

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO. DASG60-02-D-0011	2. DELIVERY ORDER/ CALL NO. 003807	3. DATE OF ORDER/CALL 2002 Sep 06	4. REQ./ PURCH. REQUEST NO. 4P1MSL1AA9	5. PRIORITY DX-A2	
6. ISSUED BY US ARMY SPACE & MISSILE DEFENSE COMMAND P.O. BOX 1500 HUNTSVILLE AL 35807-3801		7. ADMINISTERED BY DCM BIRMINGHAM BURGER PHILLIPS CENTER 1910 THIRD AVE., NORTH, RM. 201 BIRMINGHAM AL 35203-2376	7. ADMINISTERED BY CODE S0101A		

9. CONTRACTOR TELEDYNE SOLUTIONS, INC 5000 BRADFORD DRIVE HUNTSVILLE AL 35805	9. CONTRACTOR CODE 1P9G8	FACILITY	10. DELIVER TO FOB POINT BY (Date) SEE SCHEDULE	11. MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED
			12. DISCOUNT TERMS	
			13. MAIL INVOICES TO THE ADDRESS IN BLOCK See Item 15	

14. SHIP TO SEE SCHEDULE	14. SHIP TO CODE	15. PAYMENT WILL BE MADE BY DFAS-COLUMBUS CENTER DFAS-CO/SOUTH ENTITLEMENT OPERATION P.O. BOX 182264 COLUMBUS OH 43218-2264	15. PAYMENT WILL BE MADE BY CODE HQ0338	MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.
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16. TYPE OF ORDER	DELIVERY/ CALL	X	This delivery order/call is issued on another Govt. agency or in accordance with and subject to terms and conditions of above numbered contract.
	PURCHASE		Reference your quote dated Furnish the following on terms specified herein. REF:

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR	SIGNATURE	TYPED NAME AND TITLE	DATE SIGNED (YYYYMMDD)
<input type="checkbox"/> If this box is marked, supplier must sign Acceptance and return the following number of copies:			

17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
	SEE SCHEDULE				

* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.	24. UNITED STATES OF AMERICA	25. TOTAL \$100,000.00
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26. QUANTITY IN COLUMN 20 HAS BEEN <input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED	27. SHIP NO.	28. DO VOUCHER NO.	29. DIFFERENCES
DATE _____ SIGNATURE OF AUTHORIZED GOVT. REP. _____	<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	32. PAID BY	30. INITIALS

36. I certify this account is correct and proper for payment. DATE _____ SIGNATURE AND TITLE OF CERTIFYING OFFICER _____	31. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	33. AMOUNT VERIFIED CORRECT FOR	34. CHECK NUMBER
			35. BILL OF LADING NO.

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED (YYYYMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.
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Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
0001	SETAC - FP Labor COST	1	Lot	UNDEFINED	UNDEFINED
	Provide services outlined in the scope of work (SOW), as defined in a given task order (T/O), at the fixed prices/government labor category specified in Section B paragraph entitled, "GOVERNMENT LABOR CATEGORIES AND ASSOCIATED FIXED PRICES PER DPPH"				
	PURCHASE REQUEST NUMBER: 4P1MSL1AA9				
				MAX COST	\$87,400.00

FOB: Destination

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
0003	Consultants COST	1	Lot	UNDEFINED	UNDEFINED
	Provide services outlined in the scope of work (SOW) at the cost reimbursable amounts as approved on a task-order-by-task-order basis. Total Fee, including prime and subcontractor/consultant, shall not exceed 3% of the estimated costs. This CLIN is valid during the three-year base period as well as any/all award term extensions earned by the contractor.				
	PURCHASE REQUEST NUMBER: 4P1MSL1AA9				
				MAX COST	\$0.00

FOB: Destination

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
0004		1	Lot	UNDEFINED	UNDEFINED

Materials and STE

COST

Provide materials, special test equipment (STE), and associated services outlined in the individual task orders at the cost reimbursable amounts as approved by the T/OM and the Contracting Officer. NO FEE ON THIS CLIN. This CLIN is valid during the three-year base period as well as any/all award term extensions earned by the contractor.

PURCHASE REQUEST NUMBER: 4P1MSL1AA9

MAX COST

\$0.00

FOB: Destination

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
0005		1	Lot	UNDEFINED	UNDEFINED

Travel

COST

Travel as directed in the individual task orders. Travel must be completed within the cost reimbursable amounts allowed per the Joint Travel Regulations and the DCAA-approved Company-Implemented Policy and Procedures. NO FEE ON THIS CLIN. This CLIN is valid during the three-year base period as well as any/all award term extensions earned by the contractor.

PURCHASE REQUEST NUMBER: 4P1MSL1AA9

MAX COST

\$12,600.00

FOB: Destination

BLOCK 17/BLOCK 18 CONTINUED

BLOCK 17 (DD1155) CONTINUED:

TASK ORDER FUNDS REQUIRED \$100,000

TASK ORDER FUNDS AVAILABLE \$100,000

UNFUNDED BALANCE \$0

BLOCK 18 (DD1155) CONTINUED: In the performance of this Task Order (T/O), the contractor shall provide the total Direct Productive Person Hours (DPPHs), plus or minus 10 percent, as stated for fixed-price labor categories stated in Section B of the contract listed in Block 1 of the DD Form 1155. These DPPHs shall be billed at the fixed price stated in Exhibit V of the contract. The contractor shall not exceed the DPPHs, nor the total

dollars, stated for consultant below. The contractor is allowed to provide up to 10 percent less than the DPPHs stated for consultant and still expend the total dollars as stated in the T/O. Furthermore, under no circumstance shall the contractor exceed the dollars stated for Materials, Travel, or Total T/O.

LABOR CATEGORIES: Labor categories are as listed in the contract, Section B, paragraph entitled "GOVERNMENT LABOR CATEGORIES AND ASSOCIATED FIXED PRICES PER DPPH"

	DPPHs ORDERED	NTE AMOUNT
FIXED-PRICE LABOR TOTAL	 DPPHs	\$91,355
*CONSULTANT TOTAL	 DPPHs	\$0
T/O TOTAL LABOR	 DPPHs	\$91,355
MATERIAL	NTE	\$0
TRAVEL	NTE	\$8,645
T/O TOTAL		\$100,000

**Consultant requirements must have prior written approval of the Administrative Contracting Officer (ACO) (via subcontract consent package) before any costs are incurred under the consultant CLIN.

Section C - Descriptions and Specifications

A - SOW

THAAD Boost Motor and Divert Attitude Control System Analyses Statement of Work

1.0 The contractor shall support the THAAD Project Office (TPO) Missile Directorate in its analyses of the THAAD Missile Boost Motor/DACS and its interface with the Prime Contractor.

THAAD Boost Motor Failure Analyses

The Contractor shall support the THAAD Project Office in its interface with the Prime Contractor's Boost Motor Component Product Team (CPT). Activities will focus on Boost Motor and Boost Motor component failure analyses resulting in a redesign effort. Specific failure analyses could include such tasks as root-cause failure data analyses, thermo-structural analyses, combustion stability analyses, ballistic performance analyses, shock/vibration dynamic analyses and review of forensic evidence. Specific tasks will be assigned and approved by the Government Boost Motor CPT Primary POC prior to commencement which will cover the top level Boost Motor Assembly and the following Boost Motor Components: Insulated Boost Motor Case Assembly (Case Fiber/Resin, Internal & External Insulation, Forward Skirt, Bondable Conduit Covers and Aft-End Environmental Boot) Propellant Grain & Propellant Bondline, Nozzle Assembly (Lockring, Insulators, Steel Ball, Nozzle ITE, AL Closure, Nozzle O-rings, Bearing pad, greases and Exit Cone) Consumable Igniter Assembly (Case, Pellets, Igniter O-ring, greases, Snap-Ring and Squib).

The Contractor shall support the THAAD Project Office in its interface with the Prime Contractor's Thrust Vector Actuation (TVA) System Component Product Team (CPT). Activities will focus on TVA System and TVA component failure analyses resulting in a redesign effort. Specific failure analyses could include such tasks as root-cause failure data analyses, thermo-structural analyses, combustion stability analyses, ballistic performance analyses, shock/vibration dynamic analyses and review of forensic evidence. Specific tasks will be assigned and approved by the Government TVA CPT Primary POC prior to commencement which will cover the top level TVA System Assembly and the following TVA Components:

Controller System (Control Boards, Power Boards, Controller Structure, Controller connectors, Power Hybrids, Microprocessors, FPGA's, Noise and Filter Circuits), Thermal Batteries (Headers, Case, Thermo-chemistry cell stack and Interfaces) Actuators (Ball assembly, gears, LVDT and structural housing, DC motors)

1.2 THAAD Divert Attitude Control System Thruster and System Test Data Analyses

1.2.1 The Contractor shall support the THAAD Project Office in its interface with the Prime Contractor's DACS Integrated Product Team (IPT). Activities focus on DACS thruster and system hot fire test support, hot fire post test data analysis and database establishment. Specific tasks are as follows:

1.2.1.1 Contractor shall develop for the THAAD Project Office using the AMCOM Propulsion and Structures Directorate data reduction center, a database for DACS thruster and system hot fire test data received from the prime contractor. The contractor shall analyze all DACS functional performance test data for compliance to the requirements and for historical trend analysis. All Unclassified data processing can be performed at the contractor site. Classified data evaluation and processing will be performed either at the DACS test contractor's test site, the THAAD Project Office, or the Propulsion and Structures Directorate located on Redstone Arsenal, AL. Normalization tables to Declassify Secret data and Removable Classified Hard Drive w/key will be kept locked in the THAAD Project Office, Missile Directorate Classified Safe or the AMCOM Propulsion and Structures Directorate Classified Safe at all times when not in use by contractor during data processing or analysis.

1.2.1.2 Contractor shall provide analyses of the DACS system and DACS component development and qualification tests. This includes 'delta' critical design reviews for the DACS thruster, the DACS valve/ injector, and the DACS COPV Module.

1.2.1.3 Contractor shall provide technical assistance to the DACS IPT for the weekly IPT, design, and technical teleconferences.

Interface With Other THAAD Contractors

1.3.1 The contractor shall interface, as required, with the THAAD prime contractor, Lockheed Martin Space Systems Company, Sunnyvale, CA; The Simulation/Independent Verification and Validation contractor, COLSA Corporation, Huntsville, AL; the Hardware-in-the-Loop contractor, Tech Masters, Inc.; and other SETA contractors, in performance of this task order.

B - POP

PERIOD OF PERFORMANCE: 6 SEP 02 – 31 DEC 03

C - KEY PERSONNEL

KEY PERSONNEL: TBD

D - DELIVERABLES

DELIVERABLES:

Item/Title	CDRL#	# Copies	Delivery Date
Task Order Management Plan	A001	1 *	Per CDRL
FMER	A003	1 *	Per CDRL
Interim Technical Report	A004	1 *	As Required
Final Technical Report	A005	1 *	31 DEC 03
Conference Minutes	A006	1	As Required
Data Accession List	A007	1	Per CDRL

* Plus Electronic Version.

E - TRAVEL

ESTIMATED TRAVEL: Except for the locations listed below, the contractor has no authority to incur travel costs without explicit written approval (Email is acceptable) of the Task Order Monitor. Under no circumstances shall the contractor incur travel costs in excess of the NTE amount stated herein. NTE: \$8,645.

Sunnyvale, CA (LMSSC/M&SO)

Los Angeles, CA (Boeing Rocketdyne)

Edwards Air Force Base, CA (AFRL – Boeing Rocketdyne Test Facility)

East Aurora, NY (Moog Inc.)

Lincoln, NE (General Dynamics – Lincoln Operations)

F - MATERIAL

ESTIMATED COST FOR MATERIALS AND/OR SPECIAL TEST EQUIPMENT: The contractor has no authority to incur material costs without the explicit prior written approval of the contracting officer. Prior to forwarding requests to the contracting officer, the contractor shall obtain the Task Order Monitor's concurrence. Electronic Mail (email) shall be utilized for both steps in this process. Under no circumstance shall the contractor incur materials costs in excess of the NTE amount stated herein. NTE: \$0

G - SPECIAL INSTRUCTIONS

SPECIAL INSTRUCTIONS:

Cost data shall be segregated/reported/vouchered/paid at the ACRN level.

The "Limitation of Funds" is applicable at the ACRN level.

The effort described in the Task Order Statement of Work, which is anticipated to be performed in FY02-FY04, is subject to the Clause at FAR 52.232-18, Availability of Funds.

All of the terms and conditions of the contract listed in Block 1 above are applicable to this T/O.

All of the provisions and clauses of the contract listed in Block 1 above are applicable to this T/O.

Government Furnished Property: The government will furnish classified data processing machine on as a needed basis.

It is incumbent upon the contractor and/or subcontractor to ensure that appropriate Technical Assistance Agreements (TAAs) and/or applicable export licenses are in place before conducting any activity under the SOW which requires such approval and documentation.

H - DISTRIBUTION

Task Order Monitors section 1.0: 

Task Order Monitor section 1.1: [REDACTED]
[REDACTED]

Task Order Monitor section 1.2: [REDACTED]
[REDACTED]

Mailing Address: [REDACTED]
[REDACTED]

Program Management POC: [REDACTED]
[REDACTED]

Program Management Mailing Address: [REDACTED]

Mailing Address: [REDACTED]
[REDACTED]

Program Analyst POC: [REDACTED]
[REDACTED]

Program Analyst Mailing Address: [REDACTED]

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 9710400.2501 5Q-5Q08 50604861C00.2260 255Y 4P1MSL1AA9 S01021 4P1MSL1AA9/14PEXE/4P
COST 000000000000
CODE:
AMOUNT: \$20,000.00

AB: 9730400.2501 BM-THAD 50604861C00.2011 255Y TH3MSL1AA4 S01021 TH3MSL1AA4/3THEMD/TH
AMOUNT: \$80,000.00