

2. Amendment/Modification No. P00014	3. Effective Date 2004SEP09	4. Requisition/Purchase Req No. SEE SCHEDULE	5. Project No. (If applicable)
---	--------------------------------	---	--------------------------------

6. Issued By TACOM WARREN AMSTA-AQ-ABGD PHILLIP LAWRENCE (586)574-5273 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: LAWRENCPT@TACOM.ARMY.MIL	Code	W56HZV	7. Administered By (If other than Item 6) DCMA CHICAGO 1523 WEST CENTRAL ROAD BLDG 203 ARLINGTON HEIGHTS IL 60004-2451	Code	S1403A
			SCD C PAS NONE ADP PT HQ0339		

8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code) ALION SCIENCE AND TECHNOLOGY 10 W. 35TH STREET CHICAGO, IL. 60616-3799 TYPE BUSINESS: Other Nonprofit	<input type="checkbox"/>	9A. Amendment Of Solicitation No.
	<input type="checkbox"/>	9B. Dated (See Item 11)
	<input checked="" type="checkbox"/>	10A. Modification Of Contract/Order No. DAAE07-02-C-L059
	<input type="checkbox"/>	10B. Dated (See Item 13) 2002JUN27
Code 3BM47	Facility Code	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendments; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. Accounting And Appropriation Data (If required)
SEE SECTION G

13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS

It Modifies The Contract/Order No. As Described In Item 14.

<input type="checkbox"/>	A. This Change Order is Issued Pursuant To: The Contract/Order No. In Item 10A.	The Changes Set Forth In Item 14 Are Made In
<input type="checkbox"/>	B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).	
<input checked="" type="checkbox"/>	C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of: Agreement of the parties	
<input type="checkbox"/>	D. Other (Specify type of modification and authority)	

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the Issuing Office.

14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SEE SECOND PAGE FOR DESCRIPTION

Contract Expiration Date: 2005SEP30

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. Name And Title Of Signer (Type or print)	16A. Name And Title Of Contracting Officer (Type or print) MICHAEL L. CIONI CIONIM@TACOM.ARMY.MIL (586)574-7070		
15B. Contractor/Offeror (Signature of person authorized to sign)	15C. Date Signed	16B. United States Of America By _____ /SIGNED/ (Signature of Contracting Officer)	16C. Date Signed 2004SEP09

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 2 of 17

PIIN/SIIN DAAE07-02-C-L059

MOD/AMD P00014

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY

SECTION A - SUPPLEMENTAL INFORMATION

1. Prior Contract Amount:	\$12,916,714.00
Amount this Action:	\$ 6,775,904.00
Total Contract Amount:	\$19,692,618.00
Amount Previously Obligated:	\$11,745,943.00
Amount Obligated this Action	
(\$3,587,834 incremental funding for the exercise	
of option; \$1,751,608 Added Work):	\$ 5,359,180.00
Total Obligated Amount:	\$17,085,385.00

2. This modification P00014 is a bi-lateral modification, executed to exercise Option #1(H.21) of the contract and to add new effort to the scope of work in the contract for additional contractor support in Camp Arifjan, Kuwait to operate and maintain the Lathe Module.

3. With respect to the contractor personnel serving in Kuwait pursuant to this modification P00014, the following stipulations and conditions apply:

a. Overtime, at 1.5 times the basic rate of pay, is authorized for hours worked in Kuwait in excess of 40 hours per week, but such overtime, when added to normal duty time, may not exceed a limit of 12 hours per day, 6 days per week per person.

b. A 15% Danger Pay Differential allowance is hereby authorized for contractor employees deployed to Kuwait to execute the effort covered by CLIN 0007. This allowance is subject to change based on State Department guidance.

c. A 20% Post Differential Pay is hereby authorized to contractor employees deployed to Kuwait to execute the effort covered by CLIN 0007. Note, however, that such post differential pay does not become due or payable to any contractor employee deployed to Kuwait until such employee completes 42 consecutive days of service in Kuwait, during a time period in which the State Department has authorized this post differential pay allowance. Once a contractor employee completes at least 42 consecutive days of qualified service, this post differential pay allowance will be payable for that employee, retroactive to the first day of that employee's service in Kuwait. This allowance is subject to change based on State Department guidance.

d. Because the Government will provide all subsistence to contractor personnel deployed to Kuwait to execute to the effort covered by CLIN 0005AC, (i.e. housing , meals, etc.) the only per diem rate authorized for such employees is \$3.50 per day.

6. As a result of this modification P00014, the contract is hereby modified as follows:

a. Section B, Contract Schedule, is amended to reflect the incremental funding obligated under new CLIN's 0002AB,0002AC, & 0002AD for the exercise of Option 1 effort.

b. Section B, Contract Schedule, is amended to reflect the additional obligated amount of \$1,751,608.00 under CLIN 0007AA for support of the Southwest Asia operations per paragraphs C.14 through C.14.1.3 in the scope of work.

c. Section B, Contract Schedule, is amended to reflect a change to the Scope of Work reference in CLIN 0001AA

d. Section B, paragraph B.3.2, is amended to reflect the incremental funding schedule for Option one of the contract.

e. Section C, is amended to reflect the addition of paragraphs C.14 through C.14.1.3 to the scope of work

f. Section F, is amended to reflect a completion date of 30 Sep. 2005 in paragraph F.2.1.

g. Section G, Contract Administration Data, is amended to show the updated accounting information associated with the new obligation.

h. Section H, Paragraph H.21.1 is revised to show the correct Section C paragraph reference.

7. As a result of the changes made per this modification P00014, the total obligated amount of the contract is increased by \$5,339,442.00 from \$11,745,943.00 to \$17,085,385.00. The fixed fee is increased by \$408,592.00 from \$898,193.00 to \$1,306,785.00.

8. The changes described in this modification P00014 have an effective date of 15 July 2004. Any costs incurred by the contractor on or after 15 July 2004 to execute the changes described herein are reimbursable to the same extent they would have been reimbursable if incurred after the signature date of this modification.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN DAAE07-02-C-L059 MOD/AMD P00014	Page 3 of 17
Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY		

9. Except as expressed herein, all other terms and conditions of the contract, as previously modified, remain unchanged, and in full force and effect.

*** END OF NARRATIVE A 013 ***

CONTINUATION SHEET

Reference No. of Document Being Continued
 PIIN/SIIN DAAE07-02-C-L059 MOD/AMD P00014

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	<p>SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS</p> <p><u>SERVICES LINE ITEM</u></p> <p>SECURITY CLASS: Unclassified</p> <p>Contractor shall furnish all supplies and services to accomplish tasks described in Section C Scope of Work. Estimated Cost: \$10,220,516 Fixed Fee: \$ 846,248 Total Amount: \$11,066,764</p> <p>(End of narrative B001)</p>				<p>\$ _____ ** NSP **</p>
0002	<p><u>SERVICES LINE ITEM</u></p> <p>SECURITY CLASS: Unclassified</p> <p>THIS OPTION CLIN IS NOW FUNDED AND PERFORMANCE IS AUTHORIZED SEE CLAUSE H.21, SECTION C AND SECTION F.</p> <p>Option Value: Estimated Cost: \$4,639,238 Maximum Fixed Fee: \$ 385,058 Total Amount: \$5,024,296</p> <p>(End of narrative B001)</p>				<p>\$ _____ ** NSP **</p>
0002AA	<p><u>DELETED</u></p>				
0002AB	<p><u>SERVICES LINE ITEM</u></p> <p>NOUN: MOBILE PARTS HOSPITAL PRON: R342C191R3 PRON AMD: 02 ACRN: AF AMS CD: 63300553D11</p> <p>Contractor shall furnish all supplies and services to accomplish tasks described in Section C,C.8.1 through C.8.6.2.3, Scope of Work.</p>				<p>\$ _____ 2,500,000.00</p>

CONTINUATION SHEET

Reference No. of Document Being Continued
 PIIN/SIIN DAAE07-02-C-L059 MOD/AMD P00014

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	<p>(End of narrative B001)</p> <p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p> <p><u>Deliveries or Performance</u> DLVR SCH PERF COMPL <u>REL CD</u> <u>QUANTITY</u> <u>DATE</u> 001 0 30-SEP-2005</p> <p style="text-align: right;">\$ 2,500,000.00</p>				
0002AC	<p><u>SERVICES LINE ITEM</u></p> <p>NOUN: MOBIL PARTS HOSPITAL PRON: R343J131R3 PRON AMD: 02 ACRN: AE AMS CD: 123207NC000</p> <p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p> <p><u>Deliveries or Performance</u> DLVR SCH PERF COMPL <u>REL CD</u> <u>QUANTITY</u> <u>DATE</u> 001 0 30-SEP-2005</p> <p style="text-align: right;">\$ 1,078,654.00</p>				\$ 1,078,654.00
0002AD	<p><u>SERVICES LINE ITEM</u></p> <p>NOUN: MOBILE PARTS HOSPITAL PRON: R342C190R3 PRON AMD: 01 ACRN: AF AMS CD: 63300553D11</p> <p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p> <p><u>Deliveries or Performance</u> DLVR SCH PERF COMPL <u>REL CD</u> <u>QUANTITY</u> <u>DATE</u> 001 0 30-SEP-2005</p> <p style="text-align: right;">\$ 9,180.00</p>				\$ 9,180.00

CONTINUATION SHEET

Reference No. of Document Being Continued
 PIIN/SIIN DAAE07-02-C-L059 MOD/AMD P00014

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005	<p><u>SERVICES LINE ITEM</u></p> <p>SECURITY CLASS: Unclassified</p> <p>Option Value: Estimated Cost: \$1,708,485 Maximum Fixed Fee: \$ 141,465 Total Amount: \$1,849,950</p> <p>(End of narrative B001)</p>				
0007	<p><u>SERVICES LINE ITEM</u></p> <p>SECURITY CLASS: Unclassified</p> <p>CLIN for performance in Southwest Asia per paragraphs C.14 through C.14.3</p> <p>Est. Cost: \$1,617,368 Fixed Fee: \$ 134,240 Total Cost: \$1,751,608</p> <p>(End of narrative B001)</p>				\$ ** NSP **
0007AA	<p><u>SERVICES LINE ITEM</u></p> <p>NOUN: MOBILE PARTS HOSPITAL PRON: R343J120R3 PRON AMD: 05 ACRN: AE AMS CD: 123207NC000</p> <p>This CLIN is for support for the MPH in Southwest Asia see paragraphs C.14 - C.14.1.3</p> <p>(End of narrative B001)</p> <p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p> <p><u>Deliveries or Performance</u> DLVR SCH PERF COMPL</p>				\$ 1,751,608.00

CONTINUATION SHEET

Reference No. of Document Being Continued
PIIN/SIN DAAE07-02-C-L059 MOD/AMD P00014

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT									
	<table border="0"><tr><td data-bbox="272 281 354 302"><u>REL CD</u></td><td data-bbox="461 281 574 302"><u>QUANTITY</u></td><td data-bbox="672 281 753 302"><u>DATE</u></td></tr><tr><td data-bbox="298 306 331 327">001</td><td data-bbox="493 306 509 327">0</td><td data-bbox="639 306 769 327">30-SEP-2005</td></tr><tr><td data-bbox="418 361 435 382">\$</td><td colspan="2" data-bbox="483 361 623 382">1,751,608.00</td></tr></table>	<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>	001	0	30-SEP-2005	\$	1,751,608.00					
<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>												
001	0	30-SEP-2005												
\$	1,751,608.00													

CONTINUATION SHEET**Reference No. of Document Being Continued****Page 8 of 17**

PIIN/SIIN DAAE07-02-C-L059

MOD/AMD P00014

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY**B.1** Estimated Cost and Payment

B.1.1 The estimated cost for performance of the work required under this contract is \$18,185,607.00 which shall constitute the estimated cost for the purpose of the Contract Clause hereof entitled LIMITATION OF FUNDS.

B.1.2 The contractor will be paid for the fixed fee stated in Section B opposite CLIN 0001 for the performance of work under the contract and in accordance with the terms of the Contract Clause entitled FIXED FEE, (Mar 1997), FAR 52.216-8. The fixed fee together with the reimbursement of cost shall constitute full and complete consideration for the contractor's service in connection with the work required and performed under this contract. The total fixed fee amount in the contract is \$1,507,011.00.

B.1.3 Allowable cost shall be determined, and payment thereof shall be provided, in accordance with the Contract Clause hereof entitled ALLOWABLE COST AND PAYMENT.

B.2 Payment

The contractor may submit public vouchers bi-monthly for payment under this contract. The fee will be payable at the time of reimbursement of cost at the same rate to such cost as the total fee of this contract bears to the total estimated cost thereof, subject to any withholding pursuant to provisions of this contract. The Paying Office shall disburse funds in accordance with the paragraph G.3 of this contract entitled "Special Instructions - Pay Oldest Money First (MAR2000)".

B.3 Funding

B.3.1 The Government shall provide funds under this contract covering the estimated cost hereof on an incremental basis as provided for in the following funding schedule and pursuant to the Contract Clause entitled LIMITATION OF FUNDS. It is estimated that the incremental amounts are sufficient for the performance of work in each of cited periods. The Government may, at its discretion, obligate such funds on an incremental basis within each fiscal year. The contractor shall so plan and execute the work required by this contract as to expend and/or commit funds compatible with the schedule set forth below. Whenever the contractor has reason to believe that the funds obligated to this contract for any fiscal year are either insufficient or excessive for the performance of work required in that fiscal year, the Government shall be so notified.

B.3.2 Funding Schedule

<u>Performance Period</u>	<u>Amount</u>
FY02 - Award through Dec 02	\$ 4,645,996.00
FY03 - Jan 03 through Mar 04	\$ 7,099,947.00
FY04 - Apr 04 through Dec 04	\$ 6,339,442.00
FY05 - Jan 05 through Completion	\$ 1,607,233.00

B.4 Funds Obligated. The amount of funds currently obligated to this contract is \$ 17,085,385.00.

B.5 OPTION- As per paragraph H.22, the Government shall have the option to utilize the hours of this option up to a maximum of 10,000 hours and may exercise this option in more than one increment. If exercised, any resultant CLIN or subCLIN shall be awarded on a cost plus fixed fee basis using the labor categories and costs per program year on the chart located as Attachment 1 of this contract. Available hours have been exhausted with the execution of Modification P0012

B.5.1 Available Hours: 0

B.5.2 Estimated Costs: \$ 904,603

B.5.3 Maximum Fixed Fee:\$ 74,647

B.5.4 Total Costs: \$ 979,250

*** END OF NARRATIVE B 004 ***

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 9 of 17
	PIIN/SIIN DAAE07-02-C-L059	MOD/AMD P00014
Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY		

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

SECTION C MOBILE PARTS HOSPITAL

C.1 Background:

The Mobile Parts Hospital (MPH) program evolved from a feasibility study conducted the ITT Research Institute (IITRI) under Contract DAAE07-98-C-L012. Under that feasibility study the Government funded IITRI to design and fabricate a MPH technology demonstrator capable of demonstrating a state of the art manufacturing capacity in a mobile environment for the fabrication of spare parts. The capability to manufacture military vehicle/systems repair parts was demonstrated from April 2001 to the present. IITRI was simultaneously contracted as the Manufacturing Technology Information Analysis Center (MTIAC) under Contract SPO0700-97-D-4005 to design and fabricate the first prototype of a Mobile Parts Hospital that was configured and sized for loading and transporting via standard army methods. In addition, IITRI was contracted to design and plan the implementation of an Agile Manufacturing Cell that would be CONUS based in the Detroit Area. Both the MPH prototype and the Agile Cell design are to be delivered to the Government on or about 30 March 2002.

C.2 Description of the Contract:

The contract has a base period of twenty-four months and provides for four additional options, covering an aggregated potential to extend contract performance up to three additional twelve-month periods.

C.2.1 Base Period Scope of Work:

C.2.2 The Contractor shall provide a facility capable of housing the technology demonstration trailer and the two ISO container sized modules. This facility shall be used to store the items during non-demonstration periods and evaluate and repair any damage done to the equipment during the transport to and from the demonstrations listed in paragraph C.2.8 (and, potentially in paragraphs C.7.1 and C.8.1) below. The facility must also provide sufficient space for maintenance of the modules and allow for the contractor to perform experiments with advanced manufacturing technologies throughout the conduct of this contract and throughout the performance period of any or all of the contract options that may be exercised by the Government.

C.2.3 The contractor shall monitor and record the functional performance of the two MPH prototypes. The monitoring shall consist of an evaluation of the capabilities of all machines contained in the prototypes to perform the machining and manufacturing functions for which the OEM originally designed the machines. This evaluation shall consist of, before and after each movement of the prototype, an evaluation of the machineries capabilities to hold the tolerances specified by the OEM. Evaluations of powder flow functions, laser functions, inert gas functions, computer control functions, tool holding devices and functions, coolant flow functions, electrical integrity, and machine/hardware integrity (any detection of degradation in the main framework of the machines caused by excessive forces during movement of the MPH demonstrator & module). The Contractor shall maintain a record of the condition of the equipment and its functions before and after all prototype movements to and from the demonstration sites listed in paragraph C.2.8.1. This information shall be included in the deliverable described in C.3.3. Based on the results of these evaluations, the contractor shall redesign and reconfigure the prototype modules in order for the prototype modules to Fully meet the requirement to manufacture spare parts in a PLS and C-130 transportable container.

C.2.4 The Contractor shall execute the Agile Cell Design and Focus HOPE Implementation Plan developed during earlier work on the Mobile Parts Hospital program under the MTIAC Contract SPO0700-97-D-4005. The resulting Agile Cell must be capable of manufacturing limited lot size (meaning lot quantities of 100 or less) repair parts for military systems. The Contractor shall implement the Agile Cell plan in two twelve-month phases, as follows. An action plan detailing the execution of the Implementation Plan in the two twelve-month phases shall be submitted to the Government COR within 60 days from contract award.

C.2.5 First 12-months: Work with Focus HOPE to make changes to the facilities at 1400 Oakman Blvd., Detroit, MI 48238 to accommodate the equipment specified in the plan developed and delivered under the MTIAC Contract SPO0700-97-D-4005. Using the Agile Implementation Plan developed and delivered under the MTIAC Contract SPO0700-97-D-4005, the Contractor shall develop an equipment installation plan and brief the Government COR and Focus HOPE prior to placing orders for the acquisition and/or installation of the manufacturing equipment. Subject to final cost of the constituent machines, the Contractor shall install a minimum of 3 new machines identified in the plan. Additional machines may be installed up to the limit of funding available on the contract in the first 12 months of performance.

C.2.6 Second 12-months: Install all remaining new equipment set forth in the plan and validate the Agile Cell design by using the agile Cell to manufacture one each of the 100 parts identified under previous MYIAC Contract SPO0700-97-D-4005.

C.2.6 Second 12-months: Install MAZAK 300, Cincinnati, and Vibratory machines set forth on the plan and validate the Agile Cell design by using the Agile Cell manufacture parts identified by the Government. The Contractor shall provide the engineering and manufacturing data in the MPH format and database. Replaced C.2.6 above on Modification P00006 and again by Modification P00011

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 10 of 17

PIIN/SIIN DAAE07-02-C-L059

MOD/AMD P00014

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY

C.2.7 The Contractor shall reverse engineer an additional one hundred forty (140) military system parts. The Government COR will identify the parts and the Contractor shall provide the engineering and manufacturing data in the MPH format developed under the MTIAC Contract SPO0700-97-D-4005 for incorporation into the MPH program database.

C.2.7 The Contractor shall reverse engineer an additional seventy (70) military system parts. The Government COR will identify the parts and the Contractor shall provide the engineering and manufacturing data in the MPH format developed under the MTIAC Contract SPO0700-97-D-4005 for incorporation into the MPH program database. Replaced C.2.7 above on Modification P00006.

C.2.8 The Contractor shall conduct demonstrations of the MPH technology platforms at conferences and symposiums selected (and confirmed) by the Government COR during the 24 months following contract award. The Government COR will provide the specific dates and exact duration of each conference and symposium. The Government will, wherever possible, provide such notice at least 30 calendar days before the scheduled start date of each conference or symposium, to allow the contractor reasonable lead-time to arrange for or unexpected requests, the Government will provide notice to the contractor at least seven (7) calendar days prior to the scheduled start date. The Government can request contractor support of a demonstration when fewer than seven (7) days are available before the start of the demonstration, but in that event the contractor is under no obligation to comply if circumstances do not permit. This task may be continued into periods beyond 24 months, in the form of additional demonstrations, in the event the Government exercises one or more of the options given in Section H of this contract.

C.2.8.1 For planning and costing purposes, the contractor shall demonstrate the MPH mobile platform for four (4) days at each of the following locations: Ft. Lee, VA (2 demonstrations); Aberdeen Proving Grounds, MD (2 demonstrations); Ft. Sam Houston, TX (1 demonstration); Reno, NV (1 demonstration); Ft. Hood, TX (1 demonstration); and Detroit, MI (3 demonstrations). The Contractor shall demonstrate the MPH technology demonstration trailer for twenty-one (21) days in Alaska. During the 21-day period, the platform shall be demonstrated in Anchorage and Fairbanks. Deleted by Modification P00006.

C.2.8.2 For each demonstration, the Contractor shall provide round-trip transportation for all demonstration hardware and associated displays, brochures, support equipment, consumable supplies, and necessary repair and maintenance parts; and also shall provide third-party insurance, storage, portable power, and four personnel to demonstrate the mobile platforms at each location.

C.3 Reports:

C.3.1 The Contractor shall prepare and submit a separate report for each technology/module demonstration conducted under this contract. Each report shall provide (a) a summary of the event, (b) identification of important contacts made during the event, (c) a summary of lessons learned; (d) recommendations, if any, for future demonstrations, (e) condition of the equipment and its functions before movement to the demonstration, and (f) condition of the equipment and its functions after returning from the demonstration.

C.3.2 The Contractor shall monitor and provide stand-alone, independent evaluations of promising mobile manufacturing technologies in the following five areas: Direct Metal Deposition processes, Laser Scanning, Advanced Coating/Finishes/Heat Treating Processes, Flexible Material Removal Processes; and Reverse Engineering techniques and software packages.

C.3.3 The Contractor shall provide services and documentation to support the Government by drafting recommendations for a Mission Needs Analysis, a Mission Needs Statement, and Operations & Organizations Plan, and an Operations Requirements Document in accordance with the TRADOC Pamphlet 71-9, dated June 2000. Similar support tasks may be continued beyond 24 months after contract award, in the event the Government exercises one or more of the Options in Section H of this contract.

C.4 The Contractor shall manufacture one each of the 140 parts, specified in paragraph C.2.7, in the MPH modules and provide them to the Government for testing of the parts on military vehicles/systems. This task may be continued beyond 24 months after contract award, in the event the Government exercises one or more of the Options in Section H of this contract.

C.4 The Contractor shall manufacture one each of the 70 parts, specified in paragraph C.2.7, in the MPH modules and provide them to the Government for testing of the parts on military vehicles/systems. This task may be continued beyond 24 months after contract award, in the event the Government exercises one or more of the Options in Section H of this contract. Replaced C.4 above by Modification P00006

C.5 The Contractor shall develop and deliver a video showcasing the technologies contained in the prototype modules as well as describing how the MPH might be deployed and used in the battle space. Copies of the video shall be delivered in VHS, Beta and DVD formats.

C.5 The Contractor shall rework/update the previously published video showcasing the technologies contained in the prototype modules. Copies of the video shall be delivered in CD and DVD formats. Replaced C.5 above by Modification P00011

C.6 Meetings:

C.6.1 The Contractor shall initiate a kick off meeting at TACOM with the COR. The meeting shall be held NLT two weeks after contract award. The scope of work and deliverables will be discussed, and a timeline developed.

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY

C.6.2 The Contractor shall plan and conduct quarterly program reviews where schedule, cost, and performance are discussed on all aspects of the program.

C.7 Base Period Additional Deliverables:

C.7.1 Prototype and Agile Cell Evaluation Report. The initial draft is due 12 calendar months after contract award, and shall contain the contractors analysis of the manufacturing effectiveness of the prototype modules and the agile manufacturing cell. The final report is due 23 calendar months after contract award and shall contain the recommended redesigns of the prototype modules.

C.7.2 Cost and Performance Reports. The Contractor shall prepare monthly cost and performance reports, with the first report due 45 days after contract award. The reports shall contain cost information for the month being reported as well as cumulative cost data on the contract. Work accomplished and planned shall be reported. All Other Direct Costs shall be reported for the month they are incurred to include a description of the ODC, such as travel and materials.

C.8 Option 1 Scope of Work:

C.8.1 If the Government exercises Option 1, the Contractor then will be responsible to continue the tasks outlined in C.3.3 for a period of time specified in the Option exercise, and also to continue the demonstration task in C.2.8. For planning and costing purposes, the Contractor shall demonstrate the MPH mobile platform for four (4) days at each of the following locations: Washington, DC (AUSA Annual Meeting) and Aberdeen Proving Grounds, MD..

C.8.2 The Contractor shall redesign the current Rapid Manufacturing System (RMS) modules as further defined below, and build and deliver a quantity of two of the redesigned lathe manufacturing module (LMM).

C.8.2.1 The Contractor shall base the redesigned RMS LMM on the MAZAK Integra 100 SYII, and shall obtain and integrate all necessary subsystems (e.g., compressor, HVAC, power, air compressor, machine tooling, and routine maintenance replacement items (which, in the case of one of the two modules, shall be sufficient for at least seven months of daily two-shift operation) to permit the two completed modules to operate as independent units.

(a) The RMS LMM module redesign shall incorporate performance and design improvements resulting from lessons learned from field operation of the existing module in Kuwait.

(b) The RMS LMM module redesign shall include developing and executing all modifications necessary to reduce the completed module footprint, so that the module fits in a standard 8' by 8' by 20' ISO shipping container or smaller.

C.8.3 The Contractor shall complete maturation of the Direct Material Deposition technology in the RMS's Rapid Manufacturing Module (RMM) to demonstrate the ability to deposit 4140 or similar high carbon steel so that the resulting deposits meet or exceed the performance properties of such steel when cast and wrought. This effort will be performed at the Government's facility in Warren, Michigan and installation will begin 3 weeks from contract award. The Government will provide facility requirements to operate this module.

C.8.3.1 Deposition of the high-carbon steel shall occur at a rate of at least eight (8) cubic inches per hour.

C.8.3.2 The Contractor shall produce sample high-carbon steel depositions from the Direct Material Deposition system, and subject the samples to performance tests in accordance with ASTM E8. The Contractor will provide the test results to the COR in the next regular performance report, and will consult with the COR regarding the test results.

C.8.4 The contractor shall produce a maximum of 50 military system parts per month with the Agile Manufacturing Cell. The Government COR will identify the parts and the Contractor shall provide the engineering and manufacturing data in the MPH format developed under MTIAC contract SPO0700-97-D-4005 for incorporation into the MPH program database.

C.8.5 The Contractor shall develop and deliver a training video and accompanying manual to instruct Government personnel on the use, maintenance and capabilities of the MPH.. The video shall be delivered in DVD format and the manual shall be delivered in hard copy and pdf.

C.8.6 Option 1 Deliverables:

C.8.6.1 In the event Option 1 is exercised by the Government, the Contractor will be responsible to provide the same deliverables during performance of work on Option 1 as are required under the basic contract, in paragraphs , C.3.1, and C.6.2.

C.8.6.2 The two redesigned RMS LMM modules and the redesigned RMM module fabricated in response to paragraph C.8 above shall be dispositioned as follows:

(a) The contractor shall package one of the RMS LMM in an ISO container and ship it to kuwait, to the address provided by the COR.

(b) The second RMS LMM, and the redesigned RMM, will remain in the contractor's possession for use in subsequent research, development, and technical demonstrations. The LMM will be housed at the subcontractors facility (Focus Hope) and prepared for shipment

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 12 of 17

PIIN/SIIN DAAE07-02-C-L059

MOD/AMD P00014

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY

to Southwest Asia at an address provided by the COR.

C.9 Option 2 Scope of Work:

C.9.1 If the Government exercises Option 2, the Contractor then will be responsible to continue the tasks outlined in C.2.2, C.3.3, and C.4 (with the requirements of C.4 applying in this case, to the 100 parts reverse engineered per C.9.3, not to the 140 prepared per C.2.7) for a period of time specified in the Option exercise, and also to continue the demonstration task in C.2.8. For planning and costing purposes, the contractor shall demonstrate the MPH mobile platform for four (4) days at each of the following locations: Ft. Lee, VA (1 demonstration); Aberdeen Proving Grounds, MD (2 demonstrations); Ft. Hood, TX (1 demonstration); and Detroit, MI (3 demonstrations). The Contractor shall include as part of the cost for each demonstration under Option 2 a separate line reflecting the costs of (1) transporting the Government HMMWV vehicle with the permanently installed scanning device (as prepared per paragraph C.8.3 of this contract), and (2) including the HMMWV scanning device as part of the MPH demonstration at the specified location. These costs then will be included in the overall costs for a particular demonstration, in the event the Government elects to include the HMMWV as part of the MPH demonstration at such demonstration site.

C.9.2 The Contractor shall prepare for Government approval a test plan, and conduct a system test, following the Government approved test plan, of all MPH modules in a relevant Army environment such as Ft. Polk, Ft. Hood, or Ft. Erwin (the specific Army test environment will be identified at the time Option 2 is exercised), and shall summarize all test, test findings, and resulting comments and recommendations in the form of a final report.

C.9.3 The Contractor shall reverse engineer an additional one hundred (100) military system parts. The Government will identify the parts and the Contractor shall provide the engineering and manufacturing data in the MPH format developed under the MTIAC Contract SPO0700-97-D-4005 for incorporation into the MPH program database. This is beyond those required on the basic contract and any other exercises of Option hereunder.

C.9.4 Option 2 Deliverables:

C.9.4.1 In the event Option 2 is exercised by the Government, the Contractor will be responsible to provide the same deliverables during performance of work on Option 2 as are required under the basic contract, in paragraphs C.2.7, C.3.1, and C.7.2.

C.10 Option 3 Scope of Work:

C.10.1 If the Government exercises Option 3, the Contractor then will be responsible to continue the tasks outlined in C.2.2, C.3.3, and C.4 (with the requirements of C.4 applying in this case to the 100 parts reverse engineered per C.9.4 below, not to the 140 prepared per C.2.7) for a period of time specified in the Option exercise.

C.10.2 The Contractor shall provide the personnel, materials, and services to conduct a Production Qualification Test, a Logistics Demonstration, a New Equipment Training Test Support Package, a System Support Package, and a Doctrinal and Organizational Test Support Package in preparation for Initial Operational Test and Evaluation of the MPH system. These tests shall be supported and conducted in accordance with Army Pamphlet 73-1 dated 1995. The Contractor shall prepare and deliver all documents and test reports associated with the above.

C.10.3 The Contractor shall conduct an analysis of the manufacturing issues that may arise in production of the MPH modules, and develop recommended solutions, to include the advantages and disadvantages of each alternative, in preparation for Low Rate Initial Production of the MPH modules. The Contractor shall provide a detailed manufacturing issues report of this analysis and provide a decision briefing to the Government COR (and other TACOM/Army personnel designated by the COR or Contracting Officer) synthesizing the resultant analysis in order for the Government to make final decisions to resolve issues. After the decision briefing to the Government, the Contractor shall prepare a manufacturing issue resolution report summarizing the decisions made by the Government.

C.10.4 The Contractor shall reverse engineer and additional one hundred. The Government will identify the parts and the Contractor shall provide the engineering and manufacturing data in the MPH format developed under the MTIAC Contract SPO0700-97-D-4005 for incorporation into the MPH program database. This is beyond those required on the basic contract and any other exercises of Option hereunder.

C.10.5 Option 3 Deliverables:

C.10.5.1 If Option 3 is exercised by the Government, the Contractor then will be responsible to furnish the same deliverables as were required under the basic contract, in paragraphs C.2.7 and C.7.2.

C.11 Option 4 Scope of Work:

C.11.1 If the Government exercises Option 4, in part or in whole, the Contractor then will be responsible to provide technical support of the MPH program, as specified in the contract modification that exercises Option 4, at the cost reimbursable rates set forth in Section B. Option 4 can be exercised only to obtain contractor technical support for the MPH program, for tasks directly related to those set forth elsewhere in this Section C Statement of Work.

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY**C.11.2 Option 4 Deliverables:**

C.11.2.1 If Option 4 is exercised by the Government, in whole or in part, the Contractor then will be responsible to furnish the deliverables identified in the contract modification(s) that exercise Option 4.

C.12 Scope of Work Analysis of Operations/Establishment of an Agile Manufacturing Cell:

C.12.1 Perform a detailed analysis of current operations and production-readiness processes at Focus: Hope, Center for Advanced Technologies (CAT) for the purpose of assessing the establishment of a planned Agile Manufacturing Cell at Focus: Hope (currently planned for implementation in Mar 03). In the course of its analysis, the contractor shall:

C.12.1.1 Identify and provide metrics for current Focus Hope systems capabilities and limitations in the operations areas of quality, strategic management, customer relations, resources and processes/procedures available for training of personnel, supplier development, data collection systems, materials management, and financial operations reporting practice.

C.12.1.2 Using established Focus: Hope procedures as a baseline, assess how well existing processes can be expected to work when the Agile Cell becomes operational. Conduct an analysis based upon productivity, quality assurance, uniformity/repeatability of output, lead time performance, inventory management, supply chain management, master scheduling and material control, production balancing techniques, capacity planning, project management, cost structure, organizational structure and effectiveness, and responsiveness to the customer. Also, conduct an analysis of the processes Focus Hope plans to use to ensure that the Agile Cell manufacturing operation will be manned by trained and competent personnel, given the potentially high turn over rate experienced at Focus: Hope. Identify what strengths and shortcomings exist in Focus: Hope processes regarding training and skill maintenance in the context of Focus: Hope's employee turnover rates

C.12.1.3 Identify the key concentration(s) of effort that Focus: Hope must expend in manufacturing operations, and provide recommendations for deploying and utilizing Agile Cell Manufacturing resources in the development of agile cell business opportunities in support of (i) the Mobile Parts Hospital Program, and (ii) other TACOM programs and requirements.

C.12.1.4 The deliverables for this portion of the scope of work are:
Monthly cost and status reports due in conjunction with the existing contractual requirement per paragraph C.7.2. The first report shall be included with the monthly report due on or after 45 days after award of this modification.

C.12.2 Final Technical Report: Not later than 30 days after the completion of the contract, the contractor shall prepare and submit a final technical report annex, addendum, or section covering the scope of work added by this modification P0001. The final report shall be delivered to the COR, and shall summarize all results, findings, conclusions, and recommendations concerning the above requirements. shall be included in the final report required under C.7.1.

C.12.3 The period of performance of this portion of the scope of work will be 12 months from award of the modification.
Added by Modification P00001

C.13 Analysis of STEP within the MPH program

C.13.1 The contractor shall train a minimum of two persons on the use of the manufacturing tool STEPPLAN. This training is necessary to execute engineering, manufacturing and analysis of producing parts utilizing the N-STEP manufacturing process.

C.13.2 The contractor shall select and manufacture 25 of the government identified parts in the MPH (Mobile Parts Hospital) agile manufacturing cell utilizing the STEPPLAN, the N-STEP process, and the Wind-Chill database.

C.13.3 The contractor shall provide and input the data (CNC machine parameters of the machines used on the MPH program) into the STEP database so that, when utilized, the database will recognize which machine will be used to perform the desired manufacturing effort.

C.13.4. The contractor shall perform an analysis comparing the use of the N-STEP tools and processes to the use of traditional manufacturing methods. The contractor will prepare and submit a final report based on this analysis to the designated NAC technical representative 12 months after award of modification P00008. Changed by Modification P00008

C.14 Southwest Asia Deployment

C.14.1 The contractor shall deliver and support one or both of the new MPH's RMS Lathe Manufacturing Module (LMM) for deployment, operation, and use in Kuwait, Iraq, and/or Afghanistan. If the Government determines not to provide the new module to the site where the existing module is deployed, the exact location shall be transmitted by separate document.

C.14.1.1 The Contractor shall manage all logistical requirements for directed deployments to Kuwait, and/or Iraq and/or Afghanistan. The Government may choose to have the modules transported via military transport from Dover New Jersey to their final destination.

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY

C.14.1.2 The Contractor shall be responsible for providing two-person teams to operate each of the two deployed Lathe Manufacturing Modules (LMM) at all deployed locations. Each team shall consist of one machinist (machine operator with a minimum of 10 years Mazatrol Machine Language experience) and one person to serve as an on-site supervisor (having an engineering background and being capable of handling simultaneous multi-task assignments). Personnel teams may be rotated ever 90-120 days with a minimum over-lap of the on-site supervisor of five (5) days between team rotations, so that the outgoing supervisor can provide orientation to the incoming supervisor, and update him or her on project status, lessons learned, and local in-country contracts.

C.14.1.3 The contractor shall (i) prepare, for government COR approval a training plan and training materials, and, upon COR approval (ii) execute the training plan during the six months beginning 4 months from contract award to conduct 3 sessions of training for Government designated personnel in operation and basic maintenance of the MAZAK integra 100 SYII, the training plan shall include the following track:

TRACK 1: The track shall have as its target audience experienced machinists, such as employees at Government depots, having five or more years of CNC machining experience. This training track shall consist of approximately 40 hours of training per week, for a total of up to eight weeks, as necessary to provide adequate training.

a. The contractor shall conduct all training in the continental United States. Locations may include the contractor's facility or Government depot facilities. The Government will provide at least 4 week advanced notice of the location and starting date for required training sessions. For contractor planning purposes, the Government currently expects that a minimum of eight (8) persons shall be trained commencing on or about 1 Oct 2004.

b. Training materials shall include (i) a paper-based manual, and (ii) interactive audio-visual training, recorded and delivered on CD-ROM.

C.15 Reports

C.15.1 Monthly cost and status reports of the Lathe modules operation, due in conjunction with the existing contractual requirement per paragraph C.7.2. The first report shall be due one week after the module is fully operational. In addition, a weekly electronic activity report shall be delivered to the government COTR in contractor format.

C.15.2 Final report: Not later than 30 days after the 60 day deployment of the module in Kuwait, the contractor shall prepare and submit a final report annex, addendum, or section covering the scope of work added by this modification P00006. The final report shall be delivered to the COR, and shall summarize all results, findings, conclusions, and recommendations concerning the above requirements, which shall be included in the final report required under C.7.1. Added by Modification P00006

*** END OF NARRATIVE C 006 ***

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY

SECTION F - DELIVERIES OR PERFORMANCE

F.1.1 Data

F.1.2 The delivery schedule for the data items is found on Exhibit A, The Contract Data Requirements List (DD Form 1423).

F.1.3. All data deliverables under this contract shall be delivered electronically to the email addresses specified in the Contract Data Requirements List (CDRL) DD Form 1423.

F.2 Period of Performance

F.2.1 The period of performance of this contract is from contract award to 30 Sep 05.

F.2.2 The period of performance of each of options 1,2,& 3 is a maximum of 12 months from expiration of the then-current contract performance period. Performance of option 4, if exercised, in whole or in part, shall be concurrent with performance of the contract effort up to a maximum of 5 years from the contract award date.

F.3 All hardware and hardcopy documents shall be shipped FOB Destination to the following address:

U.S.Army TACOM
Attn: AMSTA-TR-N (Coryne Forest)
Mailstop 263
6501 E. 11 Mile Road Warren, MI 48397-5000

All other deliverables must be sent by e-mail to the following addresses unless alternative arrangements are made with the Contracting Officer's Representative:

forestc@tacom.army.mil, and lawrencp@tacom.army.mil.

F.3.1 The contractor shall deliver the following:

MPH Mobile Platform Demonstrations:	Due within 30 days of notice from the Government before Demo is required. The initial period of performance is 24 months, or longer if Options are exercised. Paragraph C.2.8
Cost and Performance Reports:	Monthly Paragraph C.6.2
Prototype and Agile Cell Evaluation Reports:	Draft due 12 months from award of contract Final report due 23 months from award of Contract. Paragraph C.6.1
Showcase Video:	Due 24 months from award of Contract. Paragraph C.5
140 Manufactured Parts:	Due 24 months from award of contract. Paragraph C.4.

*** END OF NARRATIVE F 001 ***

CONTINUATION SHEET

Reference No. of Document Being Continued

PIIN/SIIN DAAE07-02-C-L059

MOD/AMD P00014

Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY

SECTION G - CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ <u>ITEM</u> <u>MIPR</u>	<u>ACRN</u>	<u>OBLG STAT/</u> <u>JOB ORD NO</u>		<u>PRIOR AMOUNT</u>	<u>INCREASE/DECREASE</u> <u>AMOUNT</u>	<u>CUMULATIVE</u> <u>AMOUNT</u>
0002AB	R342C191R3 63300553D11	AF	2 42C191	\$	0.00 \$	2,500,000.00 \$	2,500,000.00
0002AC	R343J131R3 123207NC000	AE	2 4RQ030	\$	0.00 \$	1,078,654.00 \$	1,078,654.00
0002AD	R342C190R3 63300553D11	AF	2 42C190	\$	0.00 \$	9,180.00 \$	9,180.00
0007AA	R343J120R3 123207NC000	AE	2 4RQ030	\$	0.00 \$	1,751,608.00 \$	1,751,608.00
					NET CHANGE	\$ 5,339,442.00	

<u>SERVICE</u> <u>NAME</u>	<u>NET CHANGE</u> <u>BY ACRN</u>	<u>ACCOUNTING CLASSIFICATION</u>		<u>ACCOUNTING</u> <u>STATION</u>	<u>INCREASE/DECREASE</u> <u>AMOUNT</u>
Army	AE	21	42020000046N6N7EP123207252G	S20113	W56HZV \$ 2,830,262.00
Army	AF	21	42040000046N6N7EP633005255Y	S20113	W56HZV \$ 2,509,180.00
					NET CHANGE \$ 5,339,442.00

	<u>PRIOR AMOUNT</u> <u>OF AWARD</u>	<u>INCREASE/DECREASE</u> <u>AMOUNT</u>	<u>CUMULATIVE</u> <u>OBLIG AMT</u>
NET CHANGE FOR AWARD:	\$ 11,745,943.00	\$ 5,339,442.00	\$ 17,085,385.00

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN DAAE07-02-C-L059 MOD/AMD P00014	Page 17 of 17
Name of Offeror or Contractor: ALION SCIENCE AND TECHNOLOGY		

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.21 OPTIONS

H.21.1 Option 1: The Government shall have the unilateral right to exercise the option located at CLIN 0002AA for performance of the work specified in C.8. The Government may exercise this option at any time on or after contract award, but in any event not later than 28 months (2 years) after contract award. The Government may exercise this option in more than one increment. The period of performance for Option 1 will be specified in the contract modification(s) up to a maximum of twelve (12) months from the expiration of the period of performance of the basic contract.

H.21.2 Option 2: Within 36 months after contract award the Government shall have the unilateral right to exercise the option located at CLIN 0003AA for performance of the work specified in C.9 of the contract. The Government may exercise this option in more than 1 increment. The period of performance for Option 2 will be specified in the contract modification(s) up to a maximum of twelve (12) months from expiration of performance of option 1.

H.21.3 Option 3: Within 48 months after contract award the Government shall have the unilateral right to exercise the Option located at CLIN 0004AA of the contract for performance of the work specified in C.10. The Government may exercise this option in more than 1 increment. The period of performance for Option 3 will be specified in the contract modification(s) up to a twelve (12) months from expiration of option 2.

H.22 Option 4: Within 56 months after contract award the government shall have the unilateral right to exercise the option located at CLIN 0005AA of the contract, for a maximum of 10,000 hours of direct engineering labor in support of the MPH program, consistent with the parameters identified in Section C of the contract and as further described in C.10. Hours added to the contract by exercise of this option shall be priced based on the number of hours estimated to be required to perform the associated tasks, multiplied by the hourly rate that applies to the year(s) in which those hours will be used to perform work, as set forth in Section B.5. Performance of work added to the contract by exercise of this option 4 will commence on the date of option exercise and will run concurrently with other work being performed hereunder, unless otherwise specified in the option exercise modification(s).

*** END OF NARRATIVE H 001 ***