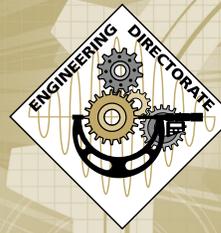


# THE ENGINEERING EDGE



**ECBC ENGINEERING**  
Design→Build→Test→Support

EDGEWOOD CHEMICAL BIOLOGICAL CENTER

## Inside This Month's Issue:

- Engineering BSC helps  
"Develop Leaders" 2
- Inside with the Detection  
Engineering Branch 3
- Engineering Recognizes  
Black History Month 4-5
- Employee Spotlight Series:  
Lee Bilka 6
- Building Business with Strategy:  
Mark Ciampaglio 6
- Engineering Edge Photo of  
the Month 7
- ECBC-RI Value Engineering  
Series 8

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published through the  
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For article suggestions,  
questions or comments  
please contact Ed Bowen at  
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## Engineering Strategy Identifies Leadership Training Options

Since the Engineering Balanced Scorecard (BSC) strategy development process began in 2005, Engineering Directorate staff have remained engaged because the strategy itself is relevant and accessible. The structure of the strategy calls for continuous efforts to educate individuals about strategic initiatives and these initiatives seek to improve daily operations for the workforce – including a specific initiative to develop leaders.

After analyzing the results of an Engineering workforce survey on leadership and forming a baseline of training data, the Engineering BSC "Develop Leaders" P3 team is looking ahead at the next phase of their initiative to begin formulating recommendations for a balanced approach to **(Continued on page 2)**



Kyle Phillips provides hands-on training support to soldiers and civilians for the CAM/ICAM and the ACADA.

## All In A Day's Work: Inside the Detection Engineering Branch

ECBC's Detection Engineering Branch (DEB) actively supports the sustainment of multiple detection items, including the M22 Automatic Chemical Agent Detector Alarm (ACADA) and the Chemical Agent Monitor/Improved Chemical Agent Monitor (CAM/ICAM). In addition to providing sustainment support for the ACADA and ICAM in the traditional sense with technical expertise for lifecycle management, DEB also provides hands-on technical support to the Warfighter through the Chemical Biological Equipment Repair Team (CBERT) and DEB Contact Team. In this issue, the *Engineering Edge* takes you inside a CBERT mission and the training provided by Engineering's DEB Contact Team to keep Warfighters knowledgeable about their Chemical Biological Radiological Nuclear (CBRN) equipment. **(Continued on page 3)**

## ECBC-Rock Island Continues Cost Savings Trend Over Four Years, Utilizing Value Engineering Applications

Members of the Edgewood Chemical Biological Center-Rock Island's (ECBC-RI) Engineering Directorate enjoy telling the story of how useful Value Engineering (VE) can be, helping others realize the effectiveness of the program to bring about efficiency improvements. The *Engineering Edge* is working with the ECBC-RI team responsible for the technical management of VE to tell the story in a series of three installments. In this month's issue, we are kicking off the series with an explanation of the history and vision behind the program.

In early 2007, the U. S. Army Materiel Systems Analysis Activity (AMSAA) closed their Rock Island office and a group of personnel and their associated functions were transferred to the ECBC-RI Site.

"We were required to develop a concept plan that addressed the functions and funding streams for the transfer of AMSAA personnel to ECBC," Kevin Lee, ECBC-RI Deputy for Sustainment Management, said. **(Continued on page 8)**



## Engineering Employee Spotlight Series: Lee Bilka (page 6)

To access the electronic version of this newsletter visit:  
[https://cbnet.apgpea.army.mil/engineering/eng\\_news.html](https://cbnet.apgpea.army.mil/engineering/eng_news.html)



## Engineering Strategy Identifies Viable Leadership Training (Continued from page 1)

workforce leadership training.

Since the early phases of the strategy's implementation, "Develop Leaders" has been comprised of two primary efforts: gather and analyze leadership training taken to date by the Engineering workforce; and create, administer and analyze results of a leadership survey given to the workforce. Both of these efforts have been completed, laying the foundation for the team's next phase in their initiative.

"Initially when we started with this, our team sat down and looked at the goals set out by the Balanced Scorecard Core Team. Essentially what we came up with was to establish a baseline," Allen Swim, Deputy Product Director for Ground Mobile Platform Chemical Biological Radiological Survivability for Major Defense Acquisition Programs, Joint Program Manager Protection, said. "We wanted to ask the question, 'What does the workforce think about the ability of their day-to-day leaders?' Not just people who were their initial supervisors, anyone in the form of leadership – General Schedule (GS)-12 to GS-15."

The team, which consists of Swim, Meg Hower and Genna Rowe, decided to come up with a survey to poll the workforce and ask them to assess their leadership. The survey was administered to over 150 Engineering employees across grade levels. Along

*It's one of the things I enjoy most about being a part of the strategy – the opportunity to work on something outside of what I do day-to-day and stay in contact with the bigger community inside Engineering.*

– **Allen Swim**, Deputy Product Director for Ground Mobile Platform CBR Survivability for Major Defense Acquisition Programs, JPM Protection

with the gathered training data on the Engineering workforce, the survey was intended to provide a gauge for the team to make informed conclusions about the perceived training needs amongst Engineering's leaders.

At the November 2010 Engineering Strategic Management Meeting (SMM), the team had the opportunity to share their findings from these efforts.

"There were a few surprises we uncovered from the survey results," Swim said. "The biggest surprise was that the survey results seemed upside down with the baseline of training data we compiled."

As presented at the SMM, the team found that when they examined the survey results and compared them to the actual trainings completed by Engineering leadership, it was counter intuitive– the areas in which respondents had the most training were rated the lowest in the survey.

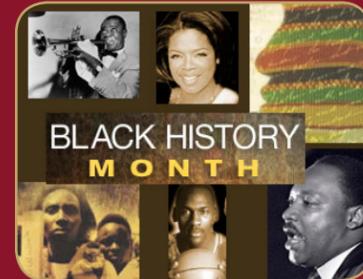
According to the survey results, participants scored leadership highest in the area of "Customer Satisfaction." However, based off of the team's research this was an area where leaders had taken the least amount of training. Additionally, survey participants scored leaders low in the area of "Leadership," but according to the training data, this was an area where numerous individuals had completed training.

"We have anecdotal evidence that speaks to the discrepancy between the two sets of data," Genna Rowe, Chief of Special Projects Branch and P3 team member, said. "For example, for something like "Customer Satisfaction" where leadership was rated high but there has been little training done, we thought the reason for that was because folks are naturally customer focused. They have an innate skill in some of the surveyed areas, so they are rated higher in the survey results."

**(Continued on page 7)**

## ECBC Safety Tip of the Month: 'ICE'

**ICE:** A safety initiative has been launched worldwide to assist people in emergency situations. Sometimes after a vehicle crash or other medical emergency, patients are unable to communicate with emergency workers. In this case, police and fire personnel can check in the patient's mobile phone for emergency contact information. In your cell phone, enter a phone number for an emergency contact under "ICE," which stands for "In Case of Emergency." You can enter more than one number, listing them as "ICE1," "ICE2," etc. Then if you are in a situation where you are physically unable to communicate, medical workers can get vital information about you from your emergency contact. This will also allow loved ones to join you sooner after a crash or other medical emergency. ⚙️



## Awareness: Black History Month

Black History Month is an annual celebration of achievements by black Americans and a time for recognizing the central role of African Americans

in U.S. history. The event grew out of "Negro History Week," the brainchild of noted historian Carter G. Woodson and other prominent African Americans. Since 1976, every U.S. president has officially designated the month of February as Black History Month. Other countries around the world, including Canada and the United Kingdom, also devote a month to celebrating black history.

The Library of Congress is paying tribute to the generations of African Americans who struggled with adversity to achieve full citizenship in American society with a retrospective presentation of the major personalities, events, and achievements that shaped the NAACP's history during its first 100 years. View the exhibition online at: <http://www.africanamericanhistorymonth.gov/>.

## The Engineering Edge

The Engineering Edge is the ECBC Engineering Directorate's monthly newsletter. It is produced for ECBC Engineering staff as part of the Balanced Scorecard Initiative. Unless otherwise noted, all stories, photographs and graphics are produced by the Engineering Directorate's Strategic Planning and Business Operations Branch.

Submissions: We need your stories, photographs, comments and suggestions. If interested, contact The Engineering Edge staff concerning ongoing and future products and submissions to The Engineering Edge Newsletter. Submit your stories or ideas via e-mail to [ed.bowen@us.army.mil](mailto:ed.bowen@us.army.mil).

## ALL IN A DAY'S WORK: Inside the Detection Engineering Branch

Article content contributions from: Nichole Au and Kyle Phillips

### Chemical Biological Equipment Repair Team (CBERT)

In the last three years, ECBC's DEB has supported 77 CBERT missions, aiding US Army units returning from active duty in theater to inspect and repair their CBRN equipment. The M22 ACADA and the CAM/ICAM, as well as M40/M42/M45/M48 masks and the M17 Decontamination Apparatus are examples of equipment inspected and repaired on these missions. Both the ACADA and the CAM/ICAM have the ability to sense nerve and blister chemical warfare agents. The mission of the ACADA is to detect and provide warning for nerve and blister agents. The ICAM provides indication of changes in agent hazard and post-attack contamination, especially for the identification of clean versus contaminated areas.

The missions are led by TACOM-Life Cycle Management Command (LCMC), and CBERT is supported by ECBC in addition to the Oregon Army National Guard and Pine Bluff Arsenal. Personnel from these four organizations travel to the Brigade's home location, and conduct inspections and repairs of their CBRN equipment on-site. The technical expertise and support provided by CBERT prepares the unit's CBRN equipment for their next deployment and allows soldiers to focus on other duties.

On CBERT missions, DEB is tasked with providing technical support for the M22 ACADA, working alongside technicians from Pine Bluff Arsenal. When required, DEB also provides CAM/ICAM technical support to technicians from Oregon Army National Guard.

"This partnership is integral to the success of the CBERT missions," Kyle Phillips, DEB Chemical Engineer, said. "ECBC's Detection Engineering Branch provides TACOM with the technical and management support in our partnered work with them. For the first few missions in 2007-08, DEB was crucial to the development of a standard method for CBERT ACADA support, integrating logistical and technical requirements for the mission. For example, DEB worked with TACOM on the mission equipment requirements and the training and certification of mission personnel."

For each CBERT mission, since the ACADAs are serialized items with a radioactive source, the equipment must be accepted from units using a hand-receipt. Upon receiving the items, the CBERT ACADA team conducts a visual inspection of each ACADA to ensure it is in working condition and there are no missing components, including expendable Components of End Item (COEI). Physical deficiencies are repaired and missing components are replaced. Afterwards, each ACADA is sent for operational testing where the ACADA team performs functional checks and confidence sample tests to ensure the items are able to detect agent and alarm appropriately.

"The inspection and repair process usually requires a 1-2 week turnaround," Phillips said. "Working with personnel from four offices while inspecting equipment that belongs to an entire Brigade requires leadership and teamwork from DEB."

Since October 2007, and over the course of 77 missions, the CBERT team has inspected and/or repaired over 16,000 ACADAs. The average mission is Brigade-size, with approximately 200 ACADAs requiring a two-week turnaround. Occasionally, CBERT requires additional support for large missions.

One such occasion arose this past December when DEB provided increased support to CBERT to inspect and repair over 700 ACADAs in two weeks in Fort Lewis, WA. TACOM, ECBC, and Pine Bluff Arsenal worked as one with the units to provide flexible and highly coordinated support.

**(Continued on page 8)**

### DEB Contact Team Training

One of the initiatives of DEB is to provide refresher training to the Warfighters on the operation and maintenance of the detection items that DEB supports. Due to the frequent turnover within the Army units, refresher training helps the Warfighters to remain knowledgeable about their CBRN equipment.

When requested, DEB Contact Team provides hands-on training support to Soldiers and Civilians and is currently offering Operator-level maintenance training for the CAM/ICAM and Operator/Unit-level and Direct Support-level maintenance for the M22 ACADA.

"Our training services showcase ECBC's support to soldiers," Kyle Phillips, DEB Chemical Engineer, said.

DEB Contact Team Operator/Unit-level refresher training includes Preventative Maintenance Checks and Services (PMCS), effective operation, proper storage and handling, and effective troubleshooting and maintenance.

The Direct Support-level maintenance refresher training is a one to two day hands-on experience leading students through performing troubleshooting and maintenance repair actions.

DEB Contact Team provides all the necessary tools and equipment as well as ACADAs for the training.

"We have provided training to the soldiers and civilians both on contiguous U.S. and outside of contiguous U.S. installations," Nichole Au, DEB Chemical Engineer said. "It is rewarding to be able to answer questions and provide information for the actual operators and maintainers in the field."

Providing this training also increases DEB visibility on problems that may occur in the field. DEB Contact team has advertised their free training services by contacting TACOM Logistics Area Representatives (LARs). DEB Contact Team plans to contact more LARs and open the offer for refresher training to more installations and units.

For each training session, the training package is updated and customized to meet the unit's needs and requests.

"The support that is provided during both CBERT and Contact Team missions improves unit readiness, increases the operational availability of fielded chemical detection items, and directly supports combat unit commanders," Phillips said. ⚙️



Mike Palko, a DEB Contact Team member, provides hands-on training support to soldiers for the CAM/ICAM and the ACADA.

# ECBC ENGINEERING RECOGNIZES BLACK HISTORY MONTH



Black History Month provides an opportunity to remember the important people and events in the history of the African Diaspora. Since 1976, it has been celebrated annually in the United States of America and Canada in February.

In honor of Black History Month, ECBC's Engineering Directorate is hosting a special blog series on the official ECBC blog site, featuring insights and candid narratives from several of Engineering's African-American leaders. We invite you to follow the series this month at <http://edgewoodchembio.blogspot.com/>.

STAY CONNECTED WITH THE ECBC COMMUNITY. FOLLOW US ON THE WEB ON **BLOGGER, FACEBOOK, TWITTER, FLICKR AND YOUTUBE.**



## The Origin of Black History Month ...

In 1915, Dr. Carter G. Woodson and Rev. Jesse E. Moorland co-founded the Association for the Study of Negro Life and History (ASNLH). Their goal was to research and bring awareness to the largely ignored, yet crucial role black people played in American and world history.

Carter Woodson understood the value of education and felt the importance of preserving one's heritage. Upon his urging, the fraternity Omega Psi Phi created Negro History and Literature Week in 1920. He selected the month of February for the celebration as a way to honor of the birth of Abraham Lincoln and Frederick Douglass, men whose actions drastically altered the future of black Americans and were both born in February.

Dr. Carter G. Woodson died in 1950, but his legacy continued on as the celebration of Negro History Week was adopted by cities and organizations across the country. This observance proved especially important during the Civil Rights Movement of the 1950s and 1960s.

In the 1970s ASNLH, now called the Association for the Study of African American Life and History, changed Negro History Week to Black History Week. In 1976, they extended the week to a month-long observance.

Black History Month is now recognized and widely celebrated by the entire nation on both a scholarly and commercial level. The Association for the Study of African American Life and History continues to promote, preserve and research black history and culture year-round.

[Excerpted from *biography.com* - Black History Month]

## “What is one word that characterizes Black History Month for you?”

Check out what several members of Engineering leadership have to say in response to this question and more, on the all new ECBC blog at: <http://edgewoodchembio.blogspot.com/>.

Throughout the month of February, responses from Engineering Director AJay Thornton, Surety and Novel Testing Branch Chief Eugene Vickers, and Branch Chief Doretha Green will be featured in a special blog series honoring Black History Month. Take a peek here, in this month's issue of the *Edge* to see what they have to say...

### DORETHA GREEN

#### Member of Advanced Technology Demonstration Branch

What is one word that characterizes Black History Month for you?

JOURNEY is the one word that characterizes Black History Month for me. It has been a long journey from the day the first slaves from Africa were deposited on the shores of this nation for the purpose of providing uncompensated labor to build this nation; to this day, when an African American was elected President of the United States of America. A journey defined by sorrow, pain, determination, and joy.

TO READ THE REST OF DORETHA'S ENTRY, VISIT ECBC'S BLOG IN FEBRUARY at: <http://edgewoodchembio.blogspot.com/>.

### EUGENE VICKERS

#### Acting Chief, Engineering Test Division



What is one word that characterizes Black History Month for you?

INSPIRATION. When I think about Black History Month, I am inspired both mentally and emotionally how (we), as African Americans have endured the obstacles of slavery, depression and segregation. Black History Month helps stimulate our knowledge and draws on history that Blacks (African Americans) were kings and queens in the early civilization, slaves to a new country, and now leaders of the most Powerful Country in the World. To me, that's Inspiration!

TO READ THE REST OF EUGENE'S ENTRY, VISIT ECBC'S BLOG IN FEBRUARY at: <http://edgewoodchembio.blogspot.com/>.

### AJAY THORNTON

#### Director of Engineering



What is one word that characterizes Black History Month for you?

ENCULTURATION or CULTURE. Black History Month is not simply for people of my own race, it is the genesis of an opportunity to allow others to know more about us as a people. I think we've missed the boat when we look at this month as a celebratory time that is just for black people. ... I look forward to when we celebrate history and it is inclusive on all fronts. American history is a story that we are all a part of, whether we are Asian, Latino, White or Black.

TO READ THE REST OF AJAY'S ENTRY, VISIT ECBC'S BLOG IN FEBRUARY at: <http://edgewoodchembio.blogspot.com/>.

## Building Business with Strategy: A conversation with Mark Ciampaglio, Chemical Engineer



The Engineering Edge talks with Mark Ciampaglio to understand why he chose to participate in Engineering's strategic planning process.

**Engineering Edge: How did you first hear about Engineering's Balanced Scorecard (BSC)?**

**Mark Ciampaglio:** I attended one of the early BSC training sessions in 2008. The briefing was more than enough to pique my interest, so I contacted Ed Bowen to get more information on the active bubble teams that needed new

members.

**EE: How long have you been a part of the BSC?**

**MC:** I first joined a BSC bubble team back in 2008, working on the C3 initiative "Provide trained and qualified personnel." We made reasonable progress in developing a plan for a database that would summarize the current workforce skill sets, attempting to reach beyond acquisition training and education.

**EE: What inspired you to get involved?**

**MC:** When I first joined the BSC, I had a relatively limited view of ECBC and was looking for an opportunity to gain exposure to the rest of the Engineering Directorate. Early success stories confirmed that the BSC strategy could be an effective tool for organizational improvement and I wanted to be a part of that.

**EE: What initiative are you currently working on?**

**MC:** I'm currently working on Initiative 2 under "Develop Leaders" P3. This initiative began as a 2010

*Early success stories confirmed that the BSC strategy could be an effective tool for organizational improvement and I wanted to be a part of that.*

– Mark Ciampaglio, Chemical Engineer

Leadership Cohort SWOT Analysis Project. Upon completion of the Cohort program, my group and I decided that the potential benefits for this project were too great to ignore and we were all committed to continuing our work. The BSC offers an excellent opportunity for motivated individuals to work on interesting projects outside of their normal job responsibilities, and a perfect fit for our project.

**EE: What are the main goals your initiative is trying to reach?**

**MC:** Our goal is to develop a program (PRIDE- Progressive Rotational Inter-Divisional Exchange) that would allow employees an opportunity to gain knowledge and develop relationships by working within different Branches, through a series of short-term temporary assignments. The first phase of PRIDE will only include assignments within the Engineering Directorate, though we're hoping to spin-off similar efforts within the other Directorates in the near future.

**EE: What has been the most rewarding part of working on the BSC?**

**MC:** I think the greatest reward is still to come. I'm very excited that my Cohort group and I have the opportunity, resources, and support to continue developing our project and make a difference in the future of ECBC. The big payoff is going to be the kick off of the first phase of PRIDE and watching our white space opportunity become reality. ⚙️

## Employee Spotlight Series: Lee Bilka, Facility Coordinator for the Berger Building (E3549)

For the first installment of the Engineering Edge Employee Spotlight Series, we talked to Lee Bilka, Facility Coordinator for the Berger Building (E3549), about her role and responsibilities at ECBC.

**Engineering Edge: How long have you been at ECBC?**

**Lee Bilka:** Since 2008

**EE: What brought you to ECBC?**

**LB:** I worked for the Applied Business Management Solutions, Inc. contract as a Facility Coordinator for 16 years. When the opportunity to switch to Government came about, of course I took it.

**EE: What is your current job title and responsibilities?**

**LB:** My job title continues to be Facility Coordinator, and my responsibilities vary, depending on what might arise in the day. I do scheduling of the Berger Auditorium, helping out in any way needed. I submit service orders to make corrections in the building, check for safety issues, and am available for all situations pertaining to the building. I make sure all concerns are met.

**EE: What is a highlight about your current job at ECBC - something you look forward to each day when you come to work?**

**LB:** I love working with people and the challenge of making each day better than the last. I like being able to solve problems and help out where needed.

**EE: What is your inspiration for your work in the Berger courtyard garden?**

**LB:** Spring means warm weather, flowers, and lots of color; the courtyard is the garden part of the building, which is in the center of the building. I love making the garden attractive and pleasing for all to enjoy, if it is just walking by, taking a break and getting some fresh air and feeling the outdoor wonders of nature. If I can bring this to the building it makes gardening pleasurable to me.

**EE: What are your hobbies outside of work?**

**LB:** Gardening, riding motorcycles and spending time with my grandchildren.

**EE: Is there any road trip more memorable to you than others?**

**LB:** All are memorable but a few we especially enjoyed were to upstate New York riding through the Catskills, and Mt. Washington where we rode on the Cog Railroad. My husband and I are both from South Dakota and riding around in the Black Hills is always a beautiful adventure. ⚙️

**THANK YOU!** You spoke and we listened! Thank you for your feedback regarding how we can better improve the content of the *Engineering Edge*. In response to the frequent requests for more stories about your fellow peers and day-to-day colleagues, we've included a new *Employee Spotlight* series, featuring the names and faces of your coworkers. We hope you enjoy the article! And as always, we welcome your feedback and article suggestions for future issues. To submit story ideas, please contact Ed Bowen, ed.bowen@us.army.mil.



## Edge Photo of the Month

Engineering's Advanced Design and Manufacturing Division represent their unique "strength through technology" at the January 2011 Army All American Bowl in San Antonio.

Engineering's Kevin Wallace and Rick Moore display various tools and technologies designed and built within the ECBC Engineering Directorate: 3D Data Capture (or 3D Laser Scanning), 3D Computer Aided Design and 3D Printing (or Rapid Prototyping). The ADM exhibit was grouped with the Mobile Machine Shop provided by the U.S. Army Armament Research Development and Engineering Center Prototype Integration Facility. The premise of the overall display addressed Major General Justice's "Tech Village" concept.

To view more pictures from this event and other ECBC photos, please visit: <http://www.flickr.com/photos/edgewoodchembiocenter/>

## Engineering Strategy Identifies Viable Leadership Training

(Continued from page 2)

Aside from these surprise findings, the P3 team was able to identify tangible themes and correlations between their gathered data to begin formulating recommendations for a balanced approach to workforce leadership training. Moving forward, the team has begun a thorough research process to begin compiling a leadership training curriculum unique to Engineering.

Part of that process includes expanding the initial scope of their research to include both non-professionals and professionals in potential leadership training curriculums.

"We want to be sure we are including those that work in administrative positions, technicians and other non-technical positions," Swim said. "To ensure that we are researching the most applicable training programs for our diverse staff, I've tried to go back and re-learn the organization of ECBC Engineering. It's one of the things I enjoy most about being a part of the strategy – the opportunity to work on something outside of what I do day-to-day and stay in contact with the bigger community inside Engineering."

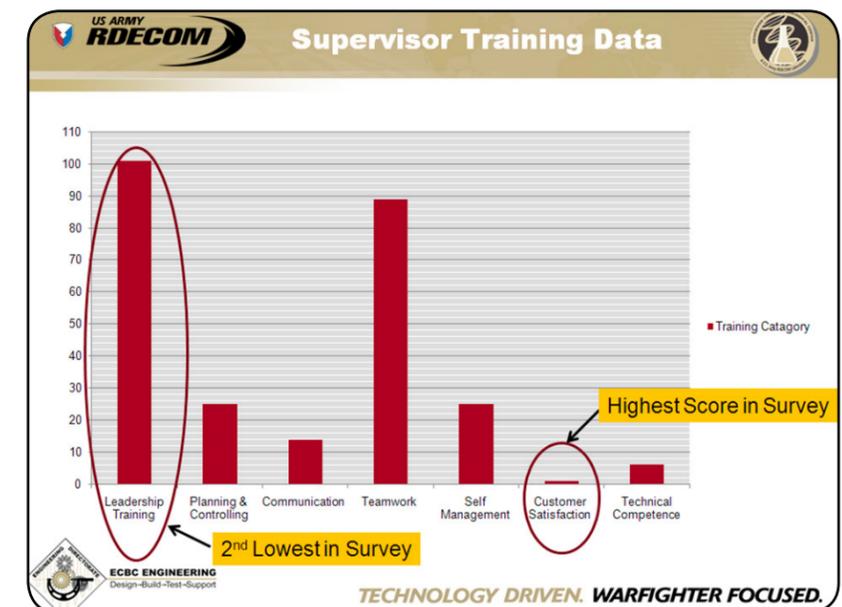
Currently, the team is looking into the Civilian Education System (CES) as a viable option for meeting leadership training needs in the Engineering Directorate. CES offers a robust leadership curriculum that begins at a GS-5 level and carries through to GS-15. There is a recent push for CES to be rolled out across the U.S. Army workforce, replacing older training systems.

"As with any of the other training programs we consider, we want to make sure CES makes sense for Engineering," Swim said. "I've reached out to others that have taken the CES courses to determine what some of the benefits may be and how it relates those of us in Engineering."

In addition to researching training initiatives that would be valuable for the workforce, Rowe says the team is also looking into the value of supervisors evaluating their employees individually.

"These individual evaluations could potentially provide suggestions for how to build their team's leadership skills." Rowe said. "Bottom line – develop upcoming leaders to become our future leaders."

For more information about the Balanced Scorecard or how you can get involved, contact Ed Bowen at ed.bowen@us.army.mil. ⚙️



The P3 team collected training data on GS12 to GS14 supervisors and non-supervisors in the Engineering Directorate and grouped the data into six categories aligned to the leadership survey they administered. The team found that when they examined the survey results and compared them to the actual trainings completed by Engineering leadership, it was counter intuitive – the areas in which respondents had the most training were rated the lowest in the survey.



A soldier operates a chemical agent monitor (CAM), one of the CBRN equipment items inspected and repaired on CBERT missions.

## **Inside a CBERT Mission with the Detection Engineering Branch** (Continued from page 3)

“This was a big mission,” Nichole Au, DEB Chemical Engineer, said. “We sent four people from our branch and another person from ECBC’s Acquisition Logistics Division to support the mission, and they worked alongside three technicians from Pine Bluff Arsenal and an equipment specialist from TACOM. It took a lot of manpower and coordination both before the mission and on the ground.”

According to Au, all CBERT missions require coordination and organized logistics for personnel, equipment, spare parts, building facilities, and work space. A mission like the recent one in Ft. Lewis that is almost four times the normal capacity requires additional organization, preparation, and stream-lined processes, as well as flexibility and extended work hours to meet the mission time frame. For these large missions that require high tempo operations, the DEB has had the opportunity to cross-train personnel from other ECBC teams, including the Decontamination Engineering Branch, the Advanced Design & Manufacturing Division, and the Acquisition Logistics Division.

“The success of [the Ft. Lewis] mission is attributed to the dedication and commitment of our subject matter experts,” Au said.

A quality maintenance process is also an important part of the success of CBERT missions. Beginning in August 2008, the DEB worked closely with the Advanced Design and Manufacturing (ADM) Division and TACOM-LCMC to develop a concept Mobile Maintenance Facility (MMF) that incorporates a quality maintenance process. The MMF is a manually expandable, 400 square foot shore-powered ISO shelter, designed and fitted as a specialized ACADA/ICAM workspace. The MMF has proven to be an asset on CBERT missions, particularly at locations where facilities are limited. It optimizes the workflow of a Brigade’s chemical detection equipment through the inspection and repair process. Currently there are six MMFs fielded to multiple CBERT locations. The DEB has continued to work closely with ADM members in recommending ACADA and ICAM tool sets, workstation design, and power requirements. Recently DEB, ADM, and TACOM members incorporated a new series of fuses into the MMF electrical system that improves the safety of the shelters and decreases the risk of fire. DEB support to CBERT is an on-going effort, and

the DEB continues to build the relationship between ECBC and TACOM by providing technical expertise and resources.

The support DEB provides to CBERT places ECBC Engineering in a unique position to understand sustainment issues and maintenance concepts that pertain to both the Institutional and Operational Army. Since October 2007, ECBC has maintained a strong relationship with TACOM-LCMC through their support of CBERT. As a result, this support has benefitted the overall sustainment and management of the CBRN items for DEB and TACOM from both the programmatic and field perspective.

“Knowing that soldiers depend upon the equipment that we repair makes our work more fulfilling and awarding,” Phillips said. ⚙️

## **Utilizing Value Engineering Applications** (Continued from page 1)

“Management from both of the organizations worked together and implemented a seamless transition without any mission disruption for the AMSAA functions being transferred.”

Part of this transfer included the technical management for the Army Materiel Command’s (AMC) Value Engineering (VE) program. The technical management function is part of the ECBC-RI Engineering Directorate’s mission.

The AMC VE program provides an organized and systematic approach to analyze the functions of systems, equipment, facilities, services, and supplies to achieve the essential functions at the lowest lifecycle cost consistent with required performance, reliability, quality, and safety.

“One of the major objectives of the VE program is to provide measurable improvement in operational availability and logistical support,” Lee said. “The technical capabilities of the Engineering Directorate to assist in achieving efficient designs for new systems is a critical element for achieving highly operational systems incorporating logistical requirements required for fielding and sustainment.”

This program has been highly successfully with documented savings and cost avoidances. During the FY2006-2010 time frame, savings and cost avoidances steadily increased each year, with results of approximately \$684M, \$687M, \$852M, \$860M, and \$2,066M respectively. These figures are generated from Value Engineering Proposals (VEP) and Value Engineering Change Proposals (VECP) implemented during that period.

“Value engineering is a vital program to the Army,” Lee said. “It provides high quality and reliable equipment to the Warfighter while reducing lifecycle costs. We are proud of the significant saving generated since the program came under ECBC.”

A VEP is an in-house VE action submitted by federal government and military personnel. All savings and cost avoidances go directly back to the submitting program for reallocation to otherwise unfunded program requirements. A VECP is an action submitted to the government by contractors enacting the VE clause in their contract, as stated in the Federal Acquisition Regulation (FAR) Parts 48 and 52.248. VECP savings and cost avoidances are shared with the contractor and, if applicable, development costs may also be reimbursed to the contractor by the government.

“I’m very grateful to the ECBC organization for taking on the mission for the technical management of the AMC VE program, and look forward to this relationship continuing in the future,” Matthew Schade, HQ AMC VE/R-TOC Technical Manager, said.

**Stay tuned for the next installment of this special “Value Engineering” series...**

**In correlation with recent efficiency improvement initiatives being worked throughout the Department of Defense, a listing of potential VE program applications to assist in accomplishing some of these goals was developed. The next article will show how these VE applications can directly support the implementation of efficiency and productivity initiatives identified in the Under Secretary of Defense for Acquisition, Technology, and Logistics, 14 September 2010 Memo, addressing Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending.** ⚙️