

ORDER FOR SUPPLIES OR SERVICES										PAGE 1 OF 9		
1. CONTRACT PURCH ORDER/AGREEMENT NO. W56HZV-04-P-0690			2. DELIVERY ORDER/CALL NO.		3. DATE OF ORDER/CALL (YYYYMMDD) 2004MAR22		4. REQUISITION/PURCH REQUEST NO. SEE SCHEDULE		5. PRIORITY DOA4			
6. ISSUED BY TACOM WARREN BLDG 231 SFAE-GCS-W-BCTP EDWARD OTTMAN (586)753-2147 WARREN, MICHIGAN 48397-5000 EMAIL: OTTMANE@TACOM.ARMY.MIL HTTP://CONTRACTING.TACOM.ARMY.MIL			CODE W56HZV	7. ADMINISTERED BY (if other than 6) DCMA SAN ANTONIO 615 EAST HOUSTON STREET P.O. BOX 1040 SAN ANTONIO TX 78294-1040				CODE S4404A	8. DELIVERY FOB <input type="checkbox"/> DESTINATION <input checked="" type="checkbox"/> OTHER (See Schedule if other)			
9. CONTRACTOR SOUTHWEST RESEARCH INSTITUTE 6220 CULEBRA ROAD SAN ANTONIO, TX. 78238-0510 NAME AND ADDRESS TYPE BUSINESS: Other Nonprofit			CODE 26401	FACILITY	10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE			11. X IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMAN-OWNED	12. DISCOUNT TERMS			
					13. MAIL INVOICES TO THE ADDRESS IN BLOCK See Block 15							
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 _____, 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: Cost-Plus-Fixed-Fee KIND OF CONTRACT: Service Contracts				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 OTTMAN, EDWARD /SIGNED/ OTTMANE@TACOM.ARMY.MIL (586)574-2147 BY: _____ CONTRACTING/ORDERING OFFICER				25. TOTAL	\$46,758.00				
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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MOD/AMD

Name of Offeror or Contractor: SOUTHWEST RESEARCH INSTITUTE

SUPPLEMENTAL INFORMATION

1. The purpose of this Purchase Order is to procure Engineering support to assist the Project Manager Stryker Brigade Combat Team examine all potential fire hazard sources in teh Engine Compartment of the Stryker vehicle. See Statement of Work in Section C.
2. The Period of Performance shall be from date of contract award to 28 May 2004.
3. The following is a breakdown of labor hours associated with this effort on CLIN 0001AA:

<u>Labor Category</u>	<u>Hours</u>	<u>Cost</u>
Professional Level 4	4	\$264
Professional Level 3	196	\$9,043
Professional Level 2	2	\$66
Professional Level 1	8	\$203
Senior Technical	48	\$872
Technical	40	\$470
Clerical	21	\$265

Fringe Burden	\$5,210
Overhead	\$10,176
G&A	\$6,237
Facilities Cap	\$228

Total Labor \$33,054

4. The ceiling price for this purchase order is \$46,758.00. This represents the maximum amount of Government liability to the Contractor for performance under this order.
5. The contractor shall bill the Government for hours performed under this order. Travel costs shall be billed on a cost incurred basis plus applicable fee. The number of hours is an estimate only. The actual number of hours performed may vary but shall not exceed the 319 authorized or the total CLIN value of \$33,054.00.
6. The contractor shall submit an invoice for payment for work performed. The Contracting Officer's Technical Representative (COTR) will certify each voucher before payment will be made. The COTR for this contract will be:

Mr. Al Schumacher
U.S. Army, TACOM
SFAB-GCS-BCT
6501 E. 11 Mile Rd
Warren, MI

(586) 753-2158
schumaca@tacom.army.mil

*** END OF NARRATIVE A 001 ***

CONTINUATION SHEET

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 PIIN/SIIN W56HZV-04-P-0690 MOD/AMD

Name of Offeror or Contractor: SOUTHWEST RESEARCH INSTITUTE

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT									
	SUPPLIES OR SERVICES AND PRICES/COSTS													
0001	SECURITY CLASS: Unclassified													
0001AA	<p><u>ENGINEERING LABOR</u></p> <p>NOUN: PWD-FIRE SUPPRESSION ANALYSIS PRON: X14GX120X1 PRON AMD: 01 ACRN: AA AMS CD: 31107180006</p> <p>Labor plus Fringe Burden, Overhead, G&A and Facilities Capital</p> <p>(End of narrative B001)</p> <p><u>Inspection and Acceptance</u> INSPECTION: Origin ACCEPTANCE: Origin</p> <p><u>Deliveries or Performance</u></p> <table border="0"> <tr> <td>DLVR SCH</td> <td></td> <td>PERF COMPL</td> </tr> <tr> <td><u>REL CD</u></td> <td><u>QUANTITY</u></td> <td><u>DATE</u></td> </tr> <tr> <td>001</td> <td>0</td> <td>28-MAY-2004</td> </tr> </table> <p>\$ 33,054.00</p>	DLVR SCH		PERF COMPL	<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>	001	0	28-MAY-2004		HR		\$ 33,054.00
DLVR SCH		PERF COMPL												
<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>												
001	0	28-MAY-2004												
0001AB	<p><u>MATERIAL AND SUPPLY</u></p> <p>NOUN: PWD-FIRE SUPPRESSION ANALYSIS PRON: X14GX120X1 PRON AMD: 01 ACRN: AA AMS CD: 31107180006</p> <p><u>Inspection and Acceptance</u> INSPECTION: Origin ACCEPTANCE: Origin</p> <p><u>Deliveries or Performance</u></p> <table border="0"> <tr> <td>DLVR SCH</td> <td></td> <td>PERF COMPL</td> </tr> <tr> <td><u>REL CD</u></td> <td><u>QUANTITY</u></td> <td><u>DATE</u></td> </tr> <tr> <td>001</td> <td>0</td> <td>28-MAY-2004</td> </tr> </table> <p>\$ 515.00</p>	DLVR SCH		PERF COMPL	<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>	001	0	28-MAY-2004				\$ 515.00
DLVR SCH		PERF COMPL												
<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>												
001	0	28-MAY-2004												
0001AC	<p><u>FACILITY MAINTENANCE</u></p> <p>NOUN: PWD-FIRE SUPPRESSION ANALYSIS PRON: X14GX120X1 PRON AMD: 01 ACRN: AA</p>				\$ 4,897.00									

Name of Offeror or Contractor: SOUTHWEST RESEARCH INSTITUTE

DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

TITLE: Analysis of Potential Fire Locations in the Stryker Engine Compartment

DESCRIPTION OF EFFORT:

The purpose of this investigation is to identify potential ignition sources for each of the combustible fluids in the Stryker engine compartment and recommend realistic fire scenarios for testing of the Stryker engine compartment fire detection and extinguishing system. The fluids of concern include: JP-8 fuel, MIL-H-5606 hydraulic fluid, MIL-PRF-2104 engine oil (SAE grade 15W-40), gear lubricant SAE 80W-90, Dexron III automatic transmission fluid and ethylene glycol coolant. Potential ignition sources include ballistic events, hot surfaces and electrical arcing. (The government will provide ballistic fragment mass and temperature data collected by the Army Research Laboratory to be used in the analysis).

The project shall include two phases. During Phase I, the contractor shall analyze the Stryker engine compartment, including the APU, to identify potential fire hazard sources and locations. Stryker vehicles will be made available in Shelby, MI for inspection by the contractor. The contractor shall perform literature searches, data analysis, and laboratory experimentation to fill data voids. The analysis shall consider the full range of Stryker operating conditions (air and surface temperatures, fluid pressures, current draws, airflows, etc.). Based on his knowledge of the ignition characteristics of POL fluids, the contractor shall provide initial recommendations of realistic engine compartment fire scenarios to the government at the end of this phase.

During Phase II, the contractor shall perform laboratory verification testing as necessary to validate the potential fire threats identified in his initial recommendations. The contractor shall provide onsite support of the fire detection and suppression system testing to be conducted at Aberdeen Proving Ground, MD. The contractor shall prepare and submit a final report that includes all relevant POL vulnerability documentation.

PERIOD OF PERFORMANCE: The contractor shall complete Phase I by 26 Mar 04 and Phase II by 28 May 04.

DELIVERABLES: The contractor shall provide a technical briefing in Warren, MI at the completion of Phase I. The contractor shall prepare and submit a Final Technical Report at the end of Phase II.

*** END OF NARRATIVE C 001 ***

INSPECTION AND ACCEPTANCE

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
1	52.246-5	INSPECTION OF SERVICES - COST-REIMBURSEMENT	APR/1984

DELIVERIES OR PERFORMANCE

2	52.242-15	STOP-WORK ORDER	AUG/1989
3	52.247-29	F.O.B. ORIGIN	JUN/1988

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Name of Offeror or Contractor: SOUTHWEST RESEARCH INSTITUTE

CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ <u>ITEM</u>	<u>ACRN</u>	<u>STAT</u>	<u>ACCOUNTING CLASSIFICATION</u>		JOB ORDER <u>NUMBER</u>	ACCOUNTING <u>STATION</u>		OBLIGATED <u>AMOUNT</u>
0001AA	X14GX120X1 31107180006 A14P30062RX1	AA	2	21	42033000045R5R07P3110712512 S20113	4GXP33	W56HZV	\$	33,054.00
0001AB	X14GX120X1 31107180006 A14P30062RX1	AA	2	21	42033000045R5R07P3110712512 S20113	4GXP33	W56HZV	\$	515.00
0001AC	X14GX120X1 31107180006 A14P30062RX1	AA	2	21	42033000045R5R07P3110712512 S20113	4GXP33	W56HZV	\$	4,897.00
0001AD	X14GX120X1 31107180006 A14P30062RX1	AA	2	21	42033000045R5R07P3110712512 S20113	4GXP33	W56HZV	\$	4,953.00
0001AE	X14GX120X1 31107180006 A14P30062RX1	AA	2	21	42033000045R5R07P3110712512 S20113	4GXP33	W56HZV	\$	3,339.00
								TOTAL	\$ 46,758.00

SERVICE <u>NAME</u>	<u>TOTAL BY ACRN</u>	<u>ACCOUNTING CLASSIFICATION</u>		ACCOUNTING <u>STATION</u>		OBLIGATED <u>AMOUNT</u>	
Army	AA	21	42033000045R5R07P3110712512 S20113	W56HZV	\$	46,758.00	
						TOTAL	\$ 46,758.00

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CONTRACT CLAUSES

4	52.203-3	GRATUITIES	APR/1984
5	52.211-5	MATERIAL REQUIREMENTS	AUG/2000
6	52.222-19	CHILD LABOR--COOPERATION WITH AUTHORITIES AND REMEDIES	JAN/2004
7	52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB/1999
8	52.223-6	DRUG FREE WORKPLACE	MAY/2001
9	52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	JAN/2004
10	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER--CENTRAL CONTRACTOR REGISTRATION	OCT/2003
11	52.243-2	CHANGES--COST-REIMBURSEMENT (ALTERNATE II, dtaed April 1984)	AUG/1987
12	52.243-7	NOTIFICATION OF CHANGES	APR/1984
13	52.246-1	CONTRACTOR INSPECTION REQUIREMENTS	APR/1984
14	52.246-23	LIMITATION OF LIABILITY	FEB/1997
15	52.249-6	TERMINATION (COST-REIMBURSEMENT)	SEP/1996
16	252.225-7016	RESTRICTION ON ACQUISITION OF BALL AND ROLLER BEARINGS (Alternate I dated Dec 2000)	DEC/2000
17	52.204-4005 (TACOM)	REQUIRED USE OF ELECTRONIC CONTRACTING	DEC/2002

(a) All contract awards, modifications and delivery orders issued by TACOM will be issued electronically. The contractor has the option to receive these actions either via the Worldwide Web (WWW) or Electronic Data Interchange (EDI). Many provisions/clauses that appear "by reference", meaning only clause titles and regulation site are listed; their full texts can be found at the website <http://farsite.hill.af.mil/>

(b) In order to be eligible to receive an award under this solicitation, the successful offeror must be registered with the Department of Defense (DOD) Central Contractor Registration (CCR). The CCR registration process may be done electronically at the World Wide Web (WWW) site: <http://www.ccr.gov/>. (In order to be registered to use EDI, you must use the long form for registration. Certification information, including information on the EDI 838 TPP, must be furnished to the Contracting Officer within 60 calendar days after contract award to complete networking requirements within the Government.)

(c) Worldwide Web Distribution. The contractor will receive an electronic Notice of the Award, Modification, or Delivery Order via e-mail. If you choose the WWW option, you must download the file from the appropriate TACOM webpage:

Warren: http://contracting.tacom.army.mil/awards_official.htm
 Rock Island: <http://aais.ria.army.mil/AAIS/AWDINFO/index.htm>
 Picatinny: <http://procnet.pica.army.mil/Contracts/Index.htm>
 Red River Army Depot: <http://www.redriver.army.mil/contracting/Awards>
 Anniston Army Depot: <http://www.anadprocnet.army.mil>

(d) Electronic Data Interchange. If you choose to receive contract awards, modifications and delivery orders through EDI, they will be delivered electronically via the Federal Acquisition Network (FACNET). Federal Standard Version 3050 of Standard X12 from the American National Standards Institute (ANSI) will be used as the format for these electronic transactions.

(1) You must complete the EDI 838 Trading Partner Profile, and must agree (i) to subcontract with a DoD certified VAN or Value Added Service (VAS) provider, or (ii) to become DoD certified as a Value Added Network (VAN). The EDI 838 Training Partner Profile is contained in the basic CCR registration form and includes portions of the registration form which are titled "Optional".

(2) You must select a VAN from the official DoD approved list. DoD Certified VANs are listed at <http://www.acq.osd.mil/ec/ecip/index.htm>. If your VAN is later removed from the official list, or if you voluntarily drop your initially selected VAN, then you must switch to a VAN that remains on the official DoD approved list. You must maintain an active account on a DoD approved VAN for the entire duration of the contract, beginning no later than the 60th day after award.

(e) Unless otherwise specified elsewhere in the contract, all data items you are required to provide under this contract must be submitted electronically. Acceptable formats include:

- (1) Microsoft* 97 Office Products (TACOM can currently read OFFICE 97* and lower.): Word, Excel, Powerpoint, or Access
- (2) 100 OR 250 MEGABYTE ZIP*-DISK, 3 1/2 INCH DISK, OR 650 MEGABYTE CD ROM
- (3) E-MAIL (Maximum size of each e-mail message is be three and one-half (3.5) megabytes).

(4) Other electronic formats. Before submitting your data in any other electronic format, please e-mail the buyer identified on the face of the contract, with e-mail copy-furnished to amsta-idq@tacom.army.mil, to obtain a decision as to the format's

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acceptability. This e-mail must be received by the buyer not later than ten calendar days before the required data submission date.

NOTE: The above formats may be submitted in compressed form using self-extracting files.

(f) Additional information can be obtained by sending a message to: acqcenweb@tacom.army.mil or by calling (586) 574-7059.

[End of Clause]

18 52.204-4009 MANDATORY USE OF CONTRACTOR TO GOVERNMENT ELECTRONIC COMMUNICATION JUN/1999
(TACOM)

(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 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]

19 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]

20 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) 574-7788 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

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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://webl.whs.osd.mil/icdhome/DD-0999.htm>

[End of Clause]