

<b>SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS</b> <i>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, &amp; 30</i>				1. REQUISITION NUMBER 15EM001025	PAGE OF 1   13
2. CONTRACT NO. DF-EM0002903		3. AWARD EFFECTIVE DATE	4. ORDER NUMBER DE-DT0009216	5. SOLICITATION NUMBER	6. SOLICITATION ISSUE DATE
7. FOR SOLICITATION INFORMATION CALL:		a. NAME Suzanne Hunt		b. TELEPHONE NUMBER (No collect calls) 575-234-7525	8. OFFER DUE DATE/LOCAL TIME ET
9. ISSUED BY EMCBC U.S. Department of Energy EM Consolidated Business Center 230 E. 5th Street, Suite 500 Cincinnati OH 45202			CODE 03001	10. THIS ACQUISITION IS UNRESTRICTED OR SET ASIDE % FOR	
11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED SEE SCHEDULE		12. DISCOUNT TERMS NET 30		13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (16 CFR 700)	
13. DELIVER TO CODE		14. METHOD OF SOLICITATION RFP IFB <input checked="" type="checkbox"/> RFP		13b. RATING	
15. DELIVER TO CODE		16. ADMINISTERED BY EMCBC - Carlsbad U.S. Department of Energy Carlsbad Project Office P.O. Box 3090 Carlsbad NM 86221		CODE 03003	
17a. CONTRACTOR/OFFEROR CODE 360613710		FACILITY CODE		18a. PAYMENT WILL BE MADE BY CODE 00511	
MA-CHIS LOWER CREEK INDIAN TRIBE ENTERPRISES Attn: James Wright 249 County Road 377 Elba AL 3632		OR for EMCBC U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 5777 Oak Ridge TN 37831		TELEPHONE NO 2024951444	
17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER			18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED SEE ADDENDUM		
19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES			21. QUANTITY	22. UNIT
	Tax ID Number: 20-2786262 DUNS Number: 360613710 IGF::OT::IGF RFID Task Order Accounting Info: Fund: 00911 Appr Year: 2015 Allottee: 33 Report Entity: 490801 Object Class: 25102 Program: 1721310 Project: 0000000 WFO: 4900221 Local Use: 0000000 Period of Performance: 05/06/2015 to 11/30/2015  Continued ... <i>(Use Reverse and/or Attach Additional Sheets as Necessary)</i>				
25. ACCOUNTING AND APPROPRIATION DATA See schedule				26. TOTAL AWARD AMOUNT (For Govt. Use Only) \$30,440.75	
27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4, FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDA			ARE ARE NOT ATTACHED.		
27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4, FAR 52.212-5 IS ATTACHED. ADDENDA			ARE ARE NOT ATTACHED.		
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED.			29. AWARD OF CONTRACT: OFFER DATED YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:		
30a. <b>Exemption 6</b>			31a. UNITED STATES OF AMERICA / SIGNATURE OF CONTRACTING OFFICER <b>Exemption 6</b>		
30b. NAME AND TITLE OF SIGNER (Type or print) Dewayhnc Carson, Contract Manager		30c. DATE SIGNED 6 May 2015	31b. NAME OF CONTRACTING OFFICER (Type or print) Suzanne W. Hunt		31c. DATE SIGNED 5/7/15

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
00001	Modify the TRANSCOM infrastructure to allow for the discrimination between multiple binary feeds in order to simultaneously support the RFID and the OSRP data feeds, thus reintegrating the ARG-US RFID system with the TRANSCOM infrastructure.				30,440.75

32a. QUANTITY IN COLUMN 21 HAS BEEN  
 RECEIVED     INSPECTED     ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: \_\_\_\_\_

32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE      32c. DATE      32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE      32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE  
 32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE

33. SHIP NUMBER      34. VOUCHER NUMBER      35. AMOUNT VERIFIED CORRECT FOR      36. PAYMENT      37. CHECK NUMBER  
 PARTIAL     FINAL       COMPLETE     PARTIAL     FINAL

38. S/R ACCOUNT NUMBER      39. S/R VOUCHER NUMBER      40. PAID BY

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT      42a. RECEIVED BY (*Print*)  
 41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER      41c. DATE      42b. RECEIVED AT (*Location*)  
 42c. DATE REC'D (*YYMMDD*)      42d. TOTAL CONTAINERS

**SECTION B  
 SUPPLIES OR SERVICES AND PRICES/COSTS**

**B.1 TYPE OF TASK ORDER (T.O.) - ITEMS BEING ACQUIRED**

**Integration of DOE-PCP/Argonne RFID System with TRANSCOM:** This is a Firm Fixed Task Order for the modification of the TRANSCOM infrastructure to allow for the discrimination between multiple binary feeds in order to simultaneously support the RFID and the OSRP data feeds, thus reintegrating the ARG-US RFID system with the TRANSCOM infrastructure. The Contractor shall be responsible for planning, managing, integrating, and executing the work as described in Section C, Performance Work Statement (PWS). The Contractor will provide qualified personnel, equipment, materials and facilities to perform all work necessary to complete the modification. All work will be performed in complete compliance to meet the requirements established in this contract. The Contractor shall furnish all personnel, facilities, equipment, materials, supplies, and services (except as furnished by the DOE) and otherwise do all the processes necessary for performing in a safe, efficient, and effective manner. This work shall be performed under CLIN 00009, System Design Changes/Upgrades in accordance with Section C.09, Indefinite Delivery/Indefinite Quantity (ID/IQ) contract DE-EM0002903.

**B.2 CONTRACT LINE ITEMS (CLINs)**

<b>T.O. CLIN</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit of Measure</b>	<b>Unit Price</b>	<b>Extended Amount</b>
001	ID/IQ CLIN 00009 System Design Changes/Upgrades in accordance with Section C.09.	1	LS	\$ <u>30,440.75</u>	\$ <u>30,440.75</u>
	<b>Total T.O. Amount</b>				<b>\$ 30,440.75</b>

## SECTION C PERFORMANCE WORK STATEMENT

### 1. BACKGROUND:

TRANSCOM, a DOE asset, tracks high-visibility shipments with near 100% reliability nationwide 24-hours per day and interacts with their clients using a secured web application. The radio frequency identification (RFID) system, called ARG-US and developed by the DOE Packaging Certification Program (PCP) staff at Argonne National Laboratory, monitors the state of health of individual containers continuously and provides alarms when triggered. The project described in this SOW is to reintegrate the Argonne-developed PCP RFID and Omnitrac's MCP200 interface into the TRANSCOM infrastructure so that the full capabilities of TRANSCOM can be utilized along with RFID to enhance safety and security of the nuclear materials transport.

The Packaging Certification Program (PCP) of the U.S. Department of Energy (DOE) Environmental Management (EM) Office has developed a radio frequency identification (RFID) system for the management of nuclear materials during storage and transportation. The system, developed by the PCP team at Argonne National Laboratory (ANL), continuously monitors the state of health of individual containers and provides alarms when triggered. RFID features consist of hardware (sensor tags, fixed and handheld readers, seal integrity sensors, and enhanced battery management), and software (an application interface for local and remote web application and database management). In July 2010 the DOE/CBFO Contracting Officer issued a task order award to Ma-Chis to modify the TRANSCOM version 2.0 system; integrate RFID alerts and display an RFID link on the TRANSCOM webpage for those shipments that employed RFID monitoring. This task was completed in 2010 and the requirement and design for integration of RFID alerts was included in the planning for TRANSCOM version 3.0. Consequently, TRANSCOM 3.0 was developed to work with data from an RFID device, and the deployed version integrated the features in accordance with the documented requirement and design, and was tested and working as of deployment in 2012.

The existing integration is based on an RFID alert that sends text data through Qualcomm Qtracs (now Omnitrac's), where the RFID device was connected to an Omnitrac's transponder terminal kept in the vehicle. Data was transmitted as ASCII text using a standard message format. The TC Data Hub, a custom interface between Omnitrac's and TRANSCOM, would look at all the Omnitrac's messages for the embedded tag " !RF! " located at position one. If the Tag was there the data was sent to software that would parse, interpret, and act on the data in TRANSCOM.

Following the 2012 deployment of TRANSCOM Omnitrac's has upgraded their transponder hardware and attaching devices via serial connections is no longer supported. The connection on the Omnitrac's new device does not support using ASCII messages and everything must be sent using a binary encoded format. The TC Data Hub was developed with the ability to receive binary messages in support of the Offsite Source Recovery Program (OSRP). The use of Binary at the time was not considered to be the standard for devices connected to Omnitrac's. The programming methodology

incorporated into the TC Data Hub is specific to the OSRP data feed. Consequently, the TC Data Hub expects that all binary traffic will be OSRP data.

**2. SCOPE OF WORK**

The Contractor will be responsible for the modification of the TRANSCOM infrastructure to allow for the discrimination between multiple binary feeds in order to simultaneously support the RFID and the OSRP data feeds, thus reintegrating the ARG-US RFID system with the TRANSCOM infrastructure.

**3. SCHEDULE AND DELIVERABLES**

The Ma-Chis/SAIC team will not begin performing work until the DOE Contracting Officer (DOE/CO) issues a notice to proceed on each milestone.

	<b>Deliverable</b>	<b>Timeline</b>	<b>Cost</b>
1.	<b>Phase I – Design &amp; Planning</b> <ul style="list-style-type: none"> <li>◦ Develop a complete design</li> <li>◦ Update System Requirements Specification</li> <li>◦ Update System Design Document</li> <li>◦ Deliver documents to DOE/CO for approval.</li> </ul>	45 Days from initial award	\$Exemption 4
2.	<b>Phase I – Design &amp; Planning</b> <ul style="list-style-type: none"> <li>◦ Develop a System Development Plan</li> <li>◦ Develop a Testing and Acceptance Plan</li> <li>◦ Deliver plans to DOE/CO for approval.</li> </ul>	15 Days from design approval and notice to proceed on milestone	\$Exemption 4
3.	<b>Phase II – Development and Testing</b> <ul style="list-style-type: none"> <li>◦ Update Database Triggers</li> <li>◦ Update TC Data Hub</li> <li>◦ Update Front End for Alerts</li> <li>◦ Perform Alpha Testing</li> <li>◦ Perform Regression Testing</li> <li>◦ Perform Beta Testing</li> <li>◦ Perform Security Testing</li> </ul>	TBD <sup>1</sup> , no later than 45 days following DOE/CO notice to proceed on milestone	\$Exemption 4
4.	<b>Phase II – Deployment</b> <ul style="list-style-type: none"> <li>◦ Deploy modifications to Production system</li> </ul>	TBD <sup>1</sup> , no later than 10 days following DOE/CO notice to	\$Exemption 4

	<b>Deliverable</b>	<b>Timeline</b>	<b>Cost</b>
	<ul style="list-style-type: none"> <li>◦ Deploy modifications to COOP</li> </ul>	proceed on milestone	
5.	<b>Phase II – Documentation</b> <ul style="list-style-type: none"> <li>◦ Update SRS and SDD based on deployed as built</li> </ul>	No later than 30 days following DOE/CO notice to proceed on milestone deployment	\$Exemption 4
<b>Total Payments:</b>			<b>\$30,440.75</b>

*Note: <sup>1</sup>The system development plan will drive the detailed WBS schedule.*

**SECTION D**  
**PACKAGING AND MARKING**

Section D of the ID/IQ Basic Contract is applicable in its entirety.

**SECTION E**  
**INSPECTION AND ACCEPTANCE**

Section E of the ID/IQ Basic Contract is applicable in its entirety.

**SECTION F**  
**DELIVERIES OR PERFORMANCE**

Section F of the ID/IQ Basic Contract is applicable in its entirety and is hereby incorporated by reference. Additional Section F clauses related to this task order are listed below:

**PERIOD OF PERFORMANCE:**

See Schedule under Section C. Period of Performance is a total of 145 calendar work days for completion of Phase I and Phase 2. Due to days needed for Government review/approval time, a Notice to Proceed will be issued for each phase and the period of performance will be calculated for actual days worked.

## SECTION G CONTRACT ADMINISTRATION DATA

Section G of the ID/IQ Basic Contract is applicable in its entirety. The specific Section G clauses of the ID/IQ Basic Contract applicable to this task order are listed below and are hereby incorporated by reference:

### G.1 GOVERNMENT CONTACT FOR TASK ORDER ADMINISTRATION

The Contractor shall use the DCO at the address provided as the point of contact for all administrative matters regarding the task order, with the exception of technical matters. The DCO's name and address is as follows:

Designated Contracting Officer – Suzanne Hunt  
U. S. Department of Energy  
Carlsbad Field Office  
4021 National Parks Highway  
Carlsbad, NM 88220

Ph: (575) 234-7525  
Email: [suzanne.hunt@cbfo.doe.gov](mailto:suzanne.hunt@cbfo.doe.gov)

The Contractor shall use the COR at the address provided as the point of contact for all technical matters. The COR's name and address is as follows:

Contracting Officer Representative – Andy Walker  
U. S. Department of Energy  
Carlsbad Field Office  
4021 National Parks Highway  
Carlsbad, NM 88220

Ph: (575) 234-7407  
Email: [andy.walker@cbfo.doe.gov](mailto:andy.walker@cbfo.doe.gov)

Specific duties and responsibilities of the COR are those delegated in the Contracting Officer's Representative Delegation for this task order and listed under the Technical Direction clause 952.242-70 in Section H of the Basic ID/IQ contract.

### G.2 POINT OF CONTACT FOR INVOICES

Inquiries regarding the status of an invoice should be directed to the Oak Ridge Financial Center at (888) 251-3557, [orfscmail@oro.doe.gov](mailto:orfscmail@oro.doe.gov), web site: [https://orfsc.oro.doe.gov/payment\\_services/contactsl.htm](https://orfsc.oro.doe.gov/payment_services/contactsl.htm),

**SECTION H**  
**SPECIAL CONTRACT REQUIREMENTS**

Section H of the ID/IQ Basic Contract is applicable in its entirety and is hereby incorporated by reference.

**SECTION I**  
**CONTRACT CLAUSES**

Section I of the ID/IQ Basic Contract is applicable in its entirety and is hereby incorporated by reference.

**SECTION J**

**LIST OF ATTACHMENTS**

Section J of the ID/IQ Basic Contract is applicable in its entirety and is hereby incorporated by reference.