STC Support of CBRN Testing at Dugway

In the heart of Utah’s West Desert, U.S. Army Dugway Proving Ground (Dugway) performs developmental and operational testing of chemical/biological (CB) and nuclear (N) defense equipment before it is fielded to warfighters. Dugway offers a “test tube to battlefield” suite of test capabilities that evaluates equipment effectiveness in laboratory, chamber, and field trials in realistic operating conditions. Data collection from that testing is primarily carried out by Dugway Data Services Team (DDST), for which STC is the prime contractor. Contract employees perform essential test support functions, from test inventory tracking to data collection to test incident reporting.

Currently utilizing Dugway’s extensive capabilities and expertise is a program that looks to enhance warfighters’ ability to identify CBRN (Chemical, Biological, Radiological, Nuclear) threats and determine protection levels needed to work in sensitive sites. Dugway’s part in the program is to evaluate equipment before it is fielded to warfighters.

STC has Certified Welding Inspectors (CWI)

In effort to further develop STC’s fabrication, design, and engineering capabilities, Mr. Eric May and Mr. Matt Stearman have taken and passed the exam to become Certified Welding Inspectors (CWI). We would like to recognize their efforts and dedication in pursuing this certification and offer them our congratulations for this achievement. Congratulations!

As STC pursued our welding program last fall, we recognized the need to have CWIs as part of developing a comprehensive program. During the welding certification process, we contracted a CWI with whom to work. This led to the achievement of certified welding procedures and qualified welders, but did not allow us to cite a CWI on staff. We now have two CWIs on staff, and they are currently identifying new procedures that will help improve our welding program. The certification process was neither easy nor quick and took a great deal of dedication. Matt and Eric spent a lot of their own time studying and preparing for the certification exam. They immersed themselves into the effort to successfully pass the exam, and spent a week attending an eight hour a day course. The course was in Denver, Colorado in January 2013, followed by an eight hour exam. Based on the CWIs we’ve spoken with, a large number of welders who take the exam do not pass the first time they take it. Matt and Eric passed on their first attempt, and as a result, STC has two new CWIs.

STC’s new CWIs are now excited about putting their certifications to work and are currently developing welding procedures for Aluminum and Chrome-Moly. This new capability can be cited both individually and collectively along with our excellent welding qualifications. Additionally, this capability will more readily allow us to pursue new certifications for other materials and will provide STC with the ability to more quickly respond to customer needs. Having CWIs on staff will also provide us with an ability to visually inspect our welds to provide a level of quality assurance we didn’t previously have. The ability to provide a better level of quality

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STC Education Outreach

Since the early 1990s, former professor at both European and American Universities, and program manager of the Science and Technology International Education Program (www.STIEP.org), Dr. Amar Choudry has provided opportunities to motivate graduate students in Europe to conduct internship research on diverse aerospace topics at different U.S. research facilities. These topics range from wake vortex studies to orbital debris management. Working through Science and Technology Corporation (STC), STIEP has provided over 120 research internships, with approximately 4–6 interns per year. The program’s philosophy aims to rectify the reality that talented people can be found anywhere in the world, but opportunities to advance and motivate those talented few are not as available or accessible.

As reported in the NASA Research Park Post (Spring 2012), STIEP facilitated research internship opportunities for students from Universities in Mexico, Singapore, Spain, France, and the Netherlands. This Spring 2013, eight more students graduated from the program. The STIEP program was especially proud of three students who were selected by their mentors to continue their research and were provided positions at NASA. In addition to their research, STIEP encourages the students to become active in their local community where they intern by volunteering at local events or education outreach; for example, the students helped provided organizational support for local events held in the Bay Area, such as the Silicon Valley Space Business Roundtable and the LunarCubes workshop in Palo Alto, California. In 2012, the students participated in local education outreach in San Jose high schools and middle schools, along with other NASA Ames volunteers.

Sponsored through STC’s STIEP initiative, STC’s Chief Scientist, Dr. Mark Schoeberl and the University of Maryland, Baltimore County (UMBC), Professor Vanderlei Martins, developed a pico-satellite named QubScout. QubScout is a prototype mission – continued on page 3 (see STC EDU)

– CBRN (Continued from page 1) set-up and take-down alone would quickly become a nightmare if they didn’t maintain constant awareness. Batteries, gasses, sensors, and other items are meticulously monitored. Add to that reams of collected data along with detailed reports of testing irregularities, and assisting in Dugway’s chemical laboratories becomes a job requiring serious focus and dedication.

The recorded test data is the most critical piece of Dugway’s testing for this or any other program. Department of Defense program managers use the data to determine the usability of tested equipment. Each SUT is tested in prescribed environmental conditions, and backup data have to be recorded during test set-up to ensure that the appropriate conditions are met before testing can begin. Ms. Castagno and Ms. McAfee monitor the test environment during set-up, keeping detailed logs to ensure testing validity.

Once testing has begun, Ms. Castagno and Ms. McAfee record test data for each SUT in a given test trial. The individual sets of collected data for each SUT are called “detection opportunities,” up to six of which can occur during a given test trial. All of these recorded data are electronically documented as well as stored in hard copy.

“I don’t have any more room in the office to store more binders of collected data,” says Ms. Castagno. “There are so many!”

Yet while the job may at times seem taxing, Ms. Castagno and Ms. McAfee try to keep what they do in perspective, recognizing that Dugway’s mission and the testing they support ultimately serves to protect the U.S. armed forces.

“The most important thing we have to remember as we do our jobs is that these detectors are going to be used in the field,” Ms. Castagno says. “Our warfighters are going to be using them. You have to see the big picture.”

SECURITY CORNER

Protect Mobile Devices

– Lock device via password; set it to automatically lock after a certain time period
– Install antivirus protection
– Update operating system
– Update applications regularly
– Backup data
– Turn off Wi-Fi, location services, and Bluetooth when they are not in use
– Avoid texting or emailing personal information
– Log out of banking/shopping sites instead of closing the browser
Mellor/STC TOCDF Effort Winds Down

Reductions-in-force (RIFs) on the Tooele Chemical Agent Disposal Facility (TOCDF) Project thus far in Closure have affected personnel in nearly every department; but none has seen a greater impact than the Battelle laboratory and monitoring subcontractor group – Mellor Engineering and Science Technology Corporation (Mellor/STC). On Thursday, 28 March 2013, 19 more employees finished their jobs, leaving only four remaining Mellor/STC people on site until sometime in June 2013, to assist Battelle with the last GA/Lewisite laboratory work and property disposition. Managers on Thursday, 28 March 2013, hosted a luncheon for the latest group of departing workers, also inviting some former workers back who still are working in Utah. Mr. Steve Freudenberger, STC Closure Laboratory and Monitoring manager, acknowledged RIFs are difficult and emotion-filled, but he says Mellor and STC people are proud of their accomplishments at the Sample Analysis Facility (SAF), and earlier, at the CAMDS laboratories, under contracts dating back to 1987. Mr. Freudenberger said, “We’ve seen a project that’s been around a long time; that did a lot of work for the Army and the demil industry. To finally see that to its conclusion is rewarding. …We’ve had a really good record here. Our safety performance has been outstanding. We haven’t had a recordable injury in more than five years.” Mr. Freudenberger said CAMDS closure already was being planned when he first arrived on site in 1989, which made it a challenge to hire people amid such uncertainty. Over the years, however, many Mellor/STC people launched successful careers on this site. Mr. Freudenberger said at last count, some 50 employees had transferred to TOCDF jobs with URS and Battelle.

FOREIGN TRAVEL

STC must submit for approval to our insurance carrier all travel to countries that are on the sanctions list. The current list of sanctioned countries is below, but subject to frequent change. Without prior approval, the employee will be traveling without any STC-provided insurance.

- Afghanistan
- Belarus
- Burma/Myanmar
- Cote d’Ivoire (Ivory Coast)
- Cuba
- Democratic Republic of Congo (DRC)
- Egypt
- Eritrea
- Federal Republic of Yugoslavia
- Iran
- Iraq
- Lebanon
- Liberia (former Liberian Regime of Charles Taylor)
- Libya
- North Korea (Democratic People’s Republic of Korea)
- Republic of Guinea-Bissau
- Republic of Guinea (Guinea-Conakry)
- Serbia
- Somalia
- Sudan
- Syria
- Tunisia
- Yemen
- Zimbabwe

NEW CONTRACTS

- STC completed subcontract negotiations with SAIC for the PAIS V subcontract, which is now a multiple-award IDIQ task order contract. To date we have submitted task order proposals, awarded one task order, and received notice that two other task orders were won by the SAIC/STC team and will be awarded to STC shortly.
- October 2012 – STC was on the winning team with Sev1Tech for the DHS TABSS contract. This is a five year, IDIQ task order contract.
- March 2013 – STC was on the winning team with ACT1 for the JPEO OPETS contract.
- March 2013 – STC became a subcontractor to Mellor Engineering for Agent Monitoring and Analytical Support Services in Libya. Mr. Steve Freudenberger will be supporting this effort through January 2014.
- STC and Vision Machine entered into two BPAs, each with the other, for welding and fabrication work. We also won a BPA with the U.S. DOT Maritime Administration for Welding Services, James River Fleet. This was an initial one year award and is renewable up to five years.
- STC continues to be awarded additional delivery orders under our NOAA Ancillary and Engineering BPAs in both Boulder, CO and NOAA NESDIS.
- Recently STC has been awarded new contracts and subcontract valued at over $3M (not to include the IDIQ subcontracts) from our Government and commercial/prime customers, with aggregate orders totaling over $1.9M under our GSA IT and PES contracts.

– STC EDU (Continued from page 2)

assurance has directed us to our next focus in regards to welding, which is in the realm of quality inspections. Our attention will be aimed towards Non-Destructive Examination (NDE), which includes dye penetration testing (PT), magnetic testing (MT), and ultrasonic testing (UT). This potential would further STC’s comprehensive welding program and continue our efforts to develop the best fabrication, design, and engineering group on the East Coast. This effort has taken another step forward with the CWI certifications that Eric and Matt have achieved. Again, Congratulations!

– STC CWI (Continued from page 1)
HONORS and AWARDS

In 2012, STC improved its Milestone Loyalty Service Appreciation Program to award full-time and part-time employees for their loyalty of service to STC on reaching 3 years, 5 years, and every 5 years of service thereafter. Awardees are given the opportunity to select an award item out of the selection of awards available for the Awardees’ milestone. The Awards are presented to Awardees at a luncheon held in their honor.

25 YEAR EMPLOYEES

- Delores Shackelford
  March 1987
- Chand Deepak
  August 1988
- Tonda Winston-Parham
  August 1988
- Paul D. Try
  May 1988

20 YEAR EMPLOYEES

- Merel D. Meyer
  March 1992
- Wesley D. Ercanbrack
  June 1992
- Joseph A. Traino, III
  July 1992
- Richard M. Gilligan, Jr.
  September 1992
- Carol Lightner
  March 1993
- John M. Forsythe
  June 1993
- Thomas H. Vonder Haar
  June 1993
- Dee M. Vonder Haar
  June 1993

15 YEAR EMPLOYEES

- Richard W. Travis
  June 1997
- Elyse A. Webb
  October 1998
- Grafton M. Apple, Jr.
  January 2002
- Samir V. Deshpande
  April 2002
- David B. Karnes
  May 2002
- Kent S. Billings
  September 2003

10 YEAR EMPLOYEES

Not Pictured: