

# ORDER FOR SUPPLIES OR SERVICES

|   |                                   |   |  |                                      |   |   |   |                      |  |  |            |
|---|-----------------------------------|---|--|--------------------------------------|---|---|---|----------------------|--|--|------------|
| 1. CONTRACT/PURCH. ORDER/ AGREEMENT NO.<br>DASG60-02-D-0011   |                                   | 2. DELIVERY ORDER/ CALL NO.<br>004204   |  | 3. DATE OF ORDER/CALL<br>2003 Feb 05 |   | 4. REQ./ PURCH. REQUEST NO.<br>N00178-03-MP-00129   |   | 5. PRIORITY<br>DX-A2 |  |  |            |
| 6. ISSUED BY<br>US ARMY SPACE & MISSILE DEFENSE COMMAND<br>PO BOX 1500<br>HUNTSVILLE AL 35807-3801  |                                   |   | CODE<br>W9113M   |                                      | 7. ADMINISTERED BY<br>DCMA HUNTSVILLE<br>BUILDING 4505, SUITE 301<br>MARTIN ROAD<br>REDSTONE ARSENAL AL 35898-0001                      |   |   | CODE<br>S0107A       |  |  |            |
| 9. CONTRACTOR<br>TELEDYNE SOLUTIONS, INC<br>5000 BRADFORD DRIVE<br>HUNTSVILLE AL 35805  |                                   |   | CODE<br>1P9G8  |                                      | FACILITY  |   | 10. DELIVER TO FOB POINT BY (Date)<br><b>SEE SCHEDULE</b> |                      | 11. MARK IF BUSINESS IS<br><input checked="" type="checkbox"/> SMALL<br><input type="checkbox"/> SMALL DISADVANTAGED<br><input type="checkbox"/> WOMEN-OWNED |  |            |
|   |                                   |   |  |                                      |   |   | 12. DISCOUNT TERMS  |                      | 13. MAIL INVOICES TO THE ADDRESS IN BLOCK<br>See Item 15   |  |            |
| 14. SHIP TO<br><b>SEE SCHEDULE</b>  |                                   |   | CODE   |                                      | 15. PAYMENT WILL BE MADE BY<br>DFAS-COLUMBUS CENTER<br>DFAS-CO/SOUTH ENTITLEMENT OPERATION<br>P.O. BOX 182264<br>COLUMBUS OH 43218-2264 |   |   | CODE<br>HQ0338       |  | <b>MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.</b> |            |
| 16. TYPE OF ORDER   | DELIVERY/ CALL                    | <input checked="" type="checkbox"/>   | 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<br>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<br><b>See Schedule</b>   |                                   |   |  |                                      |   |   |   |                      |  |  |            |
| 18. ITEM NO.  |                                   | 19. SCHEDULE OF SUPPLIES/ SERVICES  |  |                                      |   | 20. QUANTITY ORDERED/ ACCEPTED*   |   | 21. UNIT             | 22. UNIT PRICE   |  | 23. AMOUNT |
|   |                                   | <b>SEE SCHEDULE</b>   |  |                                      |   |   |   |                      |  |  |            |
| * 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            |  | \$38,000.00  |            |
| 26. QUANTITY IN COLUMN 20 HAS BEEN  |                                   |   |  |                                      |   | 27. SHIP NO.  |   | 28. DO VOUCHER NO.   |  | 29. DIFFERENCES  |            |
| <input type="checkbox"/> INSPECTED  | <input type="checkbox"/> RECEIVED | <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED |  |                                      |   | <input type="checkbox"/> PARTIAL<br><input type="checkbox"/> FINAL                                      |   | 32. PAID BY          |  | 33. AMOUNT VERIFIED CORRECT FOR  |            |
| DATE  |                                   | SIGNATURE OF AUTHORIZED GOVT. REP.  |  |                                      |   | 31. PAYMENT   |   |                      |  | 34. CHECK NUMBER   |            |
| 36. I certify this account is correct and proper for payment.   |                                   |   |  |                                      |   | <input type="checkbox"/> COMPLETE<br><input type="checkbox"/> PARTIAL<br><input type="checkbox"/> FINAL |   |                      |  | 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.  |            |

Section B - Supplies or Services and Prices

| ITEM NO | SUPPLIES/SERVICES   | MAX QUANTITY | UNIT | UNIT PRICE | MAX AMOUNT  |
|---------|---|--------------|------|------------|-------------|
| 0001    | SETAC - FP Labor<br>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: N00178-03-MP-00129   |              |      |            |             |
|         |   |              |      | MAX COST   | \$35,800.00 |

FOB: Destination

| ITEM NO | SUPPLIES/SERVICES   | MAX QUANTITY | UNIT | UNIT PRICE | MAX AMOUNT |
|---------|---|--------------|------|------------|------------|
| 0003    | Consultants<br>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: N00178-03-MP-00129   |              |      |            |            |
|         |   |              |      | 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: N00178-03-MP-00129

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: N00178-03-MP-00129

MAX COST

\$2,200.00

FOB: Destination

BLOCK 17/BLOCK 18 CONTINUED

TASK ORDER FUNDS REQUIRED \$ 38,000

TASK ORDER FUNDS AVAILABLE \$ 38,000

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 | \$ 35,800  |
| *CONSULTANT TOTAL       |  DPPHs | \$ 0       |
| T/O TOTAL LABOR         |  DPPHs | \$ 35,800  |
| MATERIAL                | NTE   | \$ 0       |
| TRAVEL                  | NTE   | \$ 2,200   |
| T/O TOTAL               |   | \$ 38,000  |

\*\*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 STATEMENT OF WORK

#### “System Engineering and Test and Evaluation Support for the Naval Operations Other Than War Technology Center (NOOTW-TC)” Statement of Work

##### 1.0 Background:

1.1 The Naval Operations Other Than War Technology Center (NOOTW-TC) was chartered on July 30, 1997 to develop and assess novel concepts and technologies relevant to naval operations across the spectrum of conflict. The primary functions of the NOOTW-TC are to identify, evaluate and catalogue concepts, technologies, and methodologies that can support naval missions; to develop, demonstrate, and transition near-term and mid-term affordable solutions to operational users; and to provide technical advice and support to policy makers.

1.2 This center, works in close coordination with various DoD activities, Joint Service components and representatives, as well as other Government agencies to provide “synergetic” technical support and management though all phases of technology exploration, development, experimentation, acquisition, and life cycle support planning as outlined by requesting sponsors.

2.0 The contractor shall assist NOOTW-TC in obtaining data and information in the general area of missile design, subcomponent composition and overall functionality. As required, the contractor shall focus the evaluation on key system vulnerabilities based on past experience in the specific area or similar areas. The contractor shall propose/recommend techniques, procedures, and mechanisms to provide the necessary data to examine means, modes and mechanisms to exploit system limitations. The contractor shall evaluate the extent of the problem and obtain required data to answer outstanding questions. The contractor shall further evaluate data available and identify problems. This evaluation may result in a recommendation of necessary techniques, hardware and procedures to be utilized to demonstrate problem resolution.

2.1 Systems Engineering - The contractor shall evaluate and identify items/components that could be modified to provide multiple possibilities for random failures as a function of time or specific designated time. The contractor shall provide recommendations on procedures, hardware and material.

2.2 System Research, Development, and Test and Evaluation - The contractor shall provide, analyze and evaluate data and technologies for future requirements. Primary focus areas are as follows:

2.2.1 Power Distribution | The contractor shall determine and examine the function of selected missile power distribution methods/schemes. The contractor shall identify possible weakness / reactions / degradation mechanisms and flaws. The contractor shall evaluate techniques to determine sensitivity of each proposed area, and shall recommend and outline test techniques and mechanisms to exploit the data.

2.2.2 Fuels and Lubricants | The contractor shall evaluate the specific propellant or propellant components used by missile systems to determine possible problem areas. The contractor shall propose techniques / mechanisms to investigate possible problem areas. Examples of problem areas include degradation, reaction, separation, reduced hypergolic reaction and non-ignition of the selected materials. The contractor shall obtain data on the proposed materials through testing and evaluation. The contractor shall recommend and outline test methods to exploit the data.

2.2.3 Component/Subcomponents | The contractor shall evaluate components in the system to determine which are critical to the success of the mission. The contractor shall propose techniques and methods to evaluate the failure modes and criticality of components such as valves, gyros, servo systems, and activators. The contractor shall recommend and outline test techniques to exploit the data. The contractor shall evaluate and test the selected components using outlined test techniques / methods.

2.3 Prototyping and Initial Testing - The contractor shall assist in the analysis of the prototyping, concentrating on the focus area aforementioned. The analysis shall be based on approved test plans utilizing best engineering practices and state-of-the art techniques and mechanisms. These efforts shall expand on the proof-of-concept approach. It is anticipated that other-than-non-destructive modes will examine hardware to exploit the data. The effort shall result in recommendations directed at specific system requirements for full scale testing.

3.0 Reporting - The contractor shall assist in the development of test plans, data extraction and recording (planning/storage) plans, event analysis and reconstruction, and draft test report documentation of all test results. The contractor shall also prepare and submit written and/or oral reports on tasked efforts, as required, within the scope of work.

#### B POP

5 FEB 03 – 30 SEP 05

#### C KEY PERS



#### D DELIVERABLES

| Item/Title                 | CDRL# | # Copies | Delivery Date |
|----------------------------|-------|----------|---------------|
| Task Order Management Plan | A001  | 1 *      | Per CDRL      |
| FMER                       | A003  | 1 *      | Per CDRL      |
| Progress Report            | A004  | 1        | Monthly       |
| Final Technical Report     | A005  | 2 */**   | 30 SEP 05     |
| Data Accession List        | A007  | 1        | Per CDRL      |

\* Plus Electronic Version.

\*\* One (1) hardcopy to the T/OM, and one (1) hardcopy to the SMDC Command Library (SMDC-IM-PL).

#### E TVL

The contractor has no authority to incur travel costs without explicit prior written approval (email acceptable) of the Task Order Monitor. Under no circumstance shall the contractor incur travel costs in excess of the NTE amount stated herein. NTE: \$ 2,200

#### F MTRL

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 SPEC INST

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 anticipated to be performed in FY03-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.

No Government Furnished Property or Test Facilities are available for use in performance of this Task Order.

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 MONITOR: [REDACTED]  
[REDACTED]

MAILING ADDRESS: [REDACTED]

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 97X4930 NHIE 000 77777 0 000178 2F 000000 21J1103A1MDA N00178  
AMOUNT: \$38,000.00