO-0542 from Contract NAS8-36200, no later than the expiration of NAS8-36200, to NAS8-00016. Direct material costs and associated burdens will remain on the NAS8-36200 contract. The Contractor will account for this property within its inventory control system. These items do not have a specific requirement/scope of work identified on this contract at this time, but it is not prudent to dispose as excess material. These items are not applicable to residual inventory identified in Clause H.17 of this contract entitled "Credit for Inventory".

(b) In the event any of these items are deemed useful for a particular need on present External Tank program requirements, the Contractor is authorized to use such items with any adjustments to contract value associated with that particular need being subject to the cost threshold identified in Clause H.3 of this contract. If any of these items are used for added or changed requirements to the External Tank program, the Contractor is authorized to use such items in the best interest of the program. The Contractor is not required to replenish any of the used items.

(c) During the performance of this contract, if any of these items are deemed prudent to dispose of as excess material, the Contractor is authorized to dispose as such in accordance with the normal disposal of excess material practice with no adjustment to contract value.

(End of Clause)

(END OF SECTION)

SECTION I

CONTRACT CLAUSES

I.1 CLAUSES INCORPORATED BY REFERENCE (52.252-2) (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 these addresses:

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

NASA FAR Supplement clauses:

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.html>

MSFC clauses: http://ec.msfc.nasa.gov/msfc/msfc_uni.html

(End of clause)

I.2 The following clauses are hereby incorporated by reference:

A. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

<u>Clause No.</u>	<u>Title</u>
52.202-1	Definitions (Oct 1995)
52.203-3	Gratuities (Apr 1984)
52.203-5	Covenant Against Contingent Fees (Apr 1984)
52.203-6	Restrictions on Subcontractor Sales to the Government (Jul 1995)
52.203-7	Anti-Kickback Procedures (Jul 1995)
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (Jan 1997)
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (Jan 1997)
52.203-12	Limitation on Payments to Influence Certain Federal Transactions (Jun 1997)
52.204-2	Security Requirements (Aug 1996)
52.204-4	Printing/Copying Double-Sided on Recycled Paper (Jun 1996)
52.209-6	Protecting the Government's Interest when Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (Jul 1995)
52.211-15	Defense Priority and Allocation Requirements (Sep 1990)
52.215-2	Audit and Records – Negotiation (Jun 1999)
52.215-8	Order of Precedence--Uniform Contract Format (Oct 1997)
52.215-9	Changes or Additions to Make-or-Buy Program (Oct 1997)

- 52.215-10 Price Reduction for Defective Cost or Pricing Data (Oct 1997)
- 52.215-12 Subcontractor Cost or Pricing Data (Oct 1997)
- 52.215-14 Integrity of Unit Prices (Oct 1997) -- Alternate I (Oct 1997)
- 52.215-15 Termination of Defined Benefit Pension Plans (Dec 1998)
- 52.215-16 Facilities Capital Cost of Money (Oct 1997)
- 52.215-18 Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other Than Pensions (Oct 1997)
- 52.215-19 Notification of Ownership Changes (Oct 1997)
- 52.216-7 Allowable Cost and Payment (March 2000)
- 52.219-8 Utilization of Small Business Concerns (Oct 1999)
- 52.219-9 Small Business Subcontracting Plan (Oct 1999) -- (Alternate II) (Jan 1999)
- 52.219-16 Liquidated Damages -- Subcontracting Plan (Jan 1999)
- 52.222-1 Notice to the Government of Labor Disputes (Feb 1997)
- 52.222-20 Walsh-Healey Public Contracts Act (Dec 1996)
- 52.222-21 Prohibition of Segregated Facilities (Feb 1999)
- 52.222-26 Equal Opportunity (Feb 1999)
- 52.222-35 Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (Apr 1998)
- 52.222-36 Affirmative Action for Workers with Disabilities (Jun 1998)
- 52.222-37 Employment Reports on Disabled Veterans and Veterans of the Vietnam Era (Jan 1999)
- 52.223-6 Drug-Free Workplace (Jan 1997)
- 52.224-1 Privacy Act Notification (Apr 1984)
- 52.223-10 Waste Reduction Program (Oct 1997)
- 52.224-2 Privacy Act (Apr 1984)
- 52.225-3 Buy American Act – Supplies (Feb 2000)
- 52.225-13 Restrictions on Certain Foreign Purchases (July 2000)
- 52.227-1 Authorization and Consent (Jul 1995) -- Alternate I (Apr 1984)
- 52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement (Aug 1996)
- 52.227-14 Rights in Data – General (Jun 1987) -- As Modified by NASA FAR Supplement 1852.227-14 – Alternate II (Jun 1987) – Alternate III (Jun 1987) – Alternate V (Jun 1987)
- 52.227-16 Additional Data Requirements (Jun 1987)
- 52.228-7 Insurance -- Liability to Third Persons (Mar 1996)
- 52.230-2 Cost Accounting Standards (Apr 1998)
- 52.230-6 Administration of Cost Accounting Standards (Nov 1999)
- 52.232-9 Limitation on Withholding of Payments (Apr 1984)
- 52.232-17 Interest (Jun 1996)
- 52.232-22 Limitation of Funds (Apr 1984)
- 52.232-23 Assignment of Claims (Jan 1986)
- 52.232-25 Prompt Payment (Jun 1997) (Insert 10th day in subparagraph (b)(1), expires September 30, 2009.)

52.232-33	Payment by Electronic Funds Transfer Central Contractor Registration (May 1999)
52.233-1	Disputes (Dec 1998) – Alternate I (Dec 1991)
52.233-3	Protest After Award (Aug 1996) -- Alternate I (Jun 1985)
52.242-1	Notice of Intent to Disallow Costs (Apr 1984)
52.242-3	Penalties for Unallowable Cost (Oct 1995)
52.242-4	Certification of Final Indirect Costs (Jan 1997)
52.242-13	Bankruptcy (Jul 1995)
52.243-2	Changes – Cost-Reimbursement (Aug 1987) –As Modified by NASA FAR Supplement 1843.205--Alternate V (Apr 1984)(Insert “60 days” in lieu of “30 days” in paragraph (c))
52.243-7	Notification of Changes (Apr 1984) (Insert 15 and 30 in paragraphs (b) and (d), respectively)
52.244-2	Subcontracts (Cost-Reimbursement and Letter Contracts) (Aug 1998) – Alternate I (Aug 1998) (Insert <u>TBD</u> in paragraph (e.))
52.244-5	Competition in Subcontracting (Dec 1996)
52.245-5	Government Property (Cost-Reimbursement, Time-and-Material, or Labor-Hour Contracts) (Jan 1986)
52.245-18	Special Test Equipment (Feb 1993)
52.246-24	Limitation of Liability -- High-Value Items (Feb 1997)
52.247-1	Commercial Bill of Lading Notations (Apr 1984)
52.247-64	Preference for Privately Owned U.S.-Flag Commercial Vessels (Jun 1997) – Alternate I (Apr 1984)
52.248-1	Value Engineering (Feb 2000)
52.249-6	Termination (Cost-Reimbursement) (Sep 1996)
52.249-14	Excusable Delays (Apr 1984)
52.251-1	Government Supply Sources (Apr 1984)
52.251-2	Interagency Fleet Management System Vehicles and Related Services (Jan 1991)
52.253-1	Computer Generated Forms (Jan 1991)

B. NASA/FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

<u>Clause No.</u>	<u>Title</u>
1852.215-84	Ombudsman (Jun 2000)(Insert MSFC Ombudsman Sidney P. Saucier (256) 544-1919)
1852.219-74	Use of Rural Area Small Businesses (Sep 1990)
1852.219-75	Small Business Subcontracting Reporting (May 1999)
1852.219-76	NASA 8 Percent Goal (Jul 1997)
1852.223-74	Drug- and Alcohol-Free Workforce (Mar 1996)
1852.223-75	Major Breach of Safety or Security (May 2001)
1852.227-70	New Technology (Nov 1998)

- 1852.235-70 Center for AeroSpace Information (Jul 1999)
- 1852.244-70 Geographic Participation in the Aerospace Program (Apr 1985)
- 1852.245-70 Contractor Requests for Government-Owned Equipment (Jul 1997)
- 1852.245-71 Installation-Provided Government Property (June 1998)
- 1852.247-71 Protection of the Florida Manatee (Mar 1989)

I.3 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS OR QUOTERS INCORPORATED BY REFERENCE (MSFC 52.252-91) (AUG 1988)

The Representations, Certifications, and Other Statements of Offerors or Quoters (Section K of the solicitation document) as completed by the Contractor are hereby incorporated in their entirety by reference, with the same force and effect as if they were given in full text.

(End of clause)

I.4 FULL TEXT CLAUSES ATTACHED

<u>Clause No.</u>	<u>Title</u>
52.204-1	Approval of Contract (Dec 1989)
52.215-21	Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data – Modifications (Oct 1997)
52.216-10	Incentive Fee (Mar 1997)
52.223-3	Hazardous Material Identification and Material Safety Data (Jan 1997) – Alternate I (Jul 1995)
52.227-9	Refund of Royalties (Apr 1984)
1852.204-76	Security Requirements for Unclassified Information Technology Resources (July 2000)

52.204-1 APPROVAL OF CONTRACT (DEC 1989)

This contract is subject to written approval of the Procurement Officer and shall not be binding until so approved.

(End of Clause)

52.215-21 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION
OTHER THAN COST OR PRICING DATA – MODIFICATIONS (OCT 1997)

(a) *Exceptions from cost or pricing data.* (1) In lieu of submitting cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.403-4 on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable --

(i) *Identification of the law or regulation establishing the price offered.* If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(ii) *Information on modifications of contracts or subcontracts for commercial items.*

(A) If --

(1) The original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item, and

(2) The modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.

(B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include --

(1) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.

(2) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market.

(3) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.

(2) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this clause, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.

(b) *Requirements for cost or pricing data.* If the Contractor is not granted an exception from the requirement to submit cost or pricing data, the following applies:

(1) The Contractor shall submit cost or pricing data and supporting attachments prepared in accordance with Table 15-2 of FAR 15.408.

(2) As soon as practicable after agreement on price, but before award (except for unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

(End of clause)

52.216-10 Incentive Fee (Mar 1997)

(a) General. The Government shall pay the Contractor for performing this contract a fee determined as provided in this contract.

(b) Target cost and target fee. The target cost and target fee specified in the Schedule are subject to adjustment if the contract is modified in accordance with paragraph (d) of this clause.

(1) "Target cost," as used in this contract, means the estimated cost of this contract as initially negotiated, adjusted in accordance with paragraph (d) below.

(2) "Target fee," as used in this contract, means the fee initially negotiated on the assumption that this contract would be performed for a cost equal to the estimated cost initially negotiated, adjusted in accordance with paragraph (d) of this clause.

(c) Withholding of payment. Normally, the Government shall pay the fee to the Contractor as specified in the Schedule. However, when the Contracting Officer considers that performance or cost indicates that the Contractor will not achieve target, the Government shall pay on the basis of an appropriate lesser fee. When the Contractor demonstrates that performance or cost clearly indicates that the Contractor will earn a fee significantly above the target fee, the Government may, at the sole discretion of the Contracting Officer, pay on the basis of an appropriate higher fee. After payment of 85 percent of the applicable fee, the Contracting Officer may withhold further payment of fee until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interest. This reserve shall not exceed 15 percent of the applicable fee or \$100,000, whichever is less. The Contracting Officer shall release 75 percent of all fee withholds under this contract after receipt of the certified final indirect cost rate proposal covering the year of physical completion of this contract, provided the Contractor has satisfied all other contract terms and conditions, including the submission of the final patent and royalty reports, and is not delinquent in submitting final vouchers on prior years' settlements. The Contracting Officer may release up to 90 percent of the fee withholds under this contract based on the Contractor's past performance related to the submission and settlement of final indirect cost rate proposals.

(d) Equitable adjustments. When the work under this contract is increased or decreased by a modification to this contract or when any equitable adjustment in the target cost is authorized under any other clause, equitable adjustments in the target cost, target fee, minimum fee, and maximum fee, as appropriate, shall be stated in a supplemental agreement to this contract.

(e) Fee payable. (1) The fee payable under this contract shall be the target fee increased by *See appropriate J-x-x Fee Attachment* cents for every dollar that the total allowable cost is less than the target cost or decreased by *See appropriate J-x-x Fee Attachment* cents for every dollar that the total allowable cost exceeds the target cost. In no event shall the fee be greater than *See appropriate J-x-x Fee Attachment* percent or less than *See appropriate J-x-x Fee Attachment* percent of the target cost.

(2) The fee shall be subject to adjustment, to the extent provided in paragraph (d) of this clause, and within the minimum and maximum fee limitations in paragraph (e)(1) of this clause, when the total allowable cost is increased or decreased as a consequence of--

(i) Payments made under assignments; or

(ii) Claims excepted from the release as required by paragraph (h)(2) of the Allowable Cost and Payment clause.

(3) If this contract is terminated in its entirety, the portion of the target fee payable shall not be subject to an increase or decrease as provided in this paragraph. The termination shall be accomplished in accordance with other applicable clauses of this contract.

(4) For the purpose of fee adjustment, "total allowable cost" shall not include allowable costs arising out of--

(i) Any of the causes covered by the Excusable Delays clause to the extent that they are beyond the control and without the fault or negligence of the Contractor or any subcontractor;

(ii) The taking effect, after negotiating the target cost, of a statute, court decision, written ruling, or regulation that results in the Contractor's being required to pay or bear the burden of any tax or duty or rate increase in a tax or duty;

(iii) Any direct cost attributed to the Contractor's involvement in litigation as required by the Contracting Officer pursuant to a clause of this contract, including furnishing evidence and information requested pursuant to the Notice and Assistance Regarding Patent and Copyright Infringement clause;

(iv) The purchase and maintenance of additional insurance not in the target cost and required by the Contracting Officer, or claims for reimbursement for liabilities to third persons pursuant to the Insurance Liability to Third Persons clause;

(v) Any claim, loss, or damage resulting from a risk for which the Contractor has been relieved of liability by the Government Property clause; or

(vi) Any claim, loss, or damage resulting from a risk defined in the contract as unusually hazardous or as a nuclear risk and against which the Government has expressly agreed to indemnify the Contractor.

(5) All other allowable costs are included in "total allowable cost" for fee adjustment in accordance with this paragraph (e), unless otherwise specifically provided in this contract.

(f) Contract modification. The total allowable cost and the adjusted fee determined as provided in this clause shall be evidenced by a modification to this contract signed by the Contractor and Contracting Officer.

(g) Inconsistencies. In the event of any language inconsistencies between this clause and provisioning documents or Government options under this contract, compensation for spare parts or other supplies and services ordered under such documents shall be determined in accordance with this clause.

(End of clause)

52.223-3 Hazardous Material Identification and Material Safety Data (Jan 1997)

(a) "Hazardous material," as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material

(If none, insert "None") Identification No.

NONE

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to--

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

Alternate I (July 1995). If the contract is awarded by an agency other than the Department of Defense, add the following paragraph (i) to the basic clause:

(i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in paragraph (b) of this clause.

(1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.

(2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

(End of clause)

52.227-9 Refund of Royalties (Apr 1984)

(a) The contract price includes certain amounts for royalties payable by the Contractor or subcontractors or both, which amounts have been reported to the Contracting Officer.

(b) The term "royalties" as used in this clause refers to any costs or charges in the nature of royalties, license fees, patent or license amortization costs, or the like, for the use of or for rights in patents and patent applications in connection with performing this contract or any subcontract hereunder.

(c) The Contractor shall furnish to the Contracting Officer, before final payment under this contract, a statement of royalties paid or required to be paid in connection with performing this contract and subcontracts hereunder together with the reasons.

(d) The Contractor will be compensated for royalties reported under paragraph (c) of this clause, only to the extent that such royalties were included in the contract price and are determined by the Contracting Officer to be properly chargeable to the Government and allocable to the contract. To the extent that any royalties that are included in the contract price are not in fact paid by the Contractor or are determined by the Contracting Officer not to be properly chargeable to the Government and allocable to the contract, the contract price shall be reduced. Repayment or credit to the Government shall be made as the Contracting Officer directs.

(e) If, at any time within 3 years after final payment under this contract, the Contractor for any reason is relieved in whole or in part from the payment of the royalties included in the final contract price as adjusted pursuant to paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer of that fact and shall reimburse the Government in a corresponding amount.

(f) The substance of this clause, including this paragraph (f), shall be included in any subcontract in which the amount of royalties reported during negotiation of the subcontract exceeds \$250.

(End of clause)

[END OF SECTION]

1852.204-76 SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION
TECHNOLOGY RESOURCES (JULY 2000)

a) The Contractor shall comply with the security requirements outlined in NASA Policy Directive (NPD) 2810.1, Security of Information Technology, and NASA Procedures and Guidelines (NPG) 2810.1, Security of Information Technology. These policies apply to all IT systems and networks under NASA's purview operated by or on behalf of the Federal Government, regardless of location.

(b) (1) The Contractor shall ensure compliance by its employees with Federal directives and guidelines that deal with IT Security including, but not limited to, OMB Circular A-130, Management of Federal Information Resources, OMB Circular A-130 Appendix III, Security of Federal Automated Information Resources, the Computer Security Act of 1987 (40 U.S.C. 1441 et seq.), and all applicable Federal Information Processing Standards (FIPS).

(2) All Federally owned information is considered sensitive to some degree and must be appropriately protected by the Contractor as specified in applicable IT Security Plans. Types of sensitive information that may be found on NASA systems that the Contractor may have access to include, but are not limited to --

(i) Privacy Act information (5 U.S.C. 552a et seq.);

(ii) Export Controlled Data, (e.g. Resources protected by the International Traffic in Arms Regulations (22 CFR Parts 120-130)).

(3) The Contractor shall ensure that all systems connected to a NASA network or operated by the Contractor for NASA conform with NASA and Center security policies and procedures.

(c) (1) The Contractor's screening of Contractor personnel will be conducted in accordance with NPG 2810.1, Section 4.5 for personnel requiring unescorted or unsupervised physical or electronic access to NASA systems, programs, and data.

(2) The Contractor shall ensure that all such employees have at least a National Agency Check investigation. The Contractor shall submit a personnel security questionnaire (NASA Form 531), Name Check Request for National Agency Check (NAC) investigation, and Standard Form 85P, Questionnaire for Public Trust Positions (for specified sensitive positions), and a Fingerprint Card (FD-258 with NASA overprint in Origin Block) to the Center Chief of Security for each Contractor employee requiring screening. The required forms may be obtained from the Center Chief of Security. In the event that the NAC is not satisfactory, access shall not be granted. At the option of the Government, background screenings may not be required for employees with recent or current Federal Government investigative clearances.

(3) The Contractor shall have an employee checkout process that ensures--

(i) Return of badges, keys, electronic access devices and NASA equipment;

(ii) Notification to NASA of planned employee terminations at least three days in advance of the employee's departure. In the case of termination for cause, NASA shall be notified immediately. All NASA accounts and/or network access granted terminated employees shall be disabled immediately upon the employee's separation from the Contractor; and

(iii) That the terminated employee has no continuing access to systems under the operation of the Contractor for NASA. Any access must be disabled the day the employee separates from the Contractor.

(4) Granting a non-permanent resident alien (foreign national) access to NASA IT resources requires special authorization. The Contractor shall obtain authorization from the Center Chief of Security prior to granting a non-permanent resident alien access to NASA IT systems and networks.

(d) (1) The Contractor shall ensure that its employees with access to NASA information resources receive annual IT security awareness and training in NASA IT Security policies, procedures, computer ethics, and best practices.

(2) The Contractor shall employ an effective method for communicating to all its employees and assessing that they understand any Information Technology Security policies and guidance provided by the Center Information Technology Security Manager (CITSM) and/or Center CIO Representative as part of the new employee briefing process. The Contractor shall ensure that all employees represent that they have read and understand any new Information Technology Security policy and guidance provided by the CITSM and Center CIO Representative over the duration of the contract.

(3) The Contractor shall ensure that its employees performing duties as system and network administrators in addition to performing routine maintenance possess specific IT security skills. These skills include the following:

- (i) Utilizing software security tools.
- (ii) Analyzing logging and audit data.
- (iii) Responding and reporting to computer or network incidents as per NPG

2810.1.

- (iv) Preserving electronic evidence as per NPG 2810.1.
- (v) Recovering to a safe state of operation.

(4) The Contractor shall provide training to employees to whom they plan to assign system administrator roles. That training shall provide the employees with a full level of proficiency to meet all NASA system administrators' functional requirements. The Contractor shall have methods or processes to document that employees have mastered the training material, or have the required knowledge and skills. This applies to all system administrator requirements.

(e) The Contractor shall promptly report to the Center IT Security Manager any suspected computer or network security incidents occurring on any system operated by the Contractor for NASA or connected to a NASA network. If it is validated that there is an incident, the Contractor shall provide access to the affected system(s) and system records to NASA and any NASA designated third party so that a detailed investigation can be conducted.

(f) The Contractor shall develop procedures and implementation plans that ensure that IT resources leaving the control of an assigned user (such as being reassigned, repaired, replaced, or excessed) have all NASA data and sensitive application software permanently removed by a NASA-approved technique. NASA-owned applications acquired via a "site license" or "server license" shall be

removed prior to the resources leaving NASA's use. Damaged IT storage media for which data recovery is not possible shall be degaussed or destroyed. If the assigned task is to be assumed by another duly authorized person, at the Government's option, the IT resources may remain intact for assignment and use of the new user.

(g) The Contractor shall afford NASA, including the Office of Inspector General, access to the Contractor's and subcontractor's facilities, installations, operations, documentation, databases and personnel. Access shall be provided to the extent required to carry out a program of IT inspection, investigation and audit to safeguard against threats and hazards to the integrity, availability and confidentiality of NASA data, and to preserve evidence of computer crime.

(h) (1) The Contractor shall document all vulnerability testing and risk assessments conducted in accordance with NPG 2810.1 and any other IT security requirements specified in the contract or as directed by the Contracting Officer.

(2) The results of these tests shall be provided to the Center IT Security Manager. Any Contractor system(s) connected to a NASA network or operated by the Contractor for NASA may be subject to vulnerability assessment or penetration testing as part of the Center's IT security compliance assessment and the Contractor shall be required to assist in the completion of these activities.

(3) A decision to accept any residual risk shall be the responsibility of NASA. The Contractor shall notify the NASA system owner and the NASA data owner within 5 working days if new or unanticipated threats or hazards are discovered by the Contractor, made known to the Contractor, or if existing safeguards fail to function effectively. The Contractor shall make appropriate risk reduction recommendations to the NASA system owner and/or the NASA data owner and document the risk or modifications in the IT Security Plan

(i) The Contractor shall develop a procedure to accomplish the recording and tracking of IT System Security Plans, including updates, and IT system penetration and vulnerability tests for all NASA systems under its control or for systems outsourced to them to be managed on behalf of NASA. The Contractor must report the results of these actions directly to the Center IT Security Manager.

(j) When directed by the Contracting Officer, the Contractor shall submit for NASA approval a post-award security implementation plan outlining how the Contractor intends to meet the requirements of NPG 2810.1. The plan shall subsequently be incorporated into the contract as a compliance document after receiving Government approval. The plan shall demonstrate thorough understanding of NPG 2810.1 and shall include as a minimum, the security measures and program safeguards to ensure that IT resources acquired and used by Contractor and subcontractor personnel --

(1) Are protected from unauthorized access, alteration, disclosure, or misuse of information processed, stored, or transmitted;

(2) Can maintain the continuity of automated information support for NASA missions, programs, and functions;

(3) Incorporate management, general, and application controls sufficient to provide cost-effective assurance of the systems' integrity and accuracy;

(4) Have appropriate technical, personnel, administrative, environmental, and access safeguards;

- (5) Document and follow a virus protection program for all IT resources under its control; and
- (6) Document and follow a network intrusion prevention program for all IT resources under its control.
- (k) Prior to selecting any IT security solution, the Contractor shall consult with their Center IT Security Manager to ensure interoperability and compatibility with other systems with which there is a data or system interface requirement.
- (l) The Contractor shall comply with all Federal and NASA encryption requirements for NASA flight programs (e.g., secure flight termination systems, encryption for satellite uplinks, encryption for flight and satellite command and control for both up and down link) and involve the Center Communications Security (COMSEC) Manager when selecting encryption solutions.
- (m) The Contractor shall incorporate this clause in all subcontracts where the requirements identified in this clause are applicable to the performance of the subcontract.

End of Clause

(END OF SECTION)