

Volume 3, Issue #11
November 2011

THE ENGINEERING EDGE

EDGEWOOD CHEMICAL BIOLOGICAL CENTER



ECBC ENGINEERING
Design→Build→Test→Support

SPECIAL ECBC-ROCK ISLAND ISSUE

Rock Island Arsenal Welcomes First Army Headquarters, Gains a Three-Star Command and is Home to Seven General Officers

Rock Island Arsenal (RIA) demonstrates its ability to adapt to change by contributing to the Army's continuing efforts to reshape how the Army trains, deploys, supplies, equips and garrisons military personnel.

Recently, the Army converted First U.S. Army Headquarters into the single Headquarters for oversight of Reserve and National Guard mobilization and demobilization. To support this conversion the Army decided to relocate First Army to Rock Island Arsenal in Illinois, a more central location. Rock Island Garrison Manager Joel Himsl shared his insights on this and some significant changes that have occurred on Rock Island.

"The headquarters of First Army provides a totally new and different mission set to the Arsenal," Himsl said.

(Continues on page 12)



ABOVE: On July 21, 2011 Lt. Gen. Mick Bednarek, First Army Commanding General, spoke to approximately 400 guests during the uncasing ceremony. First Army relocated to Rock Island, IL under 2005 BRAC process. (U.S. Army photo by Tony Lopez)

Message from Nannette Ramsey, ECBC-RI Site Manager and Associate Director of Engineering



Greetings,

The ECBC Rock Island site is honored to be the focus of another edition of the Engineering Edge. It is hard to believe an entire year has passed since last year's November issue that highlighted activities at our site. Over this past year, we have all been faced with many new challenges as we identify ways to enhance and optimize our support to customers and the Warfighter. The articles in this issue illustrate the efforts of just a few successes in ECBC's many endeavors to meet our customers' ever-changing needs.

The bond that connects Rock Island to our organization's headquarters in Maryland and to the U.S. Army Research, Development and Engineering Command has never been stronger as we strive to support the Warfighter and our shifting customer base. Working together on a wide variety of projects from information technology projects to CBRN commodity engineering, design and testing projects has been very rewarding. I am proud of being a part of the ECBC workforce that provides the best customer support possible, always maintaining the Soldier focus. By continuously developing and refining our processes and procedures, ECBC ensures delivery of innovative and positive results in the rapidly evolving chemical, biological, radiological and nuclear environment.

I hope you find this issue of the Engineering Edge beneficial. Don't hesitate to reach out to the team members mentioned in the articles.

I would like to personally thank the dedicated workforce for their outstanding effort during the FY11. As I look toward the next year and the upcoming challenges we will all face, I am certain we will be able to meet those challenges and I look forward to sharing those successes in FY12.

Respectfully,
Nannette Ramsey

To access the electronic version of this newsletter visit:
<http://www.ecbc.army.mil/news/ENG/>



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This newsletter was published through the Balanced Scorecard.

For article suggestions, questions or comments please contact Ed Bowen at edward.c.bowen8.civ@mail.mil.



Email Address Change for the Chemical Biological Radiological Nuclear - Information Resource Center (CBRN-IRC)

When you have a question regarding a CBRN item or program and do not know whom to ask, you can contact the CBRN-IRC to get the answer in a timely fashion. The CBRN-IRC has been designated by the Joint Program Executive Office for Chemical and Biological Defense (JPEO-CBD) as the single point of entry for all requests for information related to the Chemical and Biological Defense Program. Due to the current migration by the U.S. Army to a new enterprise email system, the email address for CBRN-IRC has been changed to cbn.irc@us.army.mil. This new address should be used for all email inquiries. You can also contact the CBRN-IRC by telephone at (309) 782-7309 (DSN 793). Our toll-free numbers are 1-800-831-4408 (U.S.A.), 0130810280 (Germany), or 0078-14-800-0335 (Korea). Our staff are on duty 24/7 to answer your call.



HR Tip of the Month: Employment Verification

Employment Verification is a Self Service My Biz tool allowing employees to email employment and/or salary information to an external organization (business, bank, credit union) directly from the Defense Civilian Personnel Data System via a secure internet.

For more information about your HR policies, please contact Engineering Workforce Management Representative **Sabre Harper** at ext. 5-2722.



Awareness: Veteran's Day

Veterans Day first came about when the first Armistice of World War I was signed on the eleventh day of the eleventh hour in the eleventh month. Later in 1954 Veterans Day made the change from being a day to honor world peace and just World War I vets and became a day to honor American veterans of all wars. Despite attempts at trying to make Veterans Day observed on a Monday, Veterans Day is still always celebrated on November 11, staying true to its original purpose.

true to its original purpose.

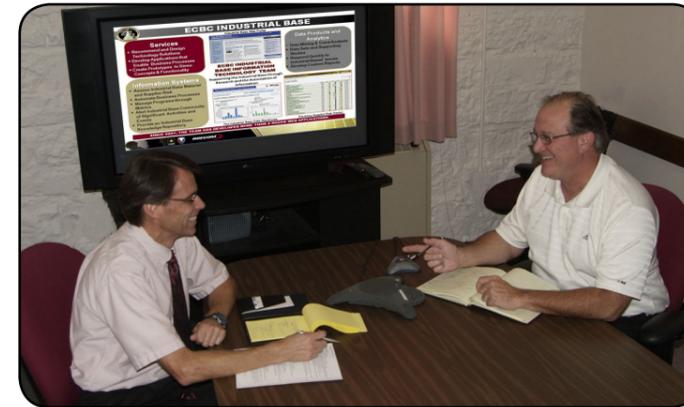
Every year, Arlington National Cemetery holds a parade and a wreath laying ceremony at 11 a.m. at the Tomb of the Unknown Soldier.

For more information about Veterans Day and Veterans Day events please visit: <http://www.va.gov/opa/vetsday/>



Safety Tip of the Month: Biological Medical Surveillance Manual

The ECBC Vaccination Manual has been updated to become the Biological Medical Surveillance Manual. The new manual has been expanded to include links to obtain forms needed for the Bio Personal Reliability Program, visitor risk assessments, the Special Immunization Program and respiratory protection. The manual also includes information sheets by the Department of Health and Human Services Center for Disease Control and Prevention on licensed vaccines.



ABOVE: (On left) Team Lead for IB Information Management Systems Steve Beck collaborates with (on right) Team Lead for the IB Assessment Functions Eric Hoover at a weekly meeting between the two team leads.

Industrial Base Analysis and Information Technology Teams Increase Customer Satisfaction Through Matrixed Communications

The Edgewood Chemical Biological Center Industrial Base (IB) Program provides a solid foundation for IB support to the Army Materiel Command's (AMC) and the Chemical, Biological, Radiological, and Nuclear (CBRN) Communities

The ECBC-RI IB Program gained significant capabilities in 2007 with the merger between the ECBC IB Team and the former U.S. Army Materiel Systems Analysis Activity IB mission at Rock Island Arsenal. Since then, the program has been steadily expanding and encompasses functional team capabilities with an integrated suite of IB Program services. Eric Hoover is the Team Lead for the IB assessment functions, and Steve Beck is the Team Lead for the IB information management systems.

"By combining our resources, customers are able to tap into a single source for comprehensive turn-key IB solutions. Many of our customers, including AMC, the CBRN communities, the Joint Program Executive Office for Chemical and Biological Defense (JPEO-CBD), as well as other customers, have already capitalized on our capabilities," Hoover said.

The AMC and JPEO-CBD IB missions provide the ECBC-RI IB Teams with the assets to incorporate a broad and in-depth spectrum of data collection methodologies. This provides our customers visibility of IB risks and issues and supports their decision-making process. As a result of the association with AMC, the IB Teams have a matrix organizational relationship with the Defense Contract Management Agency's Industrial Analysis Center (DCMA-IAC), Defense Logistics Agency (DLA) and other subordinate AMC IB-centric organizations. The IB Teams are able to reach out to resources not readily available to other IB organizations. This ability plays a critical role in IB efforts when developing an assessment or technology solution that involves a Joint Department of Defense (DoD) IB perspective – not just a single Service's.

Likewise, the synergistic matrix influence is readily apparent when the IB Teams conduct studies, analyses, market research, assessments or other research tasks. Being able to reach out to DCMA-IAC and DLA enables the teams to construct a comprehensive assessment integrating the various impacts and influences of an entire industrial sector, not just a single organization.

As an integrated organization, both teams are able to collaborate to deliver information and technology tools that enable actionable decision-making and effective solutions to industrial base issues. An example of this capability surfaced recently when the teams were tasked by the Office of the Assistant Secretary of the Army for Acquisition, Technology, and Logistics (OASA(ALT)) to assess the impact of DoD program (Continues on page 10)

In the Army Now: Chow Halls

The Engineering Edge features a regular series titled "In the Army Now," featuring information pieces addressing frequently asked questions about Army culture and structure. In this month's "In the Army Now," we look at the Army's "chow halls."

"Chow halls" are the most common name for the Army's dining facilities, which are free for Soldiers who are enlisted and live in the barracks. Most chow halls offer four meals per day (breakfast, lunch, supper and a "midnight meal"). There are even some chow halls that are open 24 hours a day.

Not too many years ago, meals consisted of one or two entrees, plus veggies and one or two dessert items. Breakfast consisted of scrambled eggs, cereal, bacon and toast. There were few choices, very little in the way of healthy choices and no junk food. Those days are long-gone.

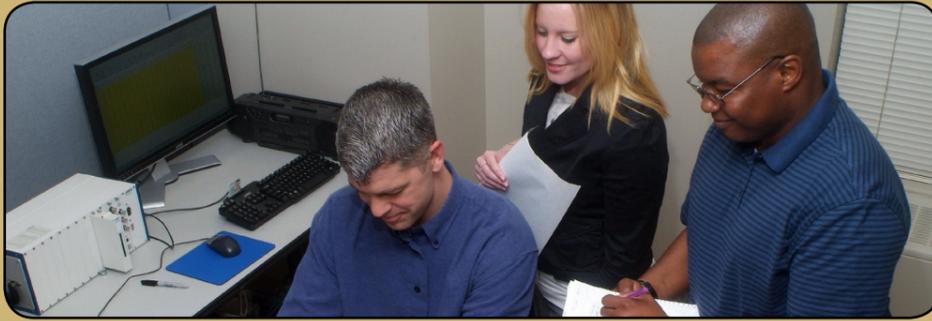
Most dining facilities now give the choice of a full meal with two or more entrees or any fast-food (burgers, hot dogs, sandwiches, fries, chicken) that a Soldier might want. For the health conscious, there is normally a "healthy-heart" menu as well as a salad bar. Desserts are usually a choice of fruits, several styles and flavors of cakes, ice cream, Jell-O®, puddings, pies and more. For breakfast, one can choose anything between a small fruit cup to a full-fledged, made-to-order omelet with all of the side dishes. Take out cartons are freely available in many chow halls, and some dining facilities even have drive-through windows.

(Continues on page 9)



ECBC Emphasizes Production Quality Management

The Edgewood Chemical Biological Center places a strong emphasis on quality to ensure that reliable Chemical and Biological Defense Equipment (CBDE) is provided to the Warfighter. The Product Quality Management (PQM) Team at Rock Island performs product assurance and management for CBDE and supports life-cycle acquisition and sustainment of those products. The PQM Team provides input in the procurement process to enforce the technical requirements and specifications developed by our engineers and works with manufacturers to ensure compliance with contractual requirements.



While not a very glamorous role, QA is an essential part of ECBC's missions to support TACOM Life Cycle Management Command (LCMC) in providing the right products to the user when needed. The PQM Team works closely with Item Managers, Engineers, Packaging Specialists, Weapons System Managers and Contract Specialists in a teaming effort to ensure that customers receive the specified items.

"The QA process supports the acquisition of CBDE by ensuring the technical specifications and test criteria are implemented

(Continues on page 8)

ABOVE: PQM Lead Adrian Henry works with TACOM Item manager Kara Ruch while Lab Technician Marvin Wink performs a First Article Test review on a CBRND item.

ECBC-Rock Island's Hung Pham Talks ISO: ISO 9001:2008 Certification for Performance Improvement

International Organization for Standards (ISO) 9001 provides an excellent framework for establishing business processes and procedures to help an organization to achieve better performance in its mission, regardless of the products or services that it provides to the customers. ECBC-Rock Island (ECBC-RI) has implemented a Quality Management System (QMS) that complies with the ISO 9001:2008 standard and has been ISO-certified since 2005.

Rock Island's Quality Assurance Chief, Hung Pham, takes the lead in maintaining ECBC-RI's ISO 9001 registration as the Management Representative for the Site.

To keep ECBC-RI quality-focused, external third-party compliance audits are conducted annually.

"It takes a dedicated effort to achieve and maintain a certification, and since our registration approval six years ago, we've had every component of ECBC-RI processes verified and improved as necessary," Pham said.

Customer feedback is an important element of an ISO-certified QMS. An annual customer survey is conducted, from which the results are carefully analyzed and reviewed at management meetings. When issues are identified, the customer will be contacted to address any improvement opportunities. In many cases, process changes have been implemented to enhance performance in meeting the customer requirements.

ISO 9001 standards can also be used in the acquisition process, imposing higher-level quality requirements on potential suppliers.

"Manufacturing processes can vary between contractors, but if their quality systems are compliant with ISO, we have a level of assurance that the products provided to the Government will be of acceptable quality. Conversely, if the contractor's quality system does not meet ISO standards, the Government may waste a



great deal of time and money with the contract," Pham said.

Pham noted that there have been incidents where a prime contractor was ISO compliant with the contract, but its subsidiary that was manufacturing the product was not in contract compliance with the prime's ISO QMS.

"In cases like this, the end user suffers. The failure of the subsidiary to meet technical requirements resulted in a termination of the contract for non-conformance to the ISO and technical requirements of the contract," Pham said.

"Everything we do is centered on customer service and protecting the Warfighter by equipping them with the highest level of quality products possible. By implementing the ISO quality management standards in our processes as well as the suppliers' processes, we are able to achieve continual improvement in our objectives."

ECBC I&TST Offers Streamlined Time Management System

The Information and Technology Solutions Team (I&TST) has simplified the process of requesting and submitting vacation time and work schedules to the click of a button. The I&TST team develops, hosts and sustains the Time Management System (TMS). The Edgewood Chemical Biological Center's Engineering Directorate staff, in Rock Island, IL, and on a limited basis in Edgewood, Maryland has been using TMS 2.0, since February 2011. The system was also piloted at the Army Contracting Command-Rock Island site on July 2011.

The TMS application was initially developed to provide a way for employees and supervisors to track time and approvals using a single, organized, easy-to-access, online database. It has evolved to help coordinate, categorize and manage the various types of leave and provides a checks and balance for timekeepers and employees to be more efficient and accurate.

TMS is a Common Access Card (CAC) - controlled, effective way for employees to maintain daily work schedules, request time off, request travel and to view historical timekeeping actions. Before TMS employees coordinated all of these administrative tasks via email or hardcopy. The concept for a more efficient process and information system came about in 2005. TMS started out as a training project and has evolved and improved through the input and suggestions from its users.

Identifying the features of a clear, organized and consistent time management system was challenging. The system needed to allow supervisors to allow supervisors to view schedules and requests while reducing confusion, email traffic, and paperwork.

Following a briefing to Rock Island management, TMS 1.0 was fully instituted at Rock Island in November 2005. By May 2006, two teams in Edgewood, MD, adopted the system. The application expanded significantly when the 2.0 version launched with more functionality. In February 2011, TMS 2.0 launched at Rock Island site. (Continues on page 9)



ABOVE: The timeline illustrates the implementation and adoption of TMS.



Employee Spotlight: A conversation with General Engineer Nicki Freeze

In this month's Employee Spotlight, the Engineering Edge spoke with Rock Island

General Engineer Nicki Freeze to learn more about her role within the Engineering Directorate and how she's progressed through the Center over the past years.

Engineering Edge: What are your current job title and responsibilities?

Nicki Freeze: I am a General Engineer at Edgewood Chemical Biological Center in Rock Island, and I serve as the lead Technical Specialist for the surveillance of A12-managed assets. I work in conjunction with TACOM Life Cycle Management Command Surveillance teams to schedule and prioritize A12-managed chemical biological gear for shelf-life extension testing.

Some of my responsibilities include identifying and work-loading test labs, the lab certification process, identifying assets for set aside consideration, shipping test samples, recording new production lots (needed for future shelf life testing) and reporting extensions and failures to the fleet and field via the Joint Acquisition CBRN Knowledge System - Shelf Life Status Tool (JACKS-SLST) and Defense Logistics Agency's Quality Status List.

EE: How long have you worked for ECBC?

NF: I've only been at ECBC for four years, and I have spent that time conducting surveillance. I did work for the Joint Manufacturing and Technology Center at Rock Island Arsenal for three and a half years prior to coming to ECBC.

EE: What is something you look forward to about your work each day?

NF: What I like most about my job, other than the individuals I work with and the friends I have at ECBC, is the fact that my job and the results are tangible. I can count the number of lots we schedule for testing each year and see tangible progress against that schedule. I can see the number of assets that are tied to each of these lots and calculate the cost avoidance we are attaining by testing and extending lots rather than having to dispose of and buy anew. I also like that my job is cross-functional, and I get to work with several other teams at ECBC, such as Quality Assurance and Lab Certification teams, the Commodity Engineers and Configuration Managers, the individual test labs and individual services.

EE: What is a little known fact about you?

NF: I typically go by 'Nicki,' but my real name is 'Nicki' (pronounced Nickel). My mom's name is Penny.

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ABOVE: The Quad City, North Scott High School Senior, Sarah Riedel, presents her award-winning research project, "Stuffing the Genie Back into the Bottle: A Century of Diplomatic Efforts to Ban Chemical Weapons"

Emphasis on Education: Local Student's Award-Winning Research on Chemical Warfare Policy

The Edgewood Chemical Biological Center Rock Island site shared in Edgewood's commitment to education by inviting Quad City, North Scott High School Senior, Sarah Riedel, to present her award-winning research project, "Stuffing the Genie Back into the Bottle: A Century of Diplomatic Efforts to Ban Chemical Weapons," on August 10, 2011. Riedel's presentation was chosen to compete in a National competition. One-hundred twenty entries from across the country, Department of Defense (DoD) Schools, Guam, International School of Shanghai and American Samoa were in Riedel's division. She placed sixth in the 2011 Kenneth E. Behring National History Day Contest at the University of Maryland at College Park last June.

National History Day is an academic competition that challenges students to research, analyze and learn from the past while connecting to a yearly theme. This year's theme was: Debate and Diplomacy: Successes, Failures, and Consequences.

"The National History Day Program not only allows students to communicate their knowledge on a specific topic, it provides an opportunity for teachers, and in this case, the professionals at ECBC Rock Island, to learn from the student's in-depth research," said Chris Green, Riedel's teacher. "The opportunity to present to ECBC and other organization also provide insight to the student on how their educational lessons apply in the public and private sector."

Riedel's three-year research on chemical warfare began with research on Fritz Haber, often referred to as the "father of chemical warfare," when she learned about the first gas attack in World War I

(WWI).

"It shocked me to learn how chemical weapons were continually used, through history, despite a century of treaties banning them, and I wanted to learn more about it," Riedel said.

Irrespective of early attempts to ban chemicals weapons including the Hague Convention of 1899, their use was widespread in WWI. The Germans utilized chlorine gas against the French in the Second Battle of Ypres, unleashing the proverbial "genie in the bottle" and setting in **(Continues on next page)**

motion the development and use of chemical weapons by other countries without restraint or consequence. Their use continued, despite the 1919 Treaty of Versailles, which forbade Germany from manufacturing or developing chemical weapons. In 1922, Allied Powers at the Washington Armament Conference agreed to, but never ratified, the section of the treaty to prohibit chemical use.

Riedel admits that the greatest lesson she learned from this research project was "that chemical warfare is as much psychological, as it is physical."

"The use of chemical weapons is scary in and of itself. But the *threat* of using it is equally, if not more, terrifying," Riedel said. "In the wrong hands, chemical warfare has the potential to result in catastrophic events. I saw many shocking photos of disfigured children, images that represent millions of other children and the unforeseen consequences of chemicals used in war."

Resulting from Fritz Haber's industrial chemical research work developing and deploying chlorine and poisonous gases, many countries began using and creating massive chemical weapon stockpiles during WWI. This included: Germany's use of nerve agents in the 1930s; Italy's use of chemicals against Ethiopia in 1935; and Japan's use of chemical weapons against China in the 1930s. To this end, in 1925, the U.S. initiated the Geneva Protocol, which was stalled by opposition that prevented its adoption until 1974. Surprisingly, chemical warfare was used very little during World War II. However, during the Cold War, both the U.S. and U.S.S.R.'s use of nerve agents led to increased usage and stockpiling.

Even though chemical weapons were banned, the U.S. and other countries still put a focus on their use and protection from it into their defense plans; primarily to guard against the threat of chemical weapons use and the suspicion of countries that continue to stockpile. Chemical warfare continues, leaving toxic reminders through the devastating effects of Agent Orange and other chemical defoliants used in Vietnam in the 1960s and Iraq's use of chemicals against Iran in 1983.

Riedel's presentation and corresponding exhibit tell the whole story. Her presentation illustrates how the 1899 Hague Convention and the 1925 and 1974 Geneva Protocol failed to end the development or use of chemical weapons. Her research highlights how diplomatic efforts did not contain any provision to prevent the stockpiling of chemical weapons. In fact, it took two decades of efforts before the Chemical Weapons Convention successfully banned chemical weapons in 1993 incorporating into the agreement a statement to "not develop, produce, otherwise acquire, stockpile or retain chemical weapons." This agreement was implemented by an organization to oversee the destruction of chemical weapon stockpiles, efforts which continue to this day. ⚙️



ABOVE: Sarah Riedel's award-winning research project placed sixth in the 2011 Kenneth E. Behring National History Day Contest at the University of Maryland at College Park last June. Riedel spent three years researching chemical warfare.



Where in the U.S. is Rock Island Arsenal?

U.S. Army Garrison Rock Island Arsenal

Rock Island Arsenal is an active U.S. Army facility located on a 946-acre island on the Mississippi River. In 1969, the Arsenal was placed on the National Register of Historic Places. In 1989, the original Arsenal buildings were designated a National Historic Landmark.

Today, Rock Island Arsenal is our nation's largest government owned and operated arsenal.

ECBC Rock Island is one of over 50 units/tenants represented on the island, working to carry out the Arsenal's core values and dedication to achieve customer satisfaction through strategic alliances, partnerships and open communication.



Emphasis on Product Quality Management

(Continued from page 4) through the use of applicable contract clauses so that the products to be acquired can be produced correctly, expeditiously and at the lowest cost possible," Rock Island's Quality Assurance Chief, Hung Pham, said.

The PQM Team consists of Quality Assurance Specialists who are Acquisition-certified to Levels II and III. Additionally, the staff includes American Society for Quality-certified Lead Auditors, Quality Auditors and Quality Engineers. Team members possess more than 75 years of combined experience in quality assurance with extensive subject matter expertise in production quality management.



ABOVE: PQM Lead Adrian Henry (back), Engineer, Craig Bielema (center) and Technician Marvin Wink conduct PQM tests at the Rock Island site lab.

"The QA process supports the acquisition of CBDE ... so that the products to be acquired can be produced correctly, expeditiously and at the lowest cost possible." --Hung Pham

The PQM team members participate in Integrated Project Team meetings for the CBDE commodities being procured by TACOM LCMC. Other duties include working with the Configuration Control Boards; developing and verifying Procurement Package Inputs; and coordinating Defense Contract Management Agency (DCMA) production surveillance. The PQM team's structured approach and attention to details help to identify and prevent potential delays and mitigate risks and consequences of poor quality before they occur.

The PQM Team performs vigilant oversight during both pre-award surveys and post-award orientation conferences. The QA process incorporates a checks and balance system to ensure quality performance by the contractor. (Continues on page 11)

Shelf-Life Surveillance: Extension Testing of Chemical-Biological Defense Equipment and Components

Engineers of Edgewood Chemical Biological Center (ECBC) perform essential roles to manage the testing and shelf-life extension for the vast quantities of Chemical Biological Defense (CBD) equipment in the Department of Defense (DoD) inventory. ECBC surveillance and commodity engineers help to ensure that the management of testing and shelf-life extension of CBD equipment is performed in the most effective and timely manner.

A key center of shelf-life surveillance activities is the ECBC Shelf-Life Surveillance Office in Rock Island, led by Mr. Hung Pham. In his role as the Shelf-Life Engineer for the Engineering Directorate, Mr. Pham provides guidance and support for CBD shelf-life surveillance issues

"A systematic approach is critical in shelf-life surveillance because of the wide impacts on the Warfighter and users of CBD equipment and to assure that we make the best decisions in times of budget constraints." --Nicki Freeze

affecting DoD organizations. Ms. Nicki Freeze, another member of the office, serves as a senior surveillance engineer. She coordinates and performs a wide range of functions for surveillance of all shelf-life CBD equipment.

"All CBD equipment has a shelf-life designation code that specifies how the equipment will be managed in the supply systems throughout their life cycle," Pham said. "Most CBD equipment is coded as having an extendable shelf-life, which requires testing at set time intervals to assure that the equipment are still in issuable or usable condition."

The Shelf-Life Surveillance Office provides support to the JPEO-CBD Joint Acquisition CBRN Knowledge System (JACKS) Shelf-Life Status Tool (SLST) to ensure that the Warfighter can find the most accurate and up-to-date information on the shelf-life of their CBD equipment. Additionally, the office performs projects and special studies that address shelf-life surveillance issues.

Successful shelf-life surveillance requires the collaboration between the Joint Project Manager Offices, ECBC, TACOM LCMC, and JEAP throughout the product life cycle. This collaboration ensures that a Joint Service perspective is considered when recommending policies and establishing processes for surveillance and cyclical testing.

"A systematic approach is critical in shelf-life surveillance because of the wide impacts on the Warfighter and users of CBD equipment and assures that we make the best decisions in times of budget constraints," Freeze said. Freeze works closely with ECBC commodity engineers and TACOM surveillance personnel to plan and implement shelf-life testing to extend the shelf-life of hundreds of production lots for A12-managed CBD equipment.

When a CBD production lot is close to or has reached the expiration date, it is evaluated for possible shelf-life extension. If the decision is to test the lot, test samples are collected and sent to a certified lab that will perform testing on the items. The ECBC commodity engineers will analyze the test results and provide a technical decision on the shelf-life extension of the particular lot.

(Continues on page 11)



ABOVE: A close-up visual of the mounting of the 326 LVOSS on the M1151 HMMWV.

Focus on Value: Light Vehicle Obscuration Smoke System (LVOSS) Grenade Launcher Upgrade

The ECBC Sustainment Engineering Division was called into action by the Joint Program Manager, Reconnaissance and Platform Integration when the M1114 HMMWV was replaced by the M1151 HMMWV. A new version of the LVOSS was designed, the M327 LVOSS. The primary purpose of the LVOSS is to provide a smoke screen and/or riot control deterrent to assist Military Police Units in the performance of their duties.

The main challenge during the development of the M327 LVOSS was the lack of space to mount a discharger on the roof of the HMMWV. The ECBC engineers designed a bracket to hold the front firing discharger in front of the HMMWV windshield; the rear firing discharger was moved to the left rear shoulder of the HMMWV. Moving the rear discharger created a new challenge: the M1151 HMMWV incorporated more antennas than its predecessor model, and it was impossible to aim the dischargers in order to miss the antennas. A test plan was devised to identify the impact the smoke (Continues on page 12)

ECBC-RI's I&TST Offers Streamlined Time Management System

(Continued from page 5)

TMS 2.0'S FEATURES:

- Registration of employees work schedules
- Ability for employees' to request leave
- Ability for employees to request compensation time type
- Ability for employees to request travel approvals
- Dashboard layout for supervisors and employees
- Approval system for supervisors
- Timekeepers dashboard view
- Ability for timekeepers to accept requests



ABOVE: Members of the ECBC-RI Information & Technology Solution Team gather to collaborate on a project.

LEFT: The TMS 2.0 Screenshot illustrates its features and its intuitive user interface.

The feedback regarding TMS 2.0 has been positive. The ECBC I&TST team members identified requirements, evaluated improvements and delivered an effective product. Users can log-in to one system to review and manage their administrative information. TMS 2.0 streamlines the request and approval process for employees and supervisors.



It allows supervisors to view their entire team's schedules on one screen.

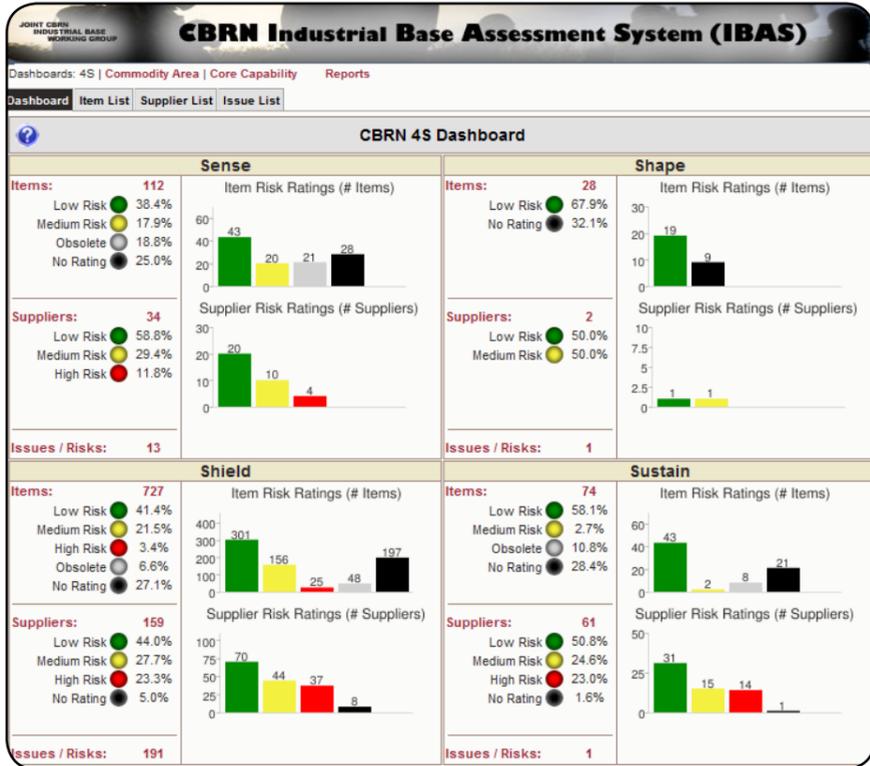
While no upgrade plans are in place at this point in time, the 2.0 system is adaptable and can be updated as improvements are identified and system requirements approved. The TMS 2.0 can be customized or branded for use by other non-ECBC organizations that may also require an easy-to-use work schedule, leave request and approval time management system.

In the Army Now: Chow Halls

(Continued from page 3) Other than a few exceptions (some military training centers, boot camp, while embarked on a vessel, while deployed, etc.), "Kitchen Patrol Duty" is a thing of the past. Most military dining facilities are now contract operations (although there are still plenty of military cooks around). One particularly interesting fact is that the military dining system is the number-one employer of disabled people in the United States.

For more information about Army dining facilities, or to check out the menu at the APG facility, visit the meal calendar or call (410) 278-3412.



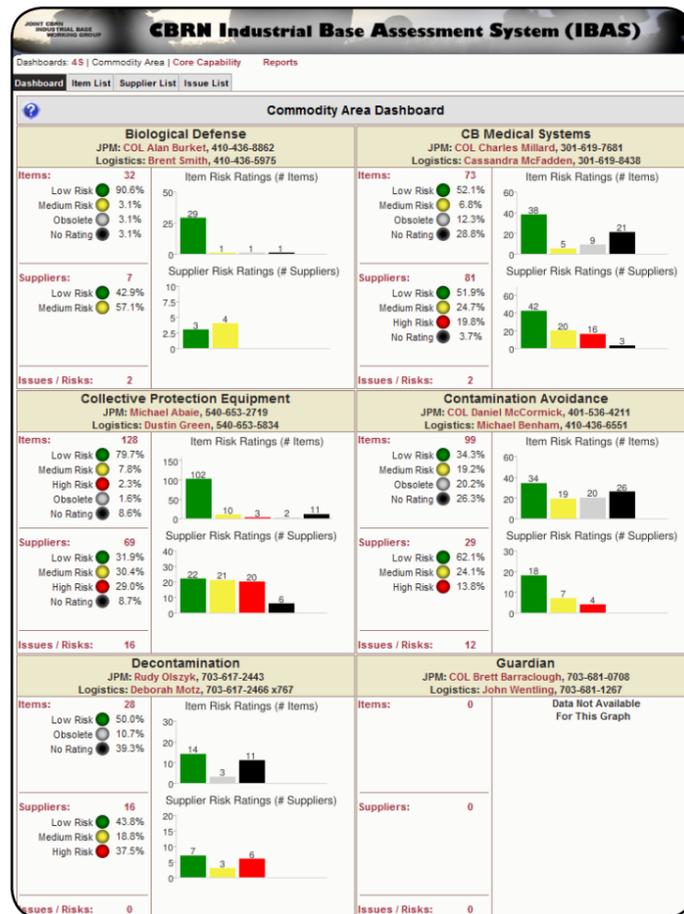


Industrial Base Analysis and Information Technology Teams Increase Customer Satisfaction Through Matrixed Communications

(Continued from page 3) eductions of the Ceramic Body Armor Industrial Sector. Key components of this assessment include planned acquisitions, procurements, Military Services requirements and contractor performance data. The teams showed their ability to access, capture and display critical information within a very concise window of time, allowing OASA(ALT) to visualize the risks facing this industrial sector and the ramifications of the program reductions and formulate risk mitigation plans to preserve the Ceramic Body Armor capabilities.

"Because of our unique position in the DoD IB community and our ability to create synergies among different organizations, our assessments can present a 'common operating picture' to leadership," Hoover said. "Another benefit we bring to the table is awareness of IB issues, future-state planning and program requirements, which are particularly important as the DoD continues to experience reductions in budgets and programs impacting the supporting IB and supply chains."

ABOVE & AT RIGHT: IBAS Dashboards, the CBRN 4S (top) and Commodity Area view (bottom). It is an example of the collaboration between the ECBC IB-AT and IB-IT teams and the ability to provide customized user-friendly access to data for decision support.



Illustrating the synergies for an effective and comprehensive IB information management solution is the Industrial Base Assessment System (IBAS) System.

"Communication with our user community is continuous. Not only is the customer able to readily retrieve actionable information, but we are also able to perform custom information requests quickly," Beck said. "This greatly enhances the user's ability to respond to issues and risks."

The matrix communication environments in which IBAS requirements are obtained include data sourced from DLA, United States Navy's Product Data Reporting and Evaluation Program and United States Army's Logistics Support Activity. This multi-source data capture ensures that the customer receives accurate information concerning their entire spectrum of items and programs.

The system screenshots at left display a snapshot of the configurability a customer has within IBAS.

"While the JPEO-CBD's Joint Project Managers prefer to view equipment data using the commodity dashboard display, other offices within JPEO-CBD prefer a different screen configuration," Beck said. "The system's flexibility allows the information to be tailored to a customer's preference with a click of the mouse button."

"Usability is critical to application development, and the user's experience is foremost in delivering timely information for decision support. If the system is not intuitive, then it will not be used, and the valuable information provided through the IB, assessments, studies and research becomes inconsequential," Beck said. (Continues on page 12)

TIME AND COST ASSOCIATED WITH PQDRs

- Cost of downtime associated with product defects/failures
- Cost of users time to submit a PQDR
- Administrative costs to coordinate the investigation
- Time and cost to determine root cause
- Time and cost to develop preventative/corrective action
- Cost and time for DCMA to provide point assistance

Product Quality Management

(Continued from page 8) The PQM team works closely with DCMA representatives to confirm on-site that the producer is complying with the requirements of the contract.

"The DCMA representatives are our eyes and hands in the contractor's plant – they monitor the contractor's QA processes, verify compliance to the contract quality requirements and interact with the acquisition team," Pham said.

While there is no measure in place within the Federal Government to track the hard costs associated with quality deficiencies, there is no question that the equipment used to protect the Warfighter must perform properly in the field. In the case of CBDE, poor quality could lead to lethal consequences.

"Early participation by the PQM Team is essential to the success of all acquisition programs, especially those that are still being developed," Pham stated. "Not only does it short-stop potential production issues and save time, it can mitigate the risks of non-conforming products and minimize the impact of poor quality on the total program life-cycle costs."

Shelf-Life Surveillance Ensures Reliability of CBRN Materiel

(Continued from page 8) The technical decision will be coordinated with TACOM prior to becoming finalized and disseminated to the CBRN community.

The shelf-life extension decisions are communicated to the field via worldwide Supply Advisory Messages (SAM). These SAMs are posted to JACKS on the "Publications" page and are linked to the particular equipment lots. The JACKS-Shelf Life Status Tool contains the current lot expiration dates for almost all CBD items.

Production lot tracking is a major component of surveillance. Production lot information is needed for shelf-life management of the equipment and to support future shelf-life surveillance efforts.

SHELF-LIFE SURVEILLANCE IS A COMPREHENSIVE PROCESS THAT INCLUDES A WIDE RANGE OF ACTIVITIES RELATED TO SHELF-LIFE MANAGEMENT OF CBD EQUIPMENT, SUCH AS:

- Development of shelf-life specifications (ECBC engineers, in support of JPEO-CBD)
- Development of shelf-life test and inspection procedures (ECBC engineers)
- Preparing and publishing Supply Bulletins (ECBC engineers and TACOM personnel)
- Providing input to DoD shelf-life policies (ECBC, JEAP, TACOM)
- Managing CBD shelf-life materiel in storage (TACOM and storage activities)
- Managing set-aside samples for testing (TACOM, JEAP)
- Evaluating CBD production lots for shelf-life extension (ECBC, TACOM, JEAP)
- Certifying test labs for surveillance testing (ECBC)
- Managing surveillance testing at approved test labs (TACOM)
- Evaluating surveillance test results (ECBC)
- Determine shelf-life extension of CBD production lots (ECBC, TACOM)
- Publishing Supply Advisory Messages on shelf-life decisions (TACOM)
- Updating shelf-life information on JACKS (ECBC, JEAP)
- Marking of new expiration date on CBD equipment that had been extended (storage activities)
- Disposing of expired CBD equipment (TACOM, storage activities)
- Reviewing shelf-life specifications for any update (ECBC, TACOM)
- Reviewing Supply Bulletins for any update (TACOM, ECBC)
- Reviewing shelf-life test and inspection procedures for any update (ECBC)

Production Lot tracking and Shelf-life surveillance activities ensure that CBRN materiel are reliable when the Warfighter needs to use it in the field where product failure is not an option.

"Production lot tracking presents a huge challenge for us as there are many different commodity teams that have many production contracts in place at any given time, and there is no centralized system where this information is maintained," Freeze said. "We test approximately 200-300 lots per year, and the test schedule is based on what we know to have been produced three, five or seven years ago. If we don't know a lot was produced, that lack of visibility will cause the lot to not be tested."

Lack of production lot visibility could result in premature disposal of CBD equipment in the field.

A module has been created in JACKS, called the Production Lot Data Registry (PLDR) system. This system will be used to document the creation of new CBD production lots.

"PLDR helps us streamline the process; it provides a centralized repository for all CBD items regardless of commodity team for lot acceptance data, and special notes about the products and shelf-life limiting components," Freeze said. "The PLDR system is not yet widely known, but we are actively promoting its use by the acquisition community."

Rock Island Arsenal Welcomes First Army

(Continued from page 1) First Army is responsible for the readiness, training, deployment and redeployment of all Reserve Component Soldiers including the Army National Guard.

“The Uncasing of the First Army red and white flag signifies that the unit, which moved from Georgia to the Rock Island Arsenal, is ‘open for business,’” Lt. Gen. Mick Bednarek said. First Army now has over 300 soldiers and staff working in the Arsenal’s Building 68.

First Army is not the only transition that has occurred over the past year, “As a result of recent changes we have successfully completed the moves of five major organizations from Rock Island Arsenal to other locations and moved four new organizations to Rock Island Arsenal,” Himsl said.

To many civilian and military personnel on Rock Island Arsenal, these changes represent a new beginning of a new phase in their lives and careers. To others who transferred to jobs on or off the Arsenal, it means new associates at different organizations with new missions. To ECBC Rock Island, the addition of new missions means new opportunities and people to work with locally and stepping up efforts to enhance communication, technology tools, and business processes to provide service to both local, and worldwide customers.

“We have been improving our work processes in several areas in response to our commitment to customer service and continuous improvement,” ECBC Associate Director at Rock Island Nannette Ramsey said. “As the Chem-Bio engineering services provider to TACOM-LCMC, our sustainment engineering group and support teams are developing innovative technology and implementing collaboration tools to provide even better levels of support to our customers who have relocated to the Detroit Arsenal in Warren, Michigan and with the Defense Logistics Agency Defense Supply Center team in Columbus, Ohio.”

RIA has added the following new mission sets to its already diverse cross-section of Defense organizations:

- First Army increases the Soldier population by approximately 150, so the Military strength on RIA will be almost 900.
- The Quad City Cartridge Case Facility (QCCCF) adds a new dimension in manufacturing. The QCCCF is the DoD’s single manufacturer of large caliber cartridge cases such as the 105mm case for the Stryker main gun and the 5-inch cartridge for the Navy’s 5-inch gun.
- The Network Operations Center’s move to Rock Island provides the strategic long-haul communications capability for logisticians which directly support the Army Sustainment Command.
- The Army Contracting Command-Rock Island is adding 50 new employees and is renovating space to accommodate that growth with the potential for additional growth. The North Central Civilian Human Resources Agency is also adding 75 new employees as that organization restructures.
- The Federal Emergency Management Agency has agreed to move about 25 of its employees to Rock Island Arsenal from the Chicago area to establish a presence in the Quad City area.
- The Civil Support Readiness Group-East is responsible for training and certifying the readiness of Weapons of Mass Destruction response teams. Each State has such a team.

“The addition of First Army, which greatly enhances the training and readiness of our Reserve Component Soldiers and is critical to the combat readiness of our Army as a whole brings a three-star General,” Himsl said. “Not only did we gain a three-star, but he has two two-star deputies as well. As I think about it, we originally had two General Officers – the two-star Army Sustainment Command (ASC) Commander and the one-star JMC Commander. End-state, we will have seven General Officers stationed at Rock Island Arsenal....and that is huge.” 

Industrial Base Analysis and Information Technology Teams Increase Customer Satisfaction Through Matrixed Communications

(Continued from page 10) Other IBAS system features include status alerts, fact sheets and numerous data elements relative to the equipment and manufacturer.

Hoover and Beck agree that customer satisfaction is the foundation blocks to their teams’ success; and interagency collaboration contributes to the IB team’s continuous improvement efforts. In order to improve processes, the IB team participates in program reviews to discuss future programs, evaluates IB research requirements and consults with customers regarding information technology solutions.

Partnering with their customers is an important aspect to ECBC-RI’s overall IB Program strategy, because the IB analysis and information management requirements continually evolve. These partnerships allow the teams to capture new requirements and modify existing systems and capabilities to better meet customer needs while providing an opportunity to increase our customer base. 

INDUSTRIAL BASE PRODUCTS

- *CBRN Equipment Handbook, Annual CBDP Item Assessment, AMC IB Baseline Assessment, Procurement Package Input, Value Engineering*
- *Information Systems: Industrial Base Web Portal – News, events, program information and links to IB web applications; Industrial Base Data Warehouse – Provides materiel item and supplier information for assessing IB risk for a wide range of Army commodities; Public-Private Partnership Knowledge Center – Supports management of the Army partnership program through collection of data and computation of performance metrics.*

LVOSS Grenade Launcher Upgrades

(Continued from page 5) system would have on the antennas. The system was tested by repeatedly launching the M90 smoke grenade rounds aiming directly at the antennas of the M1151 HMMWV at the Aberdeen Proving Grounds in Edgewood, Maryland. The test results confirmed that, despite cosmetic damage to the antennas, there was no degradation in the radio signal due to the grenades colliding with the antenna.

In 2009 a production contract was awarded on a Best Value Evaluation. Substantial savings over previous versions were realized. In addition to full scale procurement, a program to convert excess M310 LVOSS into M327 LVOSS was implemented. New interface brackets, hardware and wiring harnesses were provided by the manufacturer. The Design Engineering and Test Facility at Rock Island Site converted the excess M310 LVOSS into M327 LVOSS. Since the M310 and M327 have nearly 80% common components, the cost of 570 M327 LVOSS converted was significantly reduced and a savings of \$571,578.90 was realized. 