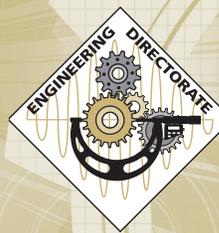


Volume 2, Issue #12
December 2010

THE ENGINEERING EDGE

EDGEWOOD CHEMICAL BIOLOGICAL CENTER



ECBC ENGINEERING
Design→Build→Test→Support



ECBC Engineering



2010



To access the electronic version of this newsletter visit:
https://cbnet.apgpea.army.mil/engineering/eng_news.html



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ECBC Holiday Bash

WHEN: Thursday, 9 Dec 10

TIME: Noon – 5:00 PM

LOCATION: Richlin Ballroom

1700 Van Bibber Road, Edgewood, MD

TICKET COST

1 thru 24 Nov - \$23.00

29 Nov thru 7 Dec - \$25.00

TICKET SELLERS

Trina Dowell, E3549, C707 | Zada Stallings, E3549/C300/80

Carolyn Blair, E3516 | Kim Miranda, E3330/253 |

Rielle Evans, E3150/A203 | Erica Yonce, E3330/119

Teresa Rudd, E3549/A103 | Angela Burke, E3942

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.

ECBC Safety Tip of the Month: SPACE HEATERS AT WORK

When using electrical heaters in your work areas please abide by the following information which is from the fire department regulation, APGR 420-1, Chapter 4 (*Requirements For Electrical Installation and Use*).

SAFETY TIPS

1. Portable space heaters are to be used as a last resort for heat and must carry the marks of the Underwriters Laboratory (UL) or Factory Mutual (FM) listing.
2. Electric space heaters shall be equipped with a safety tip-over switch and be plugged directly into a wall outlet. The use of an extension cord is prohibited including power strips.
3. There must be at least 36 inches of clear space around the space heater.
4. The area around the heater must be free of all combustibles. The use of portable space heaters under desks or tables is prohibited.
5. Do not leave space heaters unattended, turn off when leaving the room. ⚙️

ECBC Engineering Directorate HR Tip of the Month: Education Update

If your education level changes, (received your BA, Master's, PhD) a copy of your transcript, in a sealed envelope, will go to the Civilian Personnel Advisory Center to be placed in your OPF. You will have to update your education level in MyBiz. Your education will be updated in the Engineer's database by your HR Analyst. ⚙️

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

2010 Strategic Management Meeting examines progress in Balanced Scorecard Strategy



*Mike DeZearn
briefs on Defining
Responsive
Customer Service.*

The Engineering Directorate conducted its seventh Strategic Management Meeting (SMM) on November 18 as part of the implementation of the Balanced Scorecard (BSC) strategic planning process. The quarterly SMM provides a forum for initiative teams within the Engineering Directorate to present their progress to the senior leadership and receive feedback.

Facilitated by Ed Bowen, Engineering Directorate Chief of the Strategic Planning and Business Operations Branch, the Engineering Directorate uses the SMM to measure progress against the strategy and guide continued BSC efforts. **(Cont. on page 7)**



Leadership Interview Series: John Wheeler, Chief of Product Engineering Division

In this month's Engineering Edge Leadership Interview Series, we talked to John Wheeler, Chief of Product Engineering Division, about his role and got him to share his thoughts on leadership.

Engineering Edge: How did you start your career here at ECBC?

John Wheeler: I joined ECBC in March 2007. At that time, AMSAA was closing their office at Rock Island and I was in a group of people who were transferred from AMSAA to ECBC.

EE: What is your history with ECBC?

JW: I originally brought my function as Information Assurance and System Administrator for the IB Web Portal from AMSA to ECBC. Later, when ECBC began providing support to the Program Manager for Sets, Kits, Outfits and Tools (PM-SKOT) I was asked to provide engineering support for the Containerized Maintenance Facility. After that, for a while I was the ECBC Rock Island Surveillance Team Lead. Most recently, I was promoted into my current position. **(Cont. on page 7)**

ECBC 2010 Capabilities Showcase a Success

Nearly 600 visitors, presenters and guests attended the ECBC 2010 Capabilities Showcase on November 2, an event which featured displays, equipment and projects from nearly every team within the Center.



Thank you to the teams that participated in this year's 2010 Showcase - your hard work and coordinated efforts were greatly appreciated!

The Engineering Directorate was represented by 12 teams – Pyrotechnics & Explosives Branch; Obscuration & Nonlethal Engineering Branch; Rock Island; Acquisition and Logistics; Detection Engineering Branch; CBRN Unmanned Ground Vehicle; Protective Equipment Test Branch; Test, Reliability & Evaluation Branch (TREB); Joint Services Aircrew Mask Fixed Wing (JSAM-FW) CB Mask; Advanced Design & Manufacturing; Packaging Branch; and Protection Factor/Toxic Chamber Branch – all of which showcased their various projects and equipment.

"I have received nothing but positive feedback both from customers who attended and from employees across the Center," said Joe Wienand, ECBC Technical Director. "I have been told that at least two teams presenting at the event attracted new customers because of their presentations. Representatives from other Army labs who attended were so impressed with the event that they said they would like to host similar events. Leadership from DPW, which has for years been responsible for providing maintenance support in our facilities said that in all that time, they never really knew what ECBC did and that this event really opened their eyes."

The success of the showcase was evident not only in the number of people who attended and the added customers that were a result of it, but the nature of the work displayed served as a testament to the overall success of the Center's efforts to provide state of the art **(Cont. on page 8)**



The Engineering Edge - 2010 Highlights

JAN 2010: The Edge speaks with Mary McNally and gets an inside peak at Engineering's Protective Equipment Team.



MARCH 2010: Environmental and Field Testing Branch Wins ISO Accreditation.



MAY 2010: Robin Haupt talks with the Engineering Edge about her involvement in the Balanced Scorecard Strategy.



JANUARY

FEBRUARY

MARCH

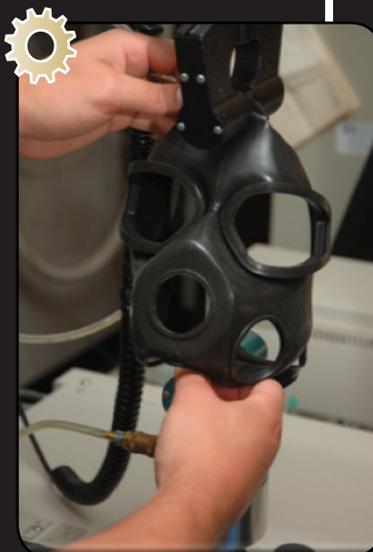
APRIL

MAY

JUNE



FEB 2010: Engineering's Test Technology Engineering Team features their capabilities, collaborative efforts and Chemical-Biological community interest in their work.



APRIL 2010: TREB Nominated for 2009 AMC's Outstanding Integrated Product/Weapon System Team of the Year Award.



JUNE 2010: Bill Klein discusses the upcoming changes to the Downer Hall and how those changes will effect the Directorate.

ECBC ENGINEERING

JULY 2010: Teresa Dorman Wins Baltimore Federal Executive Board Outstanding Woman of the Year, Bronze Individual Award.



SEPT 2010: AJay Thornton discusses why he supports the Balanced Scorecard.



SEPT 2010: The Edge talks with Engineering's Carl Busart and Juliane Olsen about their involvement in the DoD Executive Leadership Development Program.



DEC 2010: The Edge recognizes Engineering's Angel Cruz in his awarded honor as a Hispanic STEM Military and Civilian Hero.



JULY

AUGUST

SEPTEMBER

OCTOBER

NOVEMBER

DECEMBER



AUGUST 2010: ECBC Packaging Branch attends Air Force Logistics Training.



OCT 2010: Engineering powers the new face of protection: Joint Program Manager-Individual Protection leads the way in military respiratory protection.



NOV 2010: ECBC Edgewood-Rock Island Engineering collaboration sets trend for 'new way of business' with client Program Manager for Sets, Kits, Outfits and Tools.

2010

FOR THE COMPLETE SET OF 2010 ENGINEERING EDGE ISSUES, PLEASE VISIT:
<https://ecbcsharepoint.apgea.army.mil/sites/engineering/edge>

ENGINEERING'S TREB EXPANDS CAPABILITIES IN 2010

Engineering's Test Reliability & Evaluation Branch is increasing and expanding upon their existing capabilities to remain competitive in the Defense market, and continue providing support to the Warfighter. In order to stay ahead of the growing demands for Collective Protection Equipment (CPE) product qualification tests, over the past four years the branch has developed updated test systems in-house, under the Product Director, Test Equipment, Strategy and Support (PD-TESS) program. Additionally, the team exceeded one of their client's expectations this year, when they stepped out of their traditional Chemical Biological (ChemBio) testing capabilities to provide First Article Testing (FAT) on the Lighting Kit, Motion Detector (LKMD). Read more to learn about TREB's hard work and successes this past year.

IMPROVED TEST FILTER SYSTEMS

After four years of proposal work, grappling with budget constraints, and design hurdles, Engineering's Test Reliability & Evaluation Branch (TREB) team members are celebrating the results of their hard-work paid-off – two new and improved filter test systems.

"It took a lot of hard work and persistence to complete this project, but it's been well worth it. Our team has updated and increased our capabilities, which is a constant goal we work towards," Do Nguyen, TREB Branch Chief, said.

In April of 2006, TREB submitted two proposals to the Program Manager (PM) for the PD-TESS program, requesting funding and resources to upgrade their mission-essential testing facilities that fell under the Mechanical Filtration Test Facility and the Chemical Agent Simulant & Toxic Chemical Vapor Test Facility areas as outlined in the PD-TESS program plan. The proposals included requested improvements to the venerable Q223 Gas Life Filter Tester, used to test small collective protection gas filters, in addition to the redesign and construction of a new Q262 Gas Life Filter Tester.



TOP: Original Q262
BOTTOM: New and improved, Q262A1

"The original Q262 was developed in the 1980's and the Q223 had been in place since the late 1970's – that's ancient," Nguyen said. "The Q262's test stand and its components were requiring constant, costly repairs and the Q223 hadn't been used in years; it was just taking up space."

The new versions – Q262A1 and Q223A1 – are simplified, modern versions that provide more accurate, reliable detection. Additionally, spinoffs of the Q223A1 have been developed allowing TREB to test low flow filters, and test more filters at one time.

Although the Q223 tester's redesign was relatively obstacle-free – the updated Q223A1 system was operational by February 2008 – the Q262 upgrade required more perseverance and persistence to complete.

Initially, designs for the Q262A1 upgraded system were quickly initiated and orders were placed for the long lead times. However, due to budget constraints, funding was soon halted during the summer of 2006. In May 2008, funding for the project had resumed, and by June 2010, the system was validated and certified by TACOM.

"This was truly an in-house team effort. TREB was responsible for the design, integration, manufacturing and validation of the Q Test systems. This was a valuable learning and execution experience for such a young team. The engineers involved were all motivated and excited throughout the process, despite the many frustrations. The end result gave everyone such a great feeling of satisfaction and accomplishment" Nguyen said. 

LIGHTING KIT, MOTION DETECTOR

Engineering's Test Reliability & Evaluation Branch (TREB) surpassed their client's expectations in 2010, when they stepped out of their traditional Chemical Biological (CB) testing capabilities to provide First Article Testing (FAT) on the Lighting Kit, Motion Detector (LKMD).



TREB conducting a test with customer witnesses

"We're always looking out for the new thing and we're committed to earn the trust of our clients in any new area," Nguyen said.

Early warning systems may be new to TREB, but the client is no stranger to their traditional CB clientele. The Joint Program Executive Office for Chemical Biological Defense (JPEO-CBD), Product Manager-Force Protection Systems (PdM-FPS) developed the LKMD System and requested TREB to conduct the FAT.

The LKMD is a simple to use, compact, modular, sensor-based early warning system providing programmable responses of illumination (visible & IR) and sound, resulting in increased reaction time for individuals, teams, squads, or platoons.

"TREB's FAT provided the PdM the critical test data needed to make the decision to go into the Full Rate Production of 8,000 LKMD Systems," Nguyen said.

TREB received the test items later than expected but reworked their test plan, worked through many nights and were able to actually finish testing early, allowing the PdM to meet their original First Unit Equipped date.

"This was a great opportunity to allow my personnel to apply their already present skills in a different and challenging arena." Nguyen said. 

TREB's Angel Cruz takes honor at 2010 national convention



The Edge recognizes Engineering's Angel Cruz in his recently awarded honor as a Hispanic STEM Military and Civilian Hero.

By Dan Lafontaine, reprinted with permission from Research, Development and Engineering Command (RDECOM) Public Affairs

ORLANDO, Fla. – Angel Cruz's grandfathers left Puerto Rico to fight for America. Six decades later, Cruz earned a prestigious honor as one of seven Hispanic STEM Military and Civilian Heroes. ...

... Command Sgt. Maj. Hector Marin of the U.S. Army Research, Development and Engineering Command presented Cruz with the award at the 2010 Hispanic Engineer National Achievement Awards Conference. STEM stands for science, technology, engineering and mathematics. Marin praised Cruz's scientific efforts to support American Soldiers.

FOR THE COMPLETE ARTICLE, PLEASE VISIT: <http://www.army.mil/news/> and search "Angel Cruz" in the Army.mil search box under 'Articles.'

Strategic Management Meeting (Cont. from page 2)

"To quote Winston Churchill, 'However beautiful the strategy, you should occasionally look at the results.' And that's what we're doing here today, we're examining the results of our BSC strategy," Bowen said during the meeting introduction.

This SMM followed a slightly different format, focusing on a group of initiatives with significant results to report. Presenters briefed progress for initiatives that touched every BSC Perspective and, in some cases, linked to each other. Engineering's BSC Board of Directors commented on the value of connections between initiatives, noting that shared progress and partnerships across the Directorate would continue to have positive results.

Several initiatives were rejuvenated with new leadership; as part of the presentation of Initiative IP4 "Define Responsive Customer Service," Mike DeZearn highlighted the results from a workforce survey conducted to determine current customer service practices. The survey collected 180 responses over a three week period from Edgewood and Rock Island personnel, and was analyzed in collaboration with the ECBC Decision Analysis Team. In addition to explaining the results to SMM attendees, DeZearn also spoke about several recommendations for improving Engineering Directorate's customer service, including training and established customer service requirements.

Building on DeZearn's presentation, Nan Ramsey (Associate Director, ECBC Engineering Rock Island) described Rock Island's approach to customer service through International Organization for Standardization (ISO). Through ISO, Rock Island has established a formal customer feedback system to manage quality and customer satisfaction that includes surveys and regular communication with employees about customer survey results. In the future, the BSC Board of Directors suggested sharing of ideas between Rock Island and Edgewood for overall best results in customer service.

Following initiative presentations, Engineering Director AJ Thornton presented several individuals with BSC Awards. Nancy Waltman, Debbie Brooks-Harris and David Vincitore received the "Hot Shot" Award for demonstrating innovative thinking and a commitment to shaping the future of Engineering through the BSC. Jim Burns and Jim Genovese received the "Balancing the BSC" award for their outstanding individual contributions to the BSC that are linked to significant results and value added for the Engineering Directorate.

The full briefing from the SMM is available on the Engineering Intranet and SharePoint. If you want to learn more about the BSC in Engineering, please contact Ed Bowen at ed.bowen@us.army.mil or x5-4091. 



Nan Ramsey briefs on ECBC-RI's Customer Service Process.

Leadership Interview Series: John Wheeler (Cont. from page 2)

EE: What are your current roles and responsibilities?

JW: As Chief of the Product Engineering Division, I manage the Packaging, Product Data Management and Standardization and Specifications Branches, working directly with Nancy Waltman, Chris Ritchey and Barry Elliott who lead these branches.

EE: Your current position requires you to spend half of your time in Rock Island, IL and the other half here in Edgewood. Do you enjoy the dual-location responsibilities?

JW: Absolutely. I am very fortunate to have the opportunity to commute to a job I find so fulfilling. My wife and I live in Iowa, along with three of our six children. I enjoy being allowed to work in both places. Part of the responsibilities I assumed when I moved into my current position was to promote communication between the two sites; and that's been a very rewarding career experience.

EE: What makes you most excited about the work you do here at ECBC?

JW: I've learned over time that every day is worth celebrating and marking as a highlight. The people I work with make that possible. They are the most exciting part of my job. They are all fascinating people and it thrills me to have the opportunity to support their work.

EE: What have been some of the challenges you have faced during your career? How did you overcome them?

JW: Challenges have always come with I moved outside of my comfort area and stepped into a new task. Leading a group has been an interesting journey, but I've found that facing any new challenge comes down to realizing that I am responsible for the outcome. I have to do the needed research and find the training I need to ensure I do a good job. Each person is his own boss in a very real sense, and it is up to the individual to determine what needs to be done and to do it.

EE: What kind of advice would you give to members of the Engineering workforce who would someday like to see themselves in a leadership position?

JW: Take responsibility for your actions and your outcomes. Set realistic goals with deadlines and work towards them. Never wait until you are promoted to do more; grow today into the person you want to be tomorrow. Let people you trust know where you want to go and what you want to become, you never know where the opportunity you seek may turn up. 

AND THE 2010 SUMMER FITNESS CHALLENGE WINNERS ARE...

The Engineering Directorate workforce was invited to participate in the 2010 Summer Fitness Challenge from June 13 through September 11, to encourage employee fitness and reduce stress. The three-month challenge was a friendly, inter-office competition among coworkers as a summer incentive to improve or maintain personal fitness. This year's winners were:

TEAM WITH HIGHEST AVERAGE POINTS: Free Radicals- 3408.4, average

MOST IMPROVED INDIVIDUAL: Irma Farmer, Nicole Mckew

HIGHEST INDIVIDUAL POINTS: Paul Hoppe - 1,335.00

Thank you to everyone who participated! Since there was so much interest, another challenge is slated to begin Spring 2011. Volunteers are needed to help coordinate, publicize, recruit, and report participation. If you are interested in volunteering or for more information, please contact Holly Shisler at: holly.shisler@us.army.mil. 

ECBC 2010 Capabilities Showcase (Cont. from page 2)

Chemical-Biological defense technology to the Warfighter.

At the conclusion of the showcase, three awards were voted on by the attendees and given out to exhibitors at the conclusion of the showcase and the Pyrotechnics & Explosives Branch, led by Joe Domanico, won the award for Most Educational Display.

"I saw this award as recognition for the efforts of my entire team," Domanico said. "I get to stand out front and be the spokesman for them while they perform the majority of the hazardous operations. Pyrotechnics and explosives are a small, but vital part, of the ECBC overall mission. It was great fun just to be able to 'hawk my wares' for the attendees."

"It was fun watching the stunned reactions of some of the more than 400 visitors walking through the doors of the display area for the first time," Wienand said. "That first impression carried through as visitors went from booth to booth to talk to the nearly 200 presenters about the depth and breadth of the Center." 



Building Business with Strategy: Mark Schlein, Chief of Advanced Design & Manufacturing Division

The Engineering Edge talks with Mark Schlein to understand why he chose to participate in the strategic planning process and the specific initiatives he's participated in.

Engineering Edge: How did you first hear about the Balanced Scorecard (BSC) strategy?

Mark Schlein: It was at one of the Strategic Management Meetings about two years ago. Engineering leadership was giving an overview briefing of the strategy and defining the Directorate's goals.

EE: What initiative are you working on?

MS: I've been working on the IP1 Initiative, Developing Business Development Processes and Tools, and the C4 Initiative, Develop Expedited Processes for Urgent Requirements, for the past two years. The Business Development initiative has been focused on methodology, regulations and process approvals. The Expedited Processes for Urgent Requirements

initiative has been very active establishing processes that should prove very useful across Engineering Directorate, especially with IT requirements and purchasing activities.

EE: How has BSC directly influenced the business process of your branch?

MS: The strategy allowed us to implement an effective procedure for handling Urgent Requirements. More often than not, the Advanced Design and Manufacturing (ADM) Division receives urgent requirements that demand an item or request be expedited through the standard process and fielded in a matter of weeks. We were faced with the question, "What happens when something is needed, fast, and the standard procedure or prevailing contract will take months to move through?" The BSC provided a means to implement urgent need processes that would benefit not just ADM, but everyone.

EE: What inspired you to get involved?

MS: I am a bit of a renegade in many ways. We were looking for solutions to several existing business issues which were hampering the overall success of ADM. I decided to leverage the BSC thrust to gain the support and buy-in from leadership that was needed to address some of those issues. Management wanted us to participate in the business strategy efforts, and the BSC was aligned to many of the things we wanted to do. Practically speaking, it was a win-win. We were able to implement needed business process improvements for the ADM branch, and then capture those processes to be applied across the Directorate so that everyone benefits.

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

MS: Using the organization's strategy thrust to accomplish something needed "down in the trenches." Management was able to offer the Engineering workforce an effective tool that allowed teams like mine to get what we want and need. The BSC has been a tool that's allowed us to better our business processes during wartime. When you find a way to align the strategy to your own goals, and leverage the buy-in of Engineering leadership, your hard work and active participation in the strategy pays off. 

APG South's Annual Food, Toy and Gift Drive Kicks Off 2010 Holiday Season

APG South kicks off the 2010 Holiday Season with its 23rd Annual Food, Toy and Gift Drive collecting donations at 30 locations across the Edgewood Area from Nov. 8 to Dec. 7. Aiming to help less fortunate families at this time of the year, sponsoring organizations encourage their workforce members to support this charitable event with generous donations of new toys and gifts for all ages, as well as non-perishable food items.

Collected items will be donated to the Mason Dixon Community Services and Extreme Family Outreach. Following the Food, Toy and Gift Drive closing ceremony at the ECBC Berger Auditorium Dec. 7, the Mason Dixon Community Services, Extreme Family Outreach and the Army Community Services will ensure the delivery of donations to families in need. 

