

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT PURCH ORDER/AGREEMENT NO. W56HZV-04-P-1315				2. DELIVERY ORDER/CALL NO.		3. DATE OF ORDER/CALL (YYYYMMDD) 2004SEP27		4. REQUISITION/PURCH REQUEST NO. SEE SCHEDULE		5. PRIORITY DOA4		
6. ISSUED BY TACOM WARREN AMSTA-AQ-ATAD JOHN JOLOKAI (586)574-8507 WARREN, MICHIGAN 48397-5000 EMAIL: JOLOKAIJ@TACOM.ARMY.MIL HTTP://CONTRACTING.TACOM.ARMY.MIL			CODE W56HZV	7. ADMINISTERED BY (if other than 6) DCMA CHICAGO 1523 WEST CENTRAL ROAD BLDG 203 ARLINGTON HEIGHTS IL 60004-2451 SCD: C PAS: NONE ADP PT: HQ0339				CODE S1403A	8. DELIVERY FOB <input checked="" type="checkbox"/> DESTINATION <input type="checkbox"/> OTHER (See Schedule if other)			
9. CONTRACTOR TIEM ENGINEERING CORPORATION 202 BEAVER STREET P.O. BOX 790 YORKVILLE, IL. 60560-0790 NAME AND ADDRESS TYPE BUSINESS: Large Business Performing in U.S.			CODE 1F926	FACILITY	10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE			12. DISCOUNT TERMS 0.50% 10 Days Net 30 Days	11. X IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMAN-OWNED			
14. SHIP TO SEE SCHEDULE			CODE	15. PAYMENT WILL BE MADE BY DFAS - COLUMBUS CENTER DFAS-CO/WEST ENTITLEMENT OPERATIONS P.O. BOX 182381 COLUMBUS, OH 43218-2381				CODE HQ0339	MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2			
16. TYPE OF ORDER	DELIVERY/ CALL	THIS DELIVERY ORDER IS ISSUED ON ANOTHER GOVERNMENT AGENCY OR IN ACCORDANCE WITH AND SUBJECT TO TERMS AND CONDITIONS OF ABOVE NUMBERED CONTRACT.										
PURCHASE	X	Reference your <input type="checkbox"/> Oral <input type="checkbox"/> Written Quotation W56HZV04Q1314, Dated _____, furnish the following on terms specified herein.										
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 checked="" 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/SERVICE SEE SCHEDULE CONTRACT TYPE: Firm-Fixed-Price KIND OF CONTRACT: Supply Contracts and Priced Orders				20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT				
* 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 MICHEAL D. MCHUGH /SIGNED/ MCHUGHM@TACOM.ARMY.MIL (586)574-6506 BY: CONTRACTING/ORDERING OFFICER				25. TOTAL	\$8,167.50				
27a. QUANTITY IN COLUMN 20 HAS BEEN	<input type="checkbox"/> INSPECTED	<input type="checkbox"/> RECEIVED	<input type="checkbox"/> ACCEPTED, AND CONFORMS TO CONTRACT EXCEPT AS NOTED									
b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE					c. DATE (YYYYMMDD)	d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE						
e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE					28. SHIP. NO.	29. D.O. VOUCHER NO.		30. INITIALS				
f. TELEPHONE NUMBER		g. E-MAIL ADDRESS			<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	32. PAID BY		33. AMOUNT VERIFIED CORRECT FOR				
36. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.					31. PAYMENT	<input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	34. CHECK NUMBER					
a. DATE (YYYYMMDD)		b. SIGNATURE AND TITLE OF CERTIFYING OFFICER						35. BILL OF LADING NO.				
37. RECEIVED AT	38. RECEIVED BY (Print)	39. DATE RECEIVED (YYYYMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NUMBER	42. S/R VOUCHER NO.							

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Name of Offeror or Contractor: TIEM ENGINEERING CORPORATION		

SUPPLEMENTAL INFORMATION

Regulatory Cite	Title	Date
1 52.204-4016 (TACOM)	TACOM-WARREN ELECTRONIC CONTRACTING	JUL/2003

(a) TACOM is now operating in an electronic contracting environment. All TACOM solicitations and awards are now distributed on the TACOM Warren Business Opportunities web page (<http://contracting.tacom.army.mil/opportunity.htm>) and are no longer available in hard copy. The TDPs and other documents, when available electronically, will be an attachment or linked to the solicitation package on the web. Please see submission guidelines at <http://contracting.tacom.army.mil/userguide.htm> and <http://contracting.tacom.army.mil/ebidnotice.htm> for more information. Any requirements included in the solicitation take precedence over guidance found on the TACOM contracting web page.

(b) You may need to use special software to view documents that we post on the home page. This viewing software is freeware, available for download at no cost from commercial web sites like Microsoft and Adobe. In cases where such software is required, we provide a link from our page to the commercial site where the software is available. Once you arrive at the software developer's site, follow their instructions to download the free viewer. You then can return to the TACOM home page.

(c) You are required to submit your offer, bid, or quote electronically. See the provision entitled "Electronic Offers (or 'Quotes' or 'Bids') Required in Response to This Solicitation (or 'Request for Quotations')" for more specific information.

(d) Any award issued as a result of this solicitation will be distributed electronically. Awards posted on the TACOM Warren Business Opportunities web page represent complete OFFICIAL copies of contract awards and will include the awarded unit price. This is the notice required by Executive Order 12600 (June 23, 1987) of our intention to release unit prices in response to any request under the Freedom of Information Act (FOIA), 5 USC 552. Unit price is defined as the contract price per unit or item purchased as it appears in Section B of the contract and is NOT referring to nor does it include Cost or Pricing data/information. If you object to such release, and you intend on submitting an offer, notify the PCO in writing prior to the closing date identified in this solicitation and include the rationale for your objection consistent with the provisions of FOIA. A release determination will be made based on rationale given.

(e) If you have questions or need help in using the Acquisition Center Home Page, call our Electronic Contracting Help Desk at (586) 574-7059, or send an email message to: acqcenweb@tacom.army.mil

(f) If you have questions about the content of any specific item posted on our home page, please call the buyer or point of contact listed for the item. Additional help is available to small businesses from Government-funded Electronic Commerce Regional Centers (ECRCs) to implement EDI. Information on ECRC is available at <http://www.ecrc.ctc.com>

[End of Clause]

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Reference No. of Document Being Continued
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Name of Offeror or Contractor: TIEM ENGINEERING CORPORATION

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT																								
0001	SUPPLIES OR SERVICES AND PRICES/COSTS NSN: 6220-01-420-5986 FSCM: 19207 PART NR: 12420353 SECURITY CLASS: Unclassified																												
0001AA	<p><u>PRODUCTION QUANTITY</u></p> <p>NOUN: STOP LIGHT-TAILLIGHT PRON: EH4Y7080EH PRON AMD: 01 ACRN: AA AMS CD: 070011</p> <p><u>Description/Specs./Work Statement</u> TOP DRAWING NR: 12420353 DATE: 23-MAR-2004</p> <p><u>Packaging and Marking</u> PACKAGING/PACKING/SPECIFICATIONS: SEE PACKAGING REQUIREMENTS CLAUSE UNIT PACK: 001 LEVEL PRESERVATION: Military LEVEL PACKING: B</p> <p><u>Inspection and Acceptance</u> INSPECTION: Origin ACCEPTANCE: Origin</p> <p><u>Deliveries or Performance</u> DOC SUPPL <table border="0"> <tr> <td><u>REL CD</u></td> <td><u>MILSTRIP</u></td> <td><u>ADDR</u></td> <td><u>SIG CD</u></td> <td><u>MARK FOR</u></td> <td><u>TP CD</u></td> </tr> <tr> <td>001</td> <td>W56HZV4082T841</td> <td>W25G1U</td> <td>J</td> <td></td> <td>2</td> </tr> <tr> <td><u>DEL REL CD</u></td> <td><u>QUANTITY</u></td> <td><u>DAYS AFTER AWARD</u></td> <td colspan="3"></td> </tr> <tr> <td>001</td> <td>33</td> <td>0120</td> <td colspan="3"></td> </tr> </table> <p>FOB POINT: Destination</p> <p>SHIP TO: <u>FREIGHT ADDRESS</u> (W25G1U) XU TRANSPORTATION OFFICER DDSP NEW CUMBERLAND FACILITY BUILDING MISSION DOOR 113 134 NEW CUMBERLAND PA 17070-5001</p> <p><u>CONTRACT/DELIVERY ORDER NUMBER</u> W56HZV-04-P-1315/0000</p> </p>	<u>REL CD</u>	<u>MILSTRIP</u>	<u>ADDR</u>	<u>SIG CD</u>	<u>MARK FOR</u>	<u>TP CD</u>	001	W56HZV4082T841	W25G1U	J		2	<u>DEL REL CD</u>	<u>QUANTITY</u>	<u>DAYS AFTER AWARD</u>				001	33	0120				33	EA	\$ 247.50000	\$ 8,167.50
<u>REL CD</u>	<u>MILSTRIP</u>	<u>ADDR</u>	<u>SIG CD</u>	<u>MARK FOR</u>	<u>TP CD</u>																								
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Reference No. of Document Being Continued
 PIIN/SIIN W56HZV-04-P-1315 MOD/AMD

Name of Offeror or Contractor: TIEM ENGINEERING CORPORATION

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	FSCM: 19207 PART NR: 12420353 SECURITY CLASS: Unclassified				
0002AA	<p><u>UNEXERCISED OPTION QUANTITY</u></p> <p>NOUN: STOP LIGHT-TAILLIGHT</p> <p>OPTION QUANTITY, PURSUANT TO SECTION H OR I CLAUSE ENTITLED OPTION FOR INCREASED QUANTITY--- SEPARATELY PRICED LINE ITEM</p> <p>The quantity stated for the option CLIN DOES NOT Form a part of the basic contractual quantity. Part or all of it may, however, be added to the contract by exercise of the option clause, at the discretion of the Government.</p> <p>The failure of the offeror to insert a unit price applicable to the option quantity shall mean that the offeror will supply all or any part of the option, if exercised by the Government, at the basic contract unit price, and the offer will be evaluated for award accordingly.</p> <p>(End of narrative B001)</p> <p><u>Description/Specs./Work Statement</u> TOP DRAWING NR: 12420353 DATE: 23-MAR-2004</p> <p><u>Packaging and Marking</u> PACKAGING/PACKING/SPECIFICATIONS: SEE PACKAGING REQUIREMENTS CLAUSE UNIT PACK: 001 LEVEL PRESERVATION: Military LEVEL PACKING: B</p> <p><u>Inspection and Acceptance</u> INSPECTION: Origin ACCEPTANCE: Origin</p> <p><u>Deliveries or Performance</u> DOC SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 001 DEL REL CD QUANTITY DEL DATE 001 66 UNDEFINITIZED</p> <p>FOB POINT: Destination</p>	66	EA	\$ 232.50000	\$ 15,345.00

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Reference No. of Document Being Continued
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Name of Offeror or Contractor: TIEM ENGINEERING CORPORATION

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	<p>SHIP TO: <u>PARCEL POST ADDRESS</u> (Y00000) SHIPPING INSTRUCTIONS FOR CONSIGNEE (SHIP-TO) WILL BE FURNISHED PRIOR TO THE SCHEDULED DELIVERY DATE FOR ITEMS REQUIRED UNDER THIS REQUISITION.</p> <p><u>CONTRACT/DELIVERY ORDER NUMBER</u> W56HZV-04-P-1315/0000</p>				

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MOD/AMD

Name of Offeror or Contractor: TIEM ENGINEERING CORPORATION

CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ <u>ITEM</u> <u>MIPR</u>	OBLG <u>ACRN</u> <u>STAT</u>	<u>ACCOUNTING CLASSIFICATION</u>	JOB ORDER <u>NUMBER</u>	<u>ACCOUNTING STATION</u>	<u>OBLIGATED AMOUNT</u>
0001AA	EH4Y7080EH 070011	AA 2	97 X4930AC6D 6D	26FB S20113	W56HZV \$	8,167.50
TOTAL						\$ 8,167.50

<u>SERVICE NAME</u>	<u>TOTAL BY ACRN</u>	<u>ACCOUNTING CLASSIFICATION</u>	<u>ACCOUNTING STATION</u>	<u>OBLIGATED AMOUNT</u>
Army	AA	97 X4930AC6D 6D	26FB S20113	W56HZV \$ 8,167.50
TOTAL				\$ 8,167.50

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MOD/AMD

Name of Offeror or Contractor: TIEM ENGINEERING CORPORATION

CONTRACT CLAUSES

2	52.211-5	MATERIAL REQUIREMENTS	AUG/2000
3	52.211-17	DELIVERY OF EXCESS QUANTITIES	SEP/1989
4	52.219-6	NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE	JUN/2003
5	52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB/1999
6	52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	JAN/2004
7	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER--CENTRAL CONTRACTOR REGISTRATION	OCT/2003
8	52.246-2	INSPECTION OF SUPPLIES--FIXED PRICE	AUG/1996
9	252.211-7005	SUBSTITUTIONS FOR MILITARY OR FEDERAL SPECIFICATIONS AND STANDARDS	FEB/2003
10	252.225-7001	BUY AMERICAN ACT AND BALANCE OF PAYMENTS PROGRAM	APR/2003
11	252.225-7016	RESTRICTION ON ACQUISITION OF BALL AND ROLLER BEARINGS (Alternate I dated Dec 2000)	DEC/2000
12	52.209-1	QUALIFICATION REQUIREMENTS	FEB/1995

(a) Definition: Qualification requirement, as used in this clause, means a Government requirement for testing or other quality assurance demonstration that must be completed before award.

(b) One or more qualification requirements apply to the supplies or services covered by this contract. For those supplies or services requiring qualification, whether the covered product or service is an end item under this contract or simply a component of an end item, the product, manufacturer, or source must have demonstrated that it meets the standards prescribed for qualification before award of this contract. The product, manufacturer, or source must be qualified at the time of award whether or not the name of the product, manufacturer, or source is actually included on a qualified products list, qualified manufacturers list, or qualified bidders list. Offerors should contact the agency activity designated below to obtain all requirements that they or their products or services, or their subcontractors or their products or services, must satisfy to become qualified and to arrange for an opportunity to demonstrate their abilities to meet the standards specified for qualification.

(Name) SEE SUPPORTING ACTIVITY(IES) LISTED IN THE SPECIFICATION(S)
(Address)

(c) If an offeror, manufacturer, source, product or service covered by a qualification requirement has already met the standards specified, the relevant information noted below should be provided.

Offeror's Name _____
Manufacturer's Name _____
Source's Name _____
Item Name _____
Service _____
Identification _____ Test Number _____ (to the extent known)

(d) Even though a product or service subject to a qualification requirement is not itself an end item under this contract, the product, manufacturer, or source must nevertheless be qualified at the time of award of this contract. This is necessary whether the Contractor or a subcontractor will ultimately provide the product or service in question. If, after award, the Contracting Officer discovers that an applicable qualification requirement was not in fact met at the time of award, the Contracting Officer may either terminate this contract for default or allow performance to continue if adequate consideration is offered and the action is determined to be otherwise in the Government's best interests.

(e) If an offeror, manufacturer, source product or service has met the qualification requirement but is not yet on a qualified products list, qualified manufacturers list, or qualified bidders list, the offeror must submit evidence of qualification prior to award of this contract. Unless determined to be in the Government's interest, award of this contract shall not be delayed to permit an offeror to submit evidence of qualification.

(f) Any change in location or ownership of the plant where a previously qualified product or service was manufactured or performed requires reevaluation of the qualification. Similarly, any change in location or ownership of a previously qualified manufacturer or source requires reevaluation of the qualification. The reevaluation must be accomplished before the date of award.

[End of Clause]

13	52.204-4006 (TACOM)	INCORPORATION OF TACOM MASTER SOLICITATION FOR SIMPLIFIED ACQUISITIONS AND DESIGNATION OF F.O.B. POINT	MAY/2000
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MOD/AMD

Name of Offeror or Contractor: TIEM ENGINEERING CORPORATION

(a) This Request for Quotation (RFQ) or Purchase Order (PO) incorporates by reference TACOM-Warren's Master Solicitation for Simplified Acquisitions with the same force and effect as though the clauses and provisions it contains were physically incorporated into this document. The version in effect at time of award is the version that applies to your purchase order.

(b) The TACOM-Warren Master Solicitation for Simplified Acquisitions is available on our Electronic Contracting web page, which you can reach using the following URL address: <http://contracting.tacom.army.mil/opportunity.htm>

(c) The clauses and provisions in Section I of the Master Solicitation apply to all TACOM-Warren RFQs and Purchase Orders that contain this clause. The clauses contained in Section II of the Master Solicitation applies in addition to those in Section I when the RFQ or PO specifies F.O.B. Origin.

(d) We hereby specify that the required F.O.B. point for this acquisition is Destination.

(e) We will keep the Master Solicitation identified in this clause available on our Electronic Contracting web page during the entire period of performance of the purchase order. If the current Master Solicitation later is revised to incorporate a change in any of the clauses, the version specified in this clause will be retained, intact, in an archive area on our web page for continued reference and use.

[End of Clause]

14 52.211-4015 CONFIGURATION CONTROL--ENGINEERING CHANGES
(TACOM)

APR/2004

(a) DEFINITIONS:

(1) Engineering Change Proposal (ECP). An ECP is a suggestion that we (the Government) permanently change some requirement of the Technical Data Package (TDP). ECPs can be issued before or during contract performance. NOTE: The current Government Standard allows us ninety days to process routine ECPs. If you (the contractor) need a response in less than ninety days to meet contract requirements, you should consider submitting a deviation along with your ECP.

(2) Request for Deviation (RFD). A RFD is a one-time request to deviate from TDP requirements. You must submit your deviation request before you deviate from the TDP requirements. You can request a deviation for a specific number of parts or the entire contract quantity.

(3) Value Engineering Change Proposal (VECP). A proposal that --

(i) Requires a change to the instant contract; and

(ii) Results in reducing the overall projected cost to the agency without impairing essential functions or characteristics; provided, that it does not involve a change --

(A) In deliverable end item quantities only;

(B) In research and development (R&D) end items or R&D test quantities that is due solely to results of previous testing under this contract; or

(C) To the contract type only.

(4) Notice of Revision (NOR). A NOR describes the proposed changes to a technical document being requested by an ECP.

(b) When will TACOM start processing change requests? TACOM won't start processing any ECP, VECP, or RFD until we receive the ACO's comments (see paragraph (e) below) and the ECP, VECP, or RFD documentation.

(c) Contractor Responsibility. ECPs, VECPs, and RFD shall contain information per the instructions outlined on the Data Delivery Descriptions (DDD) which can be found at the following website: <http://contracting.tacom.army.mil/engr/engrchange.htm>. Forms for preparing an ECP, VECP, or a RFD can also be found at this website. You may use other media, as long as you give us all the information outlined in the DDDs.

(1) Identify the two-digit Weapon System Code (WSC) on your submittal. The WSC for this procurement is (N3).

(2) The Contractor shall submit ECPs/VECPs/RFDs to the Government electronically. You must use one of the following electronic mediums: 100 megabyte Zip*-disk, 3 1/2 inch disk, 650 megabyte CD ROM, or E-mail. (E-mail files must be sized 3.5 mb or less.) Identify the software application, and version, that you used to create each file submitted.

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Name of Offeror or Contractor: TIEM ENGINEERING CORPORATION

(3) ECPs/VECPs/RFDs submitted in paper form are unacceptable and will be returned. You must use one of the following electronic formats:

(i) Files readable using these Microsoft 97 Office Products: Word, Excel, PowerPoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print image is not acceptable.

(ii) Files in Adobe PDF (Portable Document Format).

(iii) Files in HTML (Hypertext Markup Language). HTML documents must not contain active links to live Internet sites or pages. All linked information must be contained within your electronic ECPs/VECPs/RFDs and be accessible offline.

(iv) Other electronic formats. Before preparing your ECPs, VECPs or RFDs in any other electronic format, please e-mail the engineer, copy-furnished to the buyer and ACO, to obtain a decision as to the format's acceptability. Failure to e-mail the engineer to seek an alternate format's acceptability may result in rejection of your submission. All alternate methods must be at no cost to the Government. NOTE: The above formats may be submitted in compressed form using self-extracting files.

(d) Submittal Procedures for ECPs/VECPs/RFDs.

(1) Send one copy of the ECP, VECP or RFD in electronic format to your ACO.

(2) Send one copy of the ECP, VECP or RFD in electronic format to the buyer listed on the solicitation/ contract document.

WARNING - Submit complete, legible, virus free packages per paragraphs 1 and 2 above, or we may return your ECP/VECP/RFD without processing them.

(e) ACO Responsibility. Within ten working days from the day you receive the contractor's request, the ACO must prepare Comments on the ECP, VECP, or RFD in electronic format, and forward it as follows:

ECPs, VECPs, and RFDs. Email a copy of the contractor's request and ACO comments (DD Form 1998) to the engineer (rogersk@tacom.army.mil) and the buyer identified in block 7 of the solicitation cover sheet (SF 33), block 5 on the Standard Form 26, or block 6 on the DD Form 1155.

(f) Approval of ECPs, VECPs and RFDs.

(1) ECPs should be used to make permanent changes in the Government Technical Data Package (TDP). Contractual relief should be requested using a Request for Deviation. This is because the Government requires more time to analyze any proposal to permanently change the specification or TDP. Cost saving improvements to the TDP should be submitted as a VECP, if a VE clause is contained in the contract.

(2) ECPs. TACOM will review and make a decision within the ninety day timeframe. Notification of our decision will be made by the contracting officer or representative.

(3) RFDs. Decision on RFDs will be made within 30 days from the date we receive them from the ACO.

(g) Processing Emergency and Urgent ECPs. Ordinarily, ECPs submitted by the contractor will be deemed routine. If you submit an ECP that you consider to be an emergency or urgent (as defined in paragraph 11 of DDD for ECPs), you must immediately notify the PCO. TACOM will review the criticality of the ECP, and, if we determine that it is urgent or critical, we'll follow the appropriate processing time-frames as outlined in paragraph 11 of the DDD for ECPs.

(h) Reminder - Only the PCO can change the Contract. NO OTHER GOVERNMENT REPRESENTATIVE is authorized to make a commitment for, or bind the Government.

(i) RFDs shall contain sufficient pricing data to determine if a downward equitable adjustment to the contract is required.

(j) Questions.

(1) Questions about preparation and submittal of change request should be directed to the Government Quality Assurance Representative (QAR).

(2) Questions about the status of change requests you've already submitted, contact the buyer. You can find the buyer's name, number and e-mail address in block 7 of the solicitation cover sheet (SF 33), block 5 on the Standard Form 26, or block 6 on the DD Form 1155.

[End of Clause]

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MOD/AMD

Name of Offeror or Contractor: TIEM ENGINEERING CORPORATION

15 52.211-4053 REQUIRED TAILORING LANGUAGE TO ELIMINATE CLASS I OZONE-DEPLETING MAR/2000
 (TACOM) SUBSTANCES

(a) The purchase description or Technical Data Package (TDP) for this purchase order incorporates one or more specifications or standards that, in their unmodified form, either authorize or require the use of Class I Ozone-Depleting Substances (CIODS). For purposes of your performance on this purchase order, those specifications (which are identified in paragraph (b) of this clause) are modified by special tailoring language which appears in the TACOM Acquisition Center's web-site. Directions for reaching our web-site and locating the required tailoring language appear in paragraph (c) of this clause.

(b) Tailoring language to eliminate the authorization or requirement to use Class I Ozone-Depleting Substances (CIODS) is hereby incorporated into this contract by reference. Packaging Specifications MIL-L-61002 and MIL-STD-129, where they apply, are affected by this tailoring language. Other specifications and standards affected are: MIL-DTL-53072 (TCA).

(c) The CIODS listing that contains the required tailoring language is on the TACOM Acquisition Center web-site, which you can reach by using this URL: <http://contracting.tacom.army.mil/ciods.html>

[End of Clause]

16 52.211-4515 PACKAGING REQUIREMENT (SPECIAL PACKAGING INSTRUCTIONS) MAR/2004
 (TACOM)

(a) Military preservation, packing, and marking for this contract/order shall be accomplished in accordance with the specific requirements identified below, all the applicable requirements of, MIL-STD-2073-1, Revision D, Dated 15 Dec 1999 and Notice 1, dated 10 May 2002, and the Special Packaging Instruction, see below.

- (1) LEVEL OF PRESERVATION: Military
 - (2) LEVEL OF PACKING: B
 - (3) QUANTITY PER UNIT PACKAGE: 001
 - (4) SPECIAL PACKAGING INSTRUCTION NUMBER. AK1420596
- (a) REVISION As listed on TDPL
- (b) DATE OF REVISION As listed on TDPL

(b) Unitization: Shipments of identical items going to the same destination shall be palletized if they have a total cubic displacement of 50 cubic feet or more unless skids or other forklift handling features are included on the containers. Pallet loads must be stable, and to the greatest extent possible, provide a level top for ease of stacking. A palletized load shall be of a size to allow for placement of two loads high and wide in a conveyance. The weight capacity of the pallet must be adequate for the load. The preferred commercial expendable pallet is a 40 x 48 inch, 4-way entry pallet although variations may be permitted as dictated by the characteristics of the items being unitized. The load shall be contained in a manner that will permit safe handling during shipment and storage

(c) Marking:

(1) In addition to any special markings called out on the SPI, all unit packages, intermediate packs, exterior shipping containers, and, as applicable, unitized loads shall be marked in accordance with MIL-STD-129P(2), dated 10 Feb 2004, including bar coding. The contractor is responsible for application of special markings as discussed in the Military Standard regardless of whether specified in the contract/order or not. Special markings include, but are not limited to, Shelf-life markings, structural markings, and transportation special handling markings. The marking of pilferable and sensitive materiel will not identify the nature of the materiel.

(2) Contractors and vendors shall apply identification and address markings with bar codes in accordance with this standard. For shipments moving to overseas locations and for mobile deployable units, the in-the-clear address must also include the host country geographic address and the APO/FPO address. A Military Shipment Label (MSL) is required for all shipments except contractor to contractor. The MSL will include both linear and 2D bar codes per the standard. DVD shipment documentation must also be marked with additional bar codes. The DD Form 250 or the commercial packing list shall have additional issue/receipt bar coding applied as per Direct Vendor Delivery Shipments in the standard (except for deliveries to DLA Distribution Depots, e.g. New Cumberland, San Joaquin, Red River, Anniston). . Packing lists are required in accordance with the Standard, see paragraph 5.3.

(3) Contractor to contractor shipments shall have the address markings applied to the identification marked side of the

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exterior shipping container or to the unitized load markings. The following shall be marked "FROM: name and address of consignor and TO: name and address of consignee".

(4) Computer Automated Transportation Tool (CATT). The following website provides detailed instructions for downloading and installing the Military Shipment Label/Issue Receipt Document (CATT MSL/IRRD) software that will generate a Military Shipping Label to include the required Code 39 and 2D(PDF417) bar codes on the label: <http://www.asset-trak.com/catt/msl_irrd/mslirrdmain.htm> This program was developed by the Army and is free to those with government contracts. Two contractors have introduced a version of the MSL software that can be purchased by contractors. Both programs produce labels that appear to be in compliance with the requirements of MIL-STD-129P. Contractors are MILPAC (<<http://milpac.com/>>) and Easysoft Corporation (<<http://easysoftcorp.com/>>). Ensure that the ship to and mark for in-the-clear delivery address is complete including: consignees name, organization, department name, office, building, room, street address, city, state, country code, & DODAAC.

(d) Heat Treatment and Marking of Wood Packaging Materials: Boxes/pallets and any wood used as inner packaging made of non-manufactured wood shall be heat-treated. All non-manufactured wood used in packaging shall be heat treated to a core temperature of 56 degrees Celsius for a minimum of 30 minutes. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall be affiliated with an inspection agency accredited by the board of review of the American Lumber Standard Committee. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall ensure traceability to the original source of heat treatment. Each box/pallet shall be marked to show the conformance to the International Plant Protection Convention Standard. The quality mark shall be placed on both ends of the outer packaging, between the end cleats or end battens; on two sides of the pallet. Foreign manufacturers shall have the heat treatment of non-manufactured wood products verified in accordance with their National Plant Protection Organizations compliance program.

(e) Hazardous Materials(As applicable):

(1) Hazardous Materials is defined as a substance, or waste which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce and which has been so designated. (This includes all items listed as hazardous in Titles 29, 40 and 49 CFR and other applicable modal regulations effective at the time of shipment.)

(2) Unless otherwise specified, packaging and marking for hazardous material shall comply with the requirements herein for the mode of transport and the applicable performance packaging contained in the following documents:

International Air Transport Association (IATA) Dangerous Goods Regulations
International Maritime Dangerous Goods Code (IMDG)
Code of Federal Regulations (CFR) Title 29, Title 40 and Title 49
Joint Service Regulation AFJMAN24-204/TM38-250/NAVSUPPUB 505/MCO
P4030.19/DLAM 4145.3 (for military air shipments).

(3) If the shipment originates from outside the continental United States, the shipment shall be prepared in accordance with the United Nations Recommendations on the Transport of Dangerous Goods in a manner acceptable to the Competent Authority of the nation of origin and in accordance with regulations of all applicable carriers. A Product Material Safety Data Sheets (MSDS) is required to be included with every unit pack and intermediate container and shall be included with the packing list inside the sealed pouch attached to the outside of the package.

(f) This SPI has been validated and the method of preservation/packing has proven successful in meeting the needs of the military distribution system, including indeterminate storage and shipment throughout the world. Special instructions and/or tailoring of the SPI is detailed in the Supplemental Instructions below. A prototype package is required to validate the sizes and fit requirements of the SPI. Minor dimensional and size changes are acceptable provided contractor provides the PCO and ACO with notification 60 days prior to delivery. Any design changes or changes in the method of preservation that provide a cost savings without degrading the method of preservation or packing or affecting the serviceability of the item will be considered and responded to within 10 days of submission to PCO and ACO. Government reserves the right to require testing to validate alternate industrial preservation methods, materials, alternate blocking, bracing, cushioning, and packing.

(f) SUPPLEMENTAL INSTRUCTIONS: NONE

[End of Clause]

17 52.217-4001 SEPARATELY PRICED OPTION FOR INCREASED QUANTITY APR/1997
(TACOM)

(a) The Government hereby reserves the right to increase the quantity of the contract item up to an additional quantity of 66 units. The unit price for such option quantity shall be as set forth in CLIN 0002AA. This option may be exercised by the Government at any time, but in any event not later than 365 days after Award. In addition, such option may be exercised in increments, subject to the stated total additional quantity limitations, price(s), and the above-stated time for exercise of the option.

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(b) Delivery of the items added by the exercise of this option shall continue immediately after, and at the same rate as, delivery of like items called for under this contract, unless the parties hereto otherwise agree.

(c) Additionally, prior to the expiration of the original option period identified in paragraph (a) above, the Government may seek a bilateral extension of the option period for an additional period not to exceed 90 days from the expiration date of the original option period.

[End of Clause]

18 52.242-4022 DELIVERY SCHEDULE MAY/2000
(TACOM)

(a) The following delivery schedule applies to this procurement:

(1) See the Government's proposed schedule in Section B. Start deliveries 120 days after the date of award, or, N/A days after award if First Article Test is waived. Continue delivering every thirty (30) days, if necessary, until all items are delivered.

(2) You can accelerate delivery: At no additional cost to the Government

(3) Delivery is defined as follows:

(i) FOB Origin - Contractor is required to deliver its shipment as provided in FAR 52.247-29(a)(1)-(4) by the time specified in the individual order.

(ii) FOB Destination - Contractor is required to deliver its shipment as provided in FAR 52.247-34(a)(1)-(2) by the time specified in the individual order. The contractor must take into consideration the length of time necessary to deliver its shipment to the destination designated in the order, to ensure that the item reaches its destination by the time reflected in the order.

(b) CONTRACTOR'S PROPOSED SCHEDULE:

(1) I WILL START DELIVERIES _____ DAYS AFTER THE AWARD DATE; OR, IF APPLICABLE, _____ DAYS AFTER AWARD IF FIRST ARTICLE TEST IS WAIVED.

(2) I WILL DELIVER A QUANTITY OF _____ UNITS EVERY 30 DAYS, BUT I HAVE THE CAPABILITY TO DELIVER UP TO A MAXIMUM OF _____ UNITS EVERY 30 DAYS.

ATTENTION: IF YOU DO NOT INSERT A MAXIMUM QUANTITY ABOVE, YOU MAY BE REQUIRED TO DELIVER THE TOTAL QUANTITY ON THIS ORDER IN ONE SHIPMENT.

[End of Clause]

19 52.246-4005 INSPECTION AND ACCEPTANCE POINTS: ORIGIN FEB/1995
(TACOM)

(a) Inspection and acceptance of supplies offered under this purchase order shall take place as specified herein. Inspection: ORIGIN Acceptance: ORIGIN

(b) Origin inspection shall take place at the site specified below:

Tiem Engineering Corporation
202 Beaver Street Yorkville, IL 60560

[End of Clause]

20 52.204-7 CENTRAL CONTRACTOR REGISTRATION OCT/2003

(a) Definitions. As used in this clause--

"Central Contractor Registration (CCR) database" means the primary Government repository for contractor information required for the conduct of business with the Government.

"Commercial and Government Entity (CAGE) code" means--

- (1) A code assigned by the Defense Logistics Information Service (DLIS) to identify a commercial or Government entity; or
- (2) A code assigned by a member of the North Atlantic Treaty Organization that DLIS records and maintains in the CAGE

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master file. This type of code is known as an "NCAGE code."

"Data Universal Numbering System (DUNS) number" means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

"Data Universal Numbering System +4 (DUNS+4) number" means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11 of the Federal Acquisition Regulation) for the same parent concern.

"Registered in the CCR database" means that-

- (1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database;
- (2) The Contractor's CAGE code is in the CCR database; and
- (3) The Government has validated all mandatory data fields and has marked the records "Active."

(b)

(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation DUNS or DUNS+4 followed by the DUNS or DUNS+4 number that identifies the offerors name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number

- (i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at <http://www.dnb.com/> ; or
- (ii) If located outside the United States, by contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

- (i) Company legal business name.
- (ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.
- (iii) Company physical street address, city, state and Zip Code.
- (iv) Company mailing address, city, state and Zip Code (if separate from physical).
- (v) Company telephone number.
- (vi) Date the company was started.
- (vii) Number of employees at your location.
- (viii) Chief executive officer/key manager.
- (ix) Line of business (industry).
- (x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Governments reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(1)

(i) If a Contractor has legally changed its business name, doing business as name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business days written notification of its intention to:

- (A) Change the name in the CCR database;
- (B) Comply with the requirements of Subpart 42.12 of the FAR;
- (C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the Suspension of Payment paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractors CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the Suspension of payment paragraph of the EFT clause

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of this contract.

(g) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the Internet at <http://www.ccr.gov/> or by calling 1-888-227-2423, or 269-961-5757.

(End of clause)

21 252.247-7023 TRANSPORTATION OF SUPPLIES BY SEA (Alternate III dated May 2002) MAY/2002

(a) Definitions. As used in this clause--

(1) Components means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.

(2) Department of Defense (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.

(3) Foreign flag vessel means any vessel that is not a U.S.-flag vessel.

(4) Ocean transportation means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.

(5) Subcontractor means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract. However, effective May 1, 1996, the term does not include a supplier, materialman, distributor, or vendor of commercial items or commercial components.

(6) Supplies means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.

(i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.

(ii) Supplies includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.

(7) U.S.-flag vessel means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

(b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.

(2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if-

(i) This contract is a construction contract; or

(ii) The supplies being transported are-

(A) Noncommercial items; or

(B) Commercial items that-

(1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);

(2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that--

(1) U.S.-flag vessels are not available for timely shipment;

(2) The freight charges are inordinately excessive or unreasonable; or

(3) Freight charges are higher than charges to private persons for transportation of like goods.

(d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum--

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- (1) Type, weight, and cube of cargo;
- (2) Required shipping date;
- (3) Special handling and discharge requirements;
- (4) Loading and discharge points;
- (5) Name of shipper and consignee;
- (6) Prime contract number; and

(7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.

(e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Division of National Cargo, Office of Market Development, Maritime Administration, U.S. Department of Transportation, Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information--

- (1) Prime contract number;
- (2) Name of vessel;
- (3) Vessel flag of registry;
- (4) Date of loading;
- (5) Port of loading;
- (6) Port of final discharge;
- (7) Description of commodity;
- (8) Gross weight in pounds and cubic feet if available;
- (9) Total ocean freight in U.S. dollars; and
- (10) Name of the steamship company.

(f) The Contractor shall insert the substance of this clause, including this paragraph (f) in subcontracts that are for a type of supplies described in paragraph (b)(2) of this clause.

[End of Clause]

22	52.204-4005	REQUIRED USE OF ELECTRONIC CONTRACTING	JUN/2004
23	52.204-4009 (TACOM)	MANDATORY USE OF CONTRACTOR TO GOVERNMENT ELECTRONIC COMMUNICATION	JUN/1999

(a) All references in the contract to the submission of written documentation shall mean electronic submission. All electronic submissions shall be in the formats and media described in the "Electronic Quotations/Offers/Bids Required in Response to this Request for Quotations/Proposals/Bids" clause elsewhere in this document. (See Section K for commercial acquisitions, Section L for RFPs, and Section I for RFQs.)

(b) This shall include all written unclassified communications between the Government and the Contractor except contract awards and contract modifications which shall be posted on the internet. Return receipt shall be used if a commercial application is available. Classified information shall be handled in full accordance with the appropriate security requirements.

(c) In order to be contractually binding, all Government communications requiring a Contracting Officer signature must be sent from the Contracting Officer's e-mail address. The Contractor shall designate the personnel with signature authority who can contractually bind the contractor. All binding contractor communication shall be sent from this contractor e-mail address(es).

(d) Upon award, the Contractor shall provide the Contracting Officer with a list of e-mail addresses for all administrative and

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technical personnel assigned to this contract.

(e) Unless exempted by the Procuring Contracting Officer in writing, all unclassified written communication after contract award shall be transmitted electronically.

[End of Clause]

24 52.211-4008 DRAWING LIMITATIONS
(TACOM)

NOV/2002

(a) The drawings supplied with this contract are not shop or process drawings. They are engineering design drawings. They are adequate to permit manufacture, and:

- (1) depict the completed (item(s), and
- (2) serve as the basis for inspection of the completed item(s).

(b) These drawings DON'T cover intermediate drawings/specifications or steps in the manufacturing process. As a result, even if you meet all the dimensions and tolerances specified in the engineering design drawing for each individual part, a cumulative unacceptable fit for the contract item could result.

(c) YOU ARE RESPONSIBLE for producing the shop or process drawings needed to cover intermediate steps in the manufacturing process.

(d) The Contractor agrees that he has obtained all specifications and drawings necessary to manufacture the items being solicited in accordance with the TDP including all incorporated specifications and drawings. The contractor is responsible for having all drawings and specifications. Delivery delays are not excusable where the contractor asserts that it did not have a specification or drawing and has failed to request, in writing, the specification from either the Contracting Officer or Contract Specialist prior to the solicitation closing date.

(e) If you fail to produce an end item with a cumulative fit that conforms to Government drawings, specifications or other supplemental manufacturing documentation, you'll be responsible for correcting this condition at no additional cost to the Government and no delivery schedule extension.

[End of Clause]

25 52.211-4016 CARC PAINT-PRETREATMENT REQUIREMENTS FOR FERROUS, GALVANIZED AND
ALUMINUM SURFACES

AUG/2003

(a) Ferrous and galvanized surfaces shall be cleaned and pretreated with a Type 1 microcrystalline zinc phosphate system per TT-C-490E. Alternate pretreatment systems for ferrous substances must meet the performance tests specified in paragraphs 3.5.7, 3.5.8, 4.2.7, and 4.2.8 of TT-C-490E. Corrosion resistance tests will be conducted on a monthly basis (two test coupons) after the process has been found to be in compliance with the (pretreatment chemicals) manufacturers instructions. Process control tests for this or alternative systems must ensure that the process remains in control and must be documented per ISO 9000 series and approved by TACOM. Testing (corrosion resistance and adhesion) must be performed on the same substrate and the same thickness of primer minus topcoat used in production. Unless otherwise specified, MIL-P-53022 and -53030 primers shall be salt spray tested for 336 hours (ASTM B117). All electrocoat primers shall be tested for 1000 hours. Test coupons shall be scraped at a 30 degree contact angle (approximate), with a one inch (approximate) metal blade such as a putty knife, between 24 and 168 hours after removal from the neutral salt spray cabinet for coupon evaluation. Any TT-C-490E (Type I) inorganic crystalline pretreatment is limited to a maximum build equivalent of 500 mg per square foot to minimize chipping of the CARC system. All TT-C-490E (Type I) zinc phosphate pretreatment systems must be documented per ISO 9000 series and approved by the procuring activity prior to use. The procedure containing all the elements specified in paragraph 3.2 of TT-C-490E shall be submitted to the procuring activity no less than 45 days prior to start of work. Qualification will consist of verification that the process with its controls can meet the performance requirements in the specification. The performance of zinc phosphate or any proposed alternate pretreatment system must be demonstrated and approved by the procuring activity. Prior to production, a Letter of Approval shall be provided by the Contracting Officer. Requalification of the process shall be required if the process is changed outside the limits defined in the TACOM letter of system acceptance (Letter of Approval) provided to the application facility.

Note: Zinc phosphate systems for galvanized surfaces require separate qualification. Hot dipped galvanized surfaces are highly prone to chlorine/chloride contamination from the galvanizing flux process. This contaminant must be removed prior to pretreatment for the coating system to pass these performance tests. Due to the wide variation in zinc thickness with the hot dip galvanizing process, the dry film thickness of the primer will be verified with a Tooke gage or equivalent for the purpose of production and process control. Primer test coupons shall represent both the minimum and maximum nominal dry film thickness. The test coupons must duplicate the production painting process as closely as possible.

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(b) Qualification of pretreatment systems for zinc galvanized substrates shall be performed using Accelerated Corrosion Test protocol contained in GM 9540P, Method B, rather than salt spray. Test coupons with pretreatment and primer only shall be cured for seven days, and then scribed through the primer to the substrate. After 40 cycles of test exposure, the test coupons shall be scraped at a 30 degree contact angle (approximate), with a one inch (approximate) metal blade such as a putty knife, both parallel and perpendicular to the scribe between 24 and 168 hours after removal from the cyclic salt spray chamber for coupon evaluation. There shall be no more than 3 mm of red rust creep, blistering, or loss of paint adhesion from the scribe line and no more than 5 blisters in the field with none greater than 1 mm diameter. This test shall be performed at two month intervals (two test coupons) to ensure that the process remains in control.

(c) Aluminum substrates require a chromate conversion coating per MIL-C-5541E (or alternate, see note below), after appropriate cleaning per TT-C-490E. If any other alternate pretreatment is considered, it must pass 120 cycles of GM9540P, as a scribed Q-panel when coated with the production primer. After completion of the cyclic salt environment exposure, the panels shall be scraped as described above, and shall have no more than 0.5 mm paint loss (creep-back) from the scribe. In addition, there shall be no more than 5 blisters in the field with none larger than 1mm diameter. After completion of the 120 cycle corrosion resistance test evaluation, each test panel will be subjected to cross hatch tape test (ASTM D3359, minimum tape adhesion rating of 45 oz. per inch of width). The test pattern shall be 4 lines x 4 lines scribed to the metallic layer at 2mm intervals (approximate) and shall be done no closer than 12 mm from any panel edge or the scribe. Multiple head cutters may be used. The removal of two or more complete squares of primer shall constitute failure. Any alternate system must demonstrate its ability to pass both corrosion and adhesion tests on 5 consecutive days of production to be considered acceptable. All process steps shall be documented IAW ISO 9000 series standards and approved by the procuring activity.

Note: The only alternative products which have demonstrated their ability to meet these requirements for 5000 and 6000 series aluminum alloys are Alodine 5200 and Alodine 5700.

(d) The use of TT-C-490E Type III: Vinyl Wash Primer (DOD-P-15328) is prohibited due to its hexavalent chromium content and high VOC level. The Army is committed to minimizing the use of HAPs and hazardous materials.

[End of Clause]

26 52.211-4030 SPECIAL TESTING REQUIREMENTS FOR CHEMICAL AGENT RESISTANT COATINGS MAR/2001
(TACOM) (CARC) ON METALLIC SURFACES

(a) Application: MIL-C-46168
MIL-C-53039
MIL-PRF-22750

(b) End-Item Paint Inspection: After the complete paint finish has been applied and cured* (See *Note, below), the Contractor shall test and inspect two units per lot for (i) workmanship, (ii) total paint film thickness, and (iii) paint adhesion. Unless otherwise agreed to between the Contractor and the cognizant Government quality assurance representative, a lot shall be defined as all units submitted for final Government acceptance at one time. The use of test panels in lieu of actual production units is prohibited. At final inspection, the cumulative total paint film thickness of pretreatment, primer, and topcoat shall at a minimum conform to the sum of the minimum thicknesses for individual elements of the paint finish as specified in the Film Thickness Table below. Sufficient locations shall be spot-checked to ensure proper workmanship and paint thickness uniformity. The size and configuration of the unit as well as the number of vendors responsible for the paint finish of component parts shall be taken into consideration in determining the number of locations to be checked. The specific number of test locations shall be agreed to by the cognizant Government quality assurance representative in advance. In addition, two locations on each sample unit shall be selected to conduct the scribe tape test. The test locations shall be routinely varied among the following:

- (1) Directly adjacent to a weld
- (2) On or directly adjacent to a machine cut or sheared edge.
- (3) On any mechanically formed surface when lubricants/drawing compounds were used.
- (4) On paint touch-up areas.

(c) The precise location for each scribe tape test shall be in an inconspicuous location that has been accepted by the cognizant Government quality assurance representative before the test is conducted.

(d) Upon completion of the scribe tape test, the scribe marks shall be feathered into the adjacent area and touched up with the required top coat so that the tested area again conforms to the applicable minimum specified in the Film Thickness Table below.

*Note: The complete paint finish is defined as the pretreatment, primer, and topcoat applied to the substrate. Curing of the complete paint finish is dependent upon temperature, humidity, and paint film thickness. The time necessary to achieve sufficient adhesion to pass the scribe tape test must be determined by each facility. For purposes of this test, curing at ambient temperature will take from 24 days.

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(e) Test Methods:

(1) Film Thickness. Film thickness shall be verified with a nondestructive film gage. The gage shall be suitable for measurements over the applicable substrate material and shall have sufficient accuracy to ensure compliance to the thickness limitations. The gage shall be capable of being calibrated. If no other calibration specification or requirement is identified elsewhere in this contract, then the gage shall be calibrated in accordance with ISO 10012.

(2) Scribe Tape Test. The following test procedure shall be followed. The test surface shall be sufficiently warm and dry to ensure adhesion of the tape. All dimensions cited in this Scribe Tape Test description are approximate:

(i) Scribe four one-inch lines completely through the paint finish to the substrate, one sixteenth to three thirty-seconds of an inch apart.

(ii) Scribe four additional one-inch lines, completely through the paint finish, one sixteenth to three thirty-seconds of an inch apart, rotated 90 degrees with respect to the first set of lines. The resulting pattern shall contain nine squares.

(iii) Press a length of A-A-1830, A-A-884, or any commercially available tape with a minimum adhesion rating of 45 oz. per inch of width firmly over the scribed pattern, rubbing out all air pockets.

(iv) Wait 10 seconds, minimum. Grasp a free end of the tape and at a rapid speed strip it from the paint surface by pulling the tape back upon itself at 180 degrees.

(f) Interpretation of Test Results

NOTE: These two tests are not a substitute for corrosion tests such as neutral salt spray or accelerated corrosion tests which verify coating durability.

(1) Film Thickness. All applicable surfaces shall have complete paint coverage. A minimum of 75% of the applicable surfaces of each test unit shall meet the minimum, cumulative dry film thickness requirements. Failure of either test unit shall result in rejection of the production lot that it represents.

FILM THICKNESS TABLE

<u>SPECIFICATION</u>	<u>DRY FILM THICKNESS (Mils)</u>
DOD-P-15328*	0.3 - 0.5
MIL-PRF-23377	1.0 - 1.5
MIL-P-53022	1.0 - 1.5
MIL-PRF-22750	1.3 - 1.7
MIL-P-53030	1.0 - 1.5
MIL-C-46168	1.8 - 3.2
MIL-C-53039	1.8 - 3.2

*May not be allowed per contract due to VOC and hexavalent chromium content.

(2) Scribe Tape Test (Adhesion). The removal of two or more complete squares of top coat, or top coat-primer-pretreatment coating, from either test unit constitutes test failure and the production lot from which it comes is rejected. Removal of overspray does not constitute test failure.

Notice: The scribe tape test is designed to detect any deficiency in the paint application process that would affect the durability of the CARC finish. Typical causes of failure are:

- (i) Inadequate cleaning of the substrate.
- (ii) Contamination of the surface between coatings.
- (iii) Excessive paint film thickness in a single coating application.

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(iv) Application of a coating over a previous coating which has not been adequately cured.

It is strongly recommended that the Contractor implement rigid in-process controls in conjunction with the best industrial painting practices to ensure that the performance requirements specified in this clause are met.

[End of Clause]

27 52.211-4036 FORMAT OF THE TECHNICAL DATA PACKAGE APR/2000
(TACOM)

(a) The TDP for the contract item is available only in electronic format via the TACOM Contracting Webpage (contracting.tacom.army.mil). TACOM-Warren has discontinued its practice of providing hard copies (i.e. CD ROM) of technical data packages (TDPs). You must obtain a copy of the TDP for this solicitation via the TACOM Contracting Webpage. For those TDPs not available via the webpage, the TDP will be issued free of charge in CD-ROM format. The CD-ROM includes the necessary software to access, view, and print individual images that are included in the TDP. The CD-ROM can be read in any personal computer that includes a CD-ROM drive. If your company does not have a personal computer with a CD-ROM drive, you can take the CD-ROM disk to any of various commercial computing or copying/printing service, to have hard copies produced.

(b) TDPs available via the TACOM Contracting Webpage may be purchased in CD ROM format for a fee of \$4.60 each. Requests for CD ROMs and payment should be mailed to:

USATACOM
AMSTA-CM-CDD (TDP Requests)
Warren, MI 48397-5000

Make checks payable to the United States Treasury. Points of Contact for this initiative: Diane Woods at (586) 574-7061, and Gloria McCullough at (586) 574-7064.

[End of Provision]

28 52.213-4010 ADDITIONAL GENERAL CLAUSES FEB/1997
(TACOM)

The following three FAR clauses apply to this purchase order, in addition to the other clauses contained in, or cited in, the document:

(1) CHANGES-FIXED-PRICE (AUG 1987)
52.243-1

(i) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

- (A) Drawings, designs, or specifications when the supplies to be furnished are to be specially manufactured for the Government in accordance with the drawings, designs, or specifications.
- (B) Method of shipment or packing.
- (C) Place of delivery.

(ii) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(iii) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(iv) If the Contractor's proposal includes the cost of property made, obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(v) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

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[End of Clause]

(2) TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (APR 1984)
52.249-1

The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the rights, duties, and obligations of the parties, including compensation to the Contractor, shall be in accordance with Part 49 of the Federal Acquisition Regulation in effect on the date of this contract.

[End of Clause]

(3) DEFAULT--FIXED-PRICE SUPPLY AND SERVICE (APR 1984)
52.249-8

The Contracting Officer, by written notice, may terminate this contract, in whole or in part, for failure of the Contractor to perform any of the provisions hereof. See referenced FAR cite for full provision.

[End of Clause]

29 52.215-4404 DATA AND COMMUNICATIONS SUBMITTED TO THE GOVERNMENT ELECTRONICALLY MAY/2002
(TACOM)

(a) The Government often employs contractors as system administrators to operate and maintain Government computer systems. These systems include local area networks, web sites, databases, other electronic records, e-mail accounts, other electronic data transfer mechanisms and computer software. The employees of these contracted system administrators sign nondisclosure agreements obligating them not to reveal information contained in files, documents, computers or systems that they administer. However, unless such information is protected in some way, contracted system administrators do have the ability to access such information.

(b) Potential contractors as well as any other parties are thus advised to take steps needed to prevent access by contracted system administrators to information submitted electronically to the Government. Absent such steps, it is assumed that contracted system administrators are permitted the capability to access the data. The access will be limited to that which is necessary for the contract system administrator to perform its duties for the Government. The access shall be subject to the condition that third party information is not to be revealed by the contracted system administrator.

[End of Clause]

30 52.246-4026 LOCAL ADDRESS FOR DD FORM 250 JAN/2002
(TACOM)

(a) The contractor must provide a copy of each Material Inspection and Receiving Report (DD 250) pertaining to this contract, to the addresses given below, using either of the following methods:

(1) Our first preference is for you to use electronic mail (e-mail), using the following e-mail address:
DD250@tacom.army.mil

(2) Our second preference is for you to use data facsimile (datafax) transmission, using this fax number: (586) 574-5527 and use "DD250 mailbox" in the "to:" block of your fax cover or header sheet.

In either method, do not mix DD250s from more than one contract in a single transmission. That is, you may submit multiple DD250s in a single transmission, but they must all be against the same contract.

(b) These copies meet the requirements for the Purchasing Office copy and the Army Inventory Control Manager copy listed in tables 1 and 2 of DFARS Appendix F.

(c) The DD250 form may be found, in three different formats, on the World Wide Web at
<http://www.dtic.mil/whs/directives/infomgt/forms/forminfo/forminfopage2126.html>

[End of Clause]

31 52.247-4458 GUARANTEED SHIPPING CHARACTERISTICS--F.O.B. DESTINATION SEP/2000

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Name of Offeror or Contractor: TIEM ENGINEERING CORPORATION

(TACOM)

(a) The offeror is required to complete subparagraph (b)(1), (2), and (3), of this clause, for each part or component, including all of its packaging. This information will be used by the Government to perform logistics management functions such as providing item sustainment, planning (e.g. estimating storage costs), and redistribution. You are not liable if you give us wrong information, however since the DOD uses this data in-house in existing data bases and because this information may be used in contingency planning it, we request that the information provided be as accurate as possible.

(b) Definitions of terms commonly used in the packaging and distribution environments are defined in ASTM D996 and should be consulted if any term used herein is in question.

(1) Unit Package:

(i) Specify the type of UNIT PACKAGE for each single unit of issue: A container in direct contact with and enclosing the product along with any required protective materials(s)(e.g. item is wrapped in neutral paper, polyethylene foam cushion wrapped, sealed in a waterproof bag, and placed in a fiberboard box).

(ii) Unit Package Exterior Size/Weight of Unit Package with contents:

Length_9___ x Width_6.5___ x Depth _5.5___(expressed in inches)/Weight expressed in ___9___ pounds

(2) Shipping Container:

(i) Exterior Size of SHIPPING CONTAINER AND CONTENTS THEREIN:

Length, _3___ x Width, _2.4___ x Height,___3___ (expressed in feet and inches)

(ii) Number of unit packages per shipping container ___33___ each

(iii) Gross weight of Shipping container and contents _____300___ Lbs.

(3) Unitized Loads:

(i) Is the Load palletized, skidded, or some other platform device used as a base for handling and transporting as a single entity. Yes [x] No []; describe: __Skid Box___

(ii) Number of Shipping containers per pallet/skid ___1_ each.

(iii) Weight of empty pallet, skid, platform, dolly, other device used as a base for handling and transporting materials ___15___ Lbs

(iv) Size of Unit Load(pallet/skid including shipping container(s))assembled for handling and transportation as a single entity:

Length, ___3___ x Width, _2.4___ x Height,___3___ (expressed in feet and inches)

(v) Gross Weight of Unit Load ___300___ Lbs;

[End of Clause]