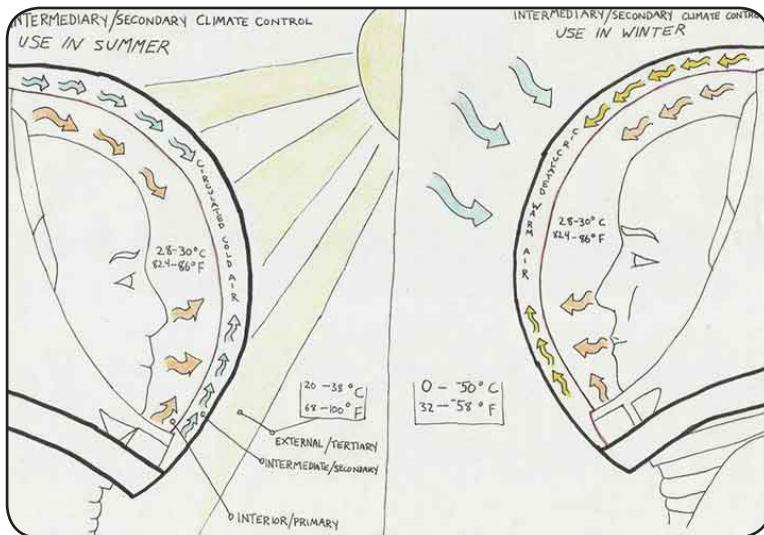


THE ENGINEERING EDGE



ECBC ENGINEERING
Design→Build→Test→Support

EDGEWOOD CHEMICAL BIOLOGICAL CENTER



Christine's Odyssey: Volunteers from ECBC Engineering complete a customized, climate controlled helmet to save the life of young woman

Due to the sensitivity of this recovery story, the last names of "Christine" and her relatives have been withheld for privacy reasons.

After two years of chronic pain, Christine is finally living a normal life again, thanks to the work of numerous volunteers from ECBC Engineering, community volunteers and the support of Johns Hopkins Medicine.

A Canadian native, Christine is a 22 year-old who had been confined to the inside of her home due to her extreme sensitivity to temperatures, smells, air movement and touch. Temperatures outside a strict range of 88-93 degrees Fahrenheit – hotter or colder – were unbearable for her. The faintest of breezes caused severe pain. Her sense of smell was intensified; background scents or odors were interpreted as pungent and nauseating. Eating hurt and was a chore; in order to avoid the painful movement of her hair across her face and head, she shaved it.

Christine didn't always have these exaggerated senses.

"She is borderline genius, an extremely intelligent individual who was eager to return **(Continues on page 7)**

In Spring 2010, Christine requested assistance to develop a helmet that would provide the environment she needs and permit her to leave her living area for medical treatment and daily activities. She did substantial research on possible designs and gave Advanced Design and Manufacturing her own preliminary designs (above).

Another Engineering Strategy Success - Budget Submission Initiative Closed Out

Since the inception of the Engineering Directorate's Balanced Scorecard (BSC) strategic planning process, ECBC Standardization and Specifications Branch Chief Barry Elliott has led a team responsible for developing a process for Army Working Capital Fund/Sustainment Systems Technical Support (SSTS) funding submissions. Members of the official strategic initiative, titled "Budget Submission Template," were recently recognized with the "Balancing the BSC" award at the first quarterly Strategic Management Meeting of 2011 on May 3.

Through their work on Engineering's strategy, the team developed an electronic budget submission tool that will be used in future SSTS budget data calls. This tool takes the former process, which was handled by a small group of people sorting through inconsistent input from multiple teams, to a standardized budget submission tool.

SSTS funds are primarily sustainment funds that support the Operations and Maintenance of systems **(Continues on page 6)**

Engineering's Obscuration and Nonlethal Engineering Branch Continues to Reinforce Importance of Obscuration as Defense Technique

During the Cold War, ECBC was the primary producer of lethal chemical munitions used as a deterrent against the threat of chemical and/or biological offensive attacks from the former Soviet Union. Since the United States' signing of the Chemical Weapons Convention in 1993, ECBC's chemical and biological research has been focused on creating defensive posture items for U.S. Forces.

ECBC's Obscuration and Nonlethal Engineering Branch retains the core expertise of the Center's former Munitions Directorate, whose mission was to design, develop and produce lethal, nonlethal/riot control, incendiary and smoke/obscurant munitions.

(Continues on page 3)



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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.



Engineering's Protective Equipment Test Branch Collaborates Across Directorates, Enhances Branch Capabilities

Engineering's Protective Equipment Test Branch (PET) knows firsthand that when life hands you lemons, you make lemonade.

Since Spring of 2010, the team has experienced a temporary downtime as needed upgrades to their existing test labs are made. Included in the upgrades are enhancements to the labs' air handlers and exhaust fans, added redundancies in the labs to improve safety and augmented temperature control.

Heeding to the old adage that "it will get worse before it gets better," PET Branch personnel anticipated the potential interruption and took action. Prior to construction on the labs, branch personnel worked tirelessly to coordinate the shift of the branch's test capabilities to other areas within PET as well as to ECBC's Research and Technology Directorate (R&T). This shift required additional cooperation and support from Safety and Environmental personnel of the Directorate of Program Integration and personnel of TACOM Rock Island to ensure that Standing Operating Procedures and waste management Laboratory Certifications were appropriately transitioned.

The shutdown of the three main testing laboratories of the PET occurred on February 21, 2011, and instead of this being detrimental to the ability of the PET to meet its customer needs, it has been a true success story. A prime example of this is the continuation of permeation production lot acceptance testing, which would have been at a standstill **(Continues on page 3)**



Awareness: Independence Day

Independence Day, commonly known as the Fourth of July, is a federal holiday in the United States commemorating the adoption of the Declaration of Independence on July 4, 1776, declaring independence from the Kingdom of Great Britain.

During the American Revolution, the legal separation of the Thirteen Colonies from Great Britain occurred on July 2, 1776, when the Second Continental Congress voted to approve a resolution of independence that had been proposed in June by Richard Henry Lee of Virginia. After voting for independence, Congress turned its attention to the Declaration of Independence, a statement explaining this decision, which had been prepared by a Committee of Five, with Thomas Jefferson as its principal author. Congress debated and revised the Declaration, finally approving it on July 4.

From the outset, Americans celebrated independence on July 4, the date shown on the much-publicized Declaration of Independence, rather than on July 2, the date the resolution of independence was approved in a closed session of Congress. ⚙️

Security Tip of the Month

Passwords are the most common means of authentication, but if you don't choose good passwords or keep them confidential, they're almost as ineffective as not having any password at all. Here are several tactics to use when choosing a password: 1.) Don't use passwords that are based on personal information that can be easily accessed or guessed. 2.) Don't use words that can be found in any dictionary of any language. 3.) Use a combination of letters, numbers, and special characters. For more information or questions about security at ECBC, please contact your security officer at ext-6810. ⚙️

Writing Tip of the Month

This month's writing tip was submitted by Engineering's Dr. John Kennedy.

Decision makers are busy people. They will not read your writing if it is not easy reading. If the decision makers do not read what you have to say, you will have no influence on their decisions. Reading should be easy whether it is a one page fact sheet for a Flag Officer or a 300-page technical report for scientists and engineers.

"To write simply is as difficult as to be good." ~ W. Somerset Maugham ⚙️

Obscuration and Nonlethal Engineering - an Important Defense Technique

(Continued from page 1) "One of the most important defensive techniques for Warfighters in combat is obscuration," said Obscuration and Nonlethal Engineering Branch Chief Kevin Fritz. "And the ECBC Obscuration and Nonlethal Engineering Branch is the Army's focal point for smoke payload support - pyrotechnic smoke mixes, obscurants and energetic materials."

Smoke and obscuration has proven to be a cost-effective force multiplier when used on the battlefield and is a key element in determining battlefield strategic goals and outcomes. During the history of U.S. conflicts, obscuration was used offensively and defensively to provide protection in the air, on land and at sea. One of the primary functions of obscuration has been to provide protection for armored vehicles, using obscurants produced by mechanized smoke generators and vehicle-launched grenades capable of screening in the visible, infrared and millimeter wavelengths of the electromagnetic spectrum.

The importance of obscuration as a defense technique was recently showcased at the 2011 Obscurants Symposium in Baltimore. The symposium offered opportunities for professionals from military installations, government contractors and high-tech companies to brief peers on current obscuration technologies, discuss future needs in obscurant capabilities and brainstorm new and effective ways to protect the 21st century Warfighter.

While Fritz's team did not provide briefings or displays at this year's symposium, the branch was present as representatives of the support they provided to the M106 under the management of the Joint Program Manager for Reconnaissance and Platform Integration.

The M106, slated to reach full rate production in the beginning of 2012, can disseminate its fill quickly and is appropriate for special and indoor operations.

Some obscurants, such as the colored smokes used in the M18 hand grenades, are used to provide signaling or marking as a means to communicate emerging needs on the battlefield, such as signaling for the airlift of injured personnel. Many of these items were developed by and continue to be supported by ECBC through the Obscuration and Nonlethal Engineering Branch.

"The U.S. Army Chemical, Biological, Radiological, and Nuclear School has been the traditional proponent of obscuration technologies, whose primary focus has been on mechanized smoke generators employed by chemical units to produce large obscurant screens on the battlefield," Fritz said. "Several other high-profile U.S. Army schools have also emerged as primary proponents of obscuration, with the focus on obscurant ammunition deployed by armored platforms, infantry and artillery. We still get feedback about how obscuration saves lives in the field against enemies such as snipers."

The Obscuration and Nonlethal Engineering Branch also excels in their ingenuity, applied innovation and collaborative efforts with other organizations to provide the best support to the Warfighter.

"Probably the highest profile project we are working on is the development of proposals to utilize obscurant and nonlethal items for defense of expeditionary base camps," Fritz said. "The expeditionary camps are those set up in Afghanistan and other places in theater."

According to Fritz, insurgents have been shelling these camps with mortar cartridges and rocket-propelled grenades, inflicting many casualties among U.S. forces and forcing them to abandon many of the camps. Responding to a request for proposals to provide protection to the camps, Fritz's team began working in March to develop concepts for adapting obscurant munitions currently used for

(Continues on page 8)

PET Collaborates with R&T, Enhances Branch Capabilities

(Continued from page 2) without the support of Dr. Stan Ostazeski of R&T's Forensic Analytical Center and his team. "It's a great example of the directorates helping one another so that work can go on," PET Branch Chief Mary McNally said.

PET Senior Chemical Engineer Mark Ciampaglio saw this as an opportunity to expand the PET's current sorbent testing capabilities and to shift resources, and now the branch is moving on it.

The team's work with the Center's R&T Directorate has allowed them to improve their test reliability and control of key parameters and to implement a real-time data acquisition system. Working with Dr. Rick Cox and other personnel from R&T's Chemical, Biological, Radiological, and Nuclear (CBRN) Filtration Team, PET was able to successfully transition several technological improvements and methods from the R&T team's cutting edge sorbent testing labs in order to ensure top quality data and service to their customers.

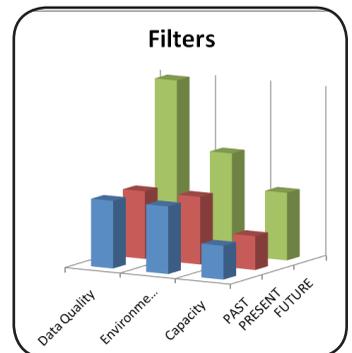
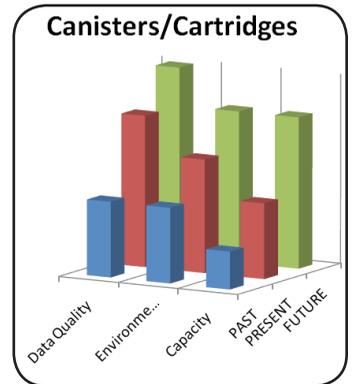
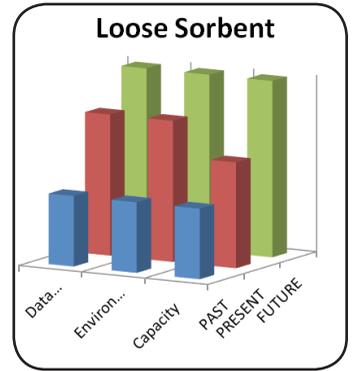
The upgrade also improves PET's Quality Assurance capabilities, allowing the branch to comb through a data set to determine any anomalies in a test. With improved control of test parameters and lower variance in test data, PET has seen notable decreases in test deviation.

"For a supposed 'downtime,' we've been very busy," Ciampaglio said.

In addition to the cross-directorate collaboration to improve PET's test systems during the branch's seeming downtime, the branch has also been working with the CBRN Filtration team for production lot testing in order to meet an emerging area of need in chemical testing - toxic industrial chemicals (TIC).

"PET aims to be a 'one-stop shop' for production lot testing. In order to be that, we are working to expand our hood space so that we can dedicate space to this additional type of testing that is appearing more frequently in potential customers' program requirements and requests for test services," Ciampaglio said. "We're trying to predict future requirements so we are ready to help."

Currently, PET works with the CBRN Filtration (Continues on page 8)



The above charts provide a pictorial look at the four-fold increase in loose sorbent, canisters/cartridges and filter testing capabilities PET anticipates following the needed upgrades. The increase is measured by testing each capability's Past, Present and Future Data Quality, Environmental Control and Capacity.

In the Army

The Engineering Edge is kicking off a regular series titled "In the Army Now," featuring information pieces addressing frequently asked questions about the Army culture and structure. In recognition of Independence Day on July 4 and in honor of the Servicemen and women whose sacrifices ensure our nation's security, take this opportunity to learn more about the U.S. Army's organizational structure. In this month's "In the Army Now," we look at designations of "Officer" and "Enlisted" of the U.S. Army and the Army Materiel Command chain of command.

ENLISTED RANKS



PRIVATE E-2



PRIVATE FIRST CLASS E-3



SPECIALIST E-4



CORPORAL E-4



SERGEANT E-5



STAFF SERGEANT E-6



SERGEANT FIRST CLASS E-7



MASTER SERGEANT E-8



FIRST SERGEANT E-8



SERGEANT MAJOR E-9



COMMAND SERGEANT MAJOR E-9



SERGEANT MAJOR OF THE ARMY

Enlisted members are the backbone of the U.S. military. They perform the primary jobs that need to be done hands-on. Enlisted members are specialists: they are trained to perform specific specialties in the military. As Enlisted Personnel progress up the ranks (there are nine Enlisted ranks), they assume more responsibility and provide direct supervision to their subordinates. Well-prepared and highly adaptable, Enlisted Soldiers are regarded for their sense of duty and the sacrifices they have made for their country. Much like employees at a company, Enlisted Soldiers perform specific job functions and have the knowledge that ensures the success of their unit's current mission within the Army.

Training for service members through Private First Class includes the basic training phase, followed by a specialized training phase that provides recruits with a specific area of expertise or concentration. In the Army and Marines, this area is called a Military Occupational Specialty.

Enlisted personnel in certain grades have special status. In the Army, Air Force and Marine Corps, this status is known as Non-Commissioned Officer (NCO) status. In the Army and Air Force, enlisted personnel that are Sergeant through Command Sergeant Major are NCOs. However, some Specialists are laterally promoted to Corporal and are considered NCOs. Within the worker group, Non-NCOs are the foremen and line-supervisors. They perform the job, but also provide direct supervision to the other workers. Senior NCOs are expected to exercise leadership at a more general level. They lead larger groups of service members, mentor junior officers and advise senior officers on matters pertaining to their areas of responsibility. A select few senior NCOs who are Sergeant Majors or Command Sergeant Majors serve as Senior Enlisted Advisors to senior commanders in each Service and in the Department of Defense.

NOW...

OFFICER RANKS



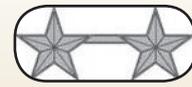
General of the Army



General
O-10



Lieutenant General
O-9



Major General
O-8



Brigadier General
O-7



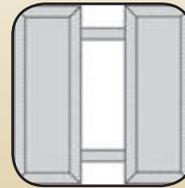
Colonel
O-6



Lieutenant Colonel
O-5



Major
O-4



Captain
O-3



First Lieutenant
O-2



Second Lieutenant
O-1



CHIEF WARRANT OFFICER-5



CHIEF WARRANT OFFICER-4



CHIEF WARRANT OFFICER-3



CHIEF WARRANT OFFICER-2



WARRANT OFFICER-1

Officer ranks in the United States military consist of Commissioned Officers and Warrant Officers. The commissioned ranks are the highest in the military. These officers hold presidential commissions and are confirmed at their ranks by the Senate. Army, Air Force and Marine Corps officers are called company grade officers in the pay grades of O-1 to O-3, field grade officers in pay grades O-4 to O-6 and general officers in pay grades O-7 and higher.

Warrant officers hold warrants from their service secretary and are specialists and experts in certain military technologies or capabilities. The lowest ranking Warrant Officers serve under a warrant, but they receive commissions from the president upon promotion to Chief Warrant Officer 2. These Commissioned Warrant Officers are direct representatives of the President of the United States. They derive their authority from the same source as commissioned officers but remain specialists, in contrast to Commissioned Officers, who are generalists.

Commissioned Officers outrank all Warrant Officers and Enlisted personnel. Commissioned Officers must have a minimum of a four-year bachelor's degree and are commissioned through specific commissioning programs, such as one of the military academies (United States Military Academy, Naval Academy, Air Force Academy, Coast Guard Academy), Reserve Officer Training Corps or Officer Candidate School.

Engineering Strategy Closes Out Budget Submission Template Initiative

(Continued from page 1) already in the field. These funds go out to all of the Directorate's commodity teams and support most of the work that the teams do throughout the year. A significant amount of the funds that support different organizations comes from these SSTS funds.

In the beginning, the intent was to develop a financial plan for the Directorate. According to Elliott, there were a small number of people who were familiar with the different types of funds, and several teams had designated one person to compile all of the input for budget submissions.

"One of the objectives at the outset of this strategic initiative was to make sure that team leaders were more responsible for overall budget submissions," Elliott said.

The initiative resulted in creating an online tool where commodity teams could make requests and input justifications for their requests. The application also provides links to informational Web pages to explain the different types of funding available. Now, team leads can retrieve an estimate for each system that is supported, either approve or send back the requests and track the progress and/or completion of the submissions.

"It's a more standardized method of submittals that also includes a historical database of requests for future reference – we've automated the process," Elliott said.

Elliott noted that the tool was created through Engineering's Product Data Management team.

"During the development of the tool, we realized the process was more complex than we had originally envisioned. The scope depends on what the commodity team is doing. Now, the system lets the user see all of the inputs, which is a great advantage to support the organizational aspect of the process," Elliott said.

When asked if the tool would eventually be applied to additional funding submission processes, Elliott mentioned that the submittal process for SSTS funds has a unique approach, specific to the requirements of its "sustainment funding" classification.

"The system is very flexible. It enhances the Directorate's support capability, and we've been fortunate to have the support of the BSC Core Team and senior leadership from the beginning."

Engineering's strategic management system continues to remain relevant for the workforce, providing opportunities for interested members to solve problems that they see as impediments to accomplishing the Directorate's mission. In the case of this strategic initiative, employees from numerous directorate organizations including Standards and Specifications, Financial Management, Product Data Management and ECBC's Rock Island Site voluntarily came together to solve a problem that will allow the Directorate to operate in a more efficient and effective manner. 

"Networking Program" Initiative Completed, Leaves Lasting Impact in Engineering: In addition to closing out the budget submission template initiative, the Engineering strategy recently closed Initiative C2 - Develop and Implement a Networking Program for Professional Users. Led by Leanne Chacon, the initiative got its start from the mentor program.

"I got involved with this initiative through the mentor program. In the program we were assigned to develop a 'white space project.' I attended an Engineering strategy meeting and heard about the networking initiative that was currently closed. It was the perfect opportunity," Chacon said.

After more than two years of working the initiative, Chacon was able to reinvigorate a sports league, coordinate a summer fitness challenge and establish continuity for a series of informal networking events called "Tuesday's with..."

Although the initiative has closed, it is not ended, Chacon noted. The progress made through this initiative will continue to provide networking opportunities for the Engineering workforce and leaves room for others within the Directorate to take a leadership role.

"My hope is that someone else will be able to open it up and work on it in the future," Chacon said.

If you are interested in becoming involved in the strategy, please contact Ed Bowen at edward.c.bowen8.civ@mail.mil.

Edge Photos of the Month

This month, the Edge is featuring the matrixed Joint General Purpose Mask (JSGPM) team. LEFT PHOTO: JSGPM team gathers on the lawn near their facility for a group photo. RIGHT PHOTO: The JSGPM is modeled on a manikin to show actual size.

To view more pictures of the Directorate and other ECBC photos, please visit the ECBC Flickr site: <http://www.flickr.com/photos/edgewoodchembiocenter/> or access them from ECBC Engineering's SharePoint home page at: <https://ecbcsharepoint.apgea.army.mil/sites/engineering>.



Christine's Odyssey: ECBC Engineering provides critical capabilities to save woman's life

(Continued from page 1) to her normal way of life," said Mark Schlein, Engineering's ADM Division Chief. "As the head of her household at such a young age, it was imperative that she get healthy."

Two years ago a head trauma injury caused the onset of Christine's Complex Regional Pain Syndrome (CRPS), a condition which is described as constant or intense chronic pain that can develop after a minor injury or as a result of tissue damage during a surgical procedure. Most patients will report continuous, excruciating pain that exceeds the threshold for what is considered normal in comparison to the type of injury the patient has.

"Christine was more and more locked into her apartment due to her symptoms, and she needed to receive medical treatment," Schlein said. "But since the Canadian healthcare system doesn't allow for house calls, she was stuck with a dilemma – she had to get out in order to receive necessary medical treatment."



ABOVE: Transport team volunteers contributed a week of their vacation time to get Christine from Canada and bring her to medical treatment at Johns Hopkins. Pictured here from right to left: Hopkins' Dr. Ian Shantz and ECBC ADM Engineers Mark Schlein and Jason Adamek in an RV. **BELOW:** Christine in her parka and the helmet named "Gecko" is carried to RV by her brother; Schlein has the support unit. Christine was too weak to walk and had lost considerable weight.



In the spring of 2010, after reaching out to numerous medical facilities, science and engineering research centers and international labs, Christine found an organization that could help her. She requested assistance from V-LINC, a merged organization consisting of Volunteers for Medical Engineering (VME) and Learning Independence Through Computers (LINC). Focused on improving the independence and quality of life for individuals through innovative technology solutions and in-home training, V-LINC was able to provide the solutions and support that Christine would need to recover.

Through V-LINC, Christine was connected to the ECBC VME volunteers, where she received personalized assistance to develop a helmet and full-body suit that would provide the environment she needed to permit her to leave her living area for medical treatment and daily activities. She had done substantial research on possible design alternatives for the helmet and gave ECBC her own designs.

During the summer of 2010, a project team was formed to incorporate the existing VME volunteer team from ECBC headed by Schlein, representatives of The Johns Hopkins University Whiting School of Engineering headed by Dr. Andy Conn, V-LINC volunteer (retired from National Aeronautics and Space Administration) Stan Ollendorf and other individual V-LINC volunteers with relevant experience and expertise.

"Originally, Hopkins was to take the lead, and ECBC volunteers were going to serve as consultants," Schlein said. "But as the project progressed, the university was unable to maintain a lead role, and so we switched. Hopkins held a fundraiser, raised \$8,000 to go towards the project and we moved forward to develop the helmet for Christine."

Using Christine's concepts, ECBC volunteers began work to develop a portable solution incorporating: a helmet, which Christine dubbed "Gecko," a full-body suit, air heating and filtering and a power supply.

"It was a collaborative effort across the Engineering Directorate," Schlein said. "Greg Thompson's Conceptual Modeling team, Rick Moore's Rapid Technologies team, Jeff Hofmann's Program Manager team, Dan Lumpkins shop team and Alex Pappas' Protection Factor team were all a part of this effort."

In October, the project became critical when Christine suffered a recurrence of gastroparesis, which caused a loss of weight and threatened her overall health. As the international Calmar Pain Relief Therapy clinic notes, CRPS symptoms tend to worsen rather than get better over time.

In Christine's case, the symptoms did worsen and were beginning to cause additional health problems.

"Our team immediately stopped focusing on the full-body suit and focused on perfecting the temperature system in the helmet. The helmet would permit her to travel to medical facilities to resolve this problem without exacerbating the CRPS," Schlein said.

The required travel would be more than just a quick drive to her local hospital, though. With the help and coordination of Conn, Christine was to receive evaluation/treatment at the Johns Hopkins Medical Institution (JHMI) in Baltimore.

In December, a prototype Rapid Response Helmet System (RRHS) was produced and delivered to Christine. In February, because commercial travel was not feasible for Christine, a three-member team consisting of Schlein, along with ADM's Jason Adamek and a volunteer community physician, Dr. Ian Shantz, began a journey via RV to her hometown of Red Deer, picked her up and brought her to JHMI. All three road-trippers committed to the trip voluntarily, taking personal vacation time to travel. "She literally looked close to death when we got her," Schlein said. "She had lost considerable weight and was too weak to walk." (Continues on page 8)

Obscuration and Nonlethal Engineering

(Continued from page 3) vehicle protection to the protection of these camps. Also proposed was the use of nonlethal agents, such as malodorants and marking agents known as “taggants.”

Essentially, the nonlethal agents would be used to drive an enemy from cover, after which lethal force could be used, or as a crowd dispersant if the enemy force faced is a civil disturbance and not a lethal attack.

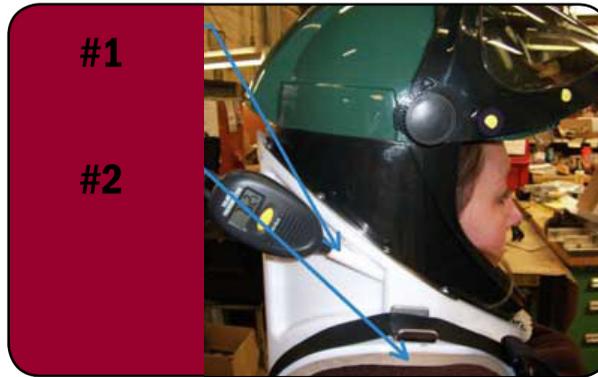
The taggants can be used to either visibly mark (paint) or mark with a hidden (ultraviolet or infrared) substance. These markers can be used actively from direct fire platforms to mark enemies with the intention of identifying them later, or could be pre-emplaced to effect direct transfer to enemy personnel or equipment as a method of finding out what routes enemy forces are using.

“I briefed the technical director of the Natick Soldier Research, Development and Engineering Center (NSRDEC) on May 20, and he and his colleagues expressed interest in pursuing the ideas further,” Fritz said. “At an earlier NSRDEC meeting, one attendee enthusiastically welcomed obscurant technology proposals from ECBC, stating, ‘In places like Afghanistan one of the significant battlefield threats in places like these camps is a low-tech enemy using lethal conventional weapons,’” Fritz said.

In the upcoming months, the branch has many other customer-funded projects planned. One of those projects includes the recapitalization of 55,000 M825A1 projectiles to restore them to usable condition by replacing internal components that have exceeded design shelf life and redesigning the delay module.

Additionally, Fritz’s team is collaborating with Engineering’s Pyrotechnics and Explosives Branch to design and test AN-M14 incendiary hand grenade product improvements in order to enhance safety by elimination of incendiary fragments and increase of the lag time between fuse initiation and grenade functioning.

“The Pyrotechnic and Explosives Branch had previously developed an improved fill for the AN-M14 that was safer for both personnel and the environment,” Fritz said. “These design enhancements requested by our customer will further enhance the safety, reliability and use possibilities of the AN-M14 incendiary grenade.” 



The RRHS/Gecko, based on Christine’s design recommendations. Special features of “Gecko” include: **#1: talking thermometer** and **#2: new foam pad.**

Christine’s Odyssey: ECBC Engineering provides critical capabilities to save woman’s life

(Continued from page 7) However, Christine hadn’t lost her sense of humor and creativity. She sarcastically christened the large RV as “Amentet,” referencing the ancient Egyptian goddess who was the consort of Aken, ferryman of the dead.

“She kept us entertained for much of the ride to Baltimore,” Schlein said.

At 7:45 p.m. EST on Saturday, February 5, 2011, the Amentet arrived at JHMI – a five-day, 5,500 miles round-trip finally completed. Its precious cargo was smoothly delivered into the caring arms of the doctors and staff at the hospital.

=====

After two months of intensive treatment at JHMI, Christine returned home to Red Deer – via airplane.

“The doctors were able to determine that her gastroparesis and CRPS were related problems. One was causing the other, both problems were intensifying the severity of either problem,” Schlein said.

When the doctors were able to block the primary source of pain, Christine’s holistic recovery was able to begin.

“Christine told me how impressed she was by the health care she’d received in the U.S., starting with Dr. Ian Shantz during the long ride from Red Deer to Baltimore, and then all of the JHMI staff, and especially her primary physician at Hopkins, Dr. Anastasia Rowland-Seymour,” Schlein said.

Christine’s recovery was considered remarkable by the medical professionals. More so, her recovery was considered impossible without the numerous volunteers who designed, engineered, tested, nursed, treated and drove – all for the sake of working one miracle in the life of one young woman.

To find out more information about V-LINC, visit: <http://www.v-linc.org/> 

PET Collaborates with R&T, Enhances Branch Capabilities

(Continued from page 3) team to offer the TICs testing. As the branch is able to absorb the testing at their facility, it will allow the Filtration team to refine their specific capability focus.

“As we move to become a ‘one-stop shop’ that offers TICs testing, we are not taking away from the R&T function. They’ve had to take on some production lot testing in order for us to meet customer needs. Moving ahead, they will be able to focus on their primary mission,” McNally said.

Aside from the collaborative work PET has done with R&T to reshuffle the branch’s capabilities, the reconstruction of their labs will increase PET’s existing test capabilities four-fold. Specifically, the branch’s loose carbon testing and canister filter testing capacities will quadruple.

“We will have more fume hoods than we’ve ever had in recent past, so this is an opportunity for us to increase our capability dramatically,” Ciampaglio said.

Expansion and modernization are the buzz words at PET’s Edgewood facility. Applying the same tenacity for improvement to the branch’s permeation and mask testing capabilities, PET Engineering Technician John Knopp noted that the branch is working some of the same magic to modernize the branch’s permeation and mask testing areas.

“This has been an opportune time to clean house and restructure our capabilities to flow better, consolidate our operations and enhance our data capture systems across our capabilities to provide real time information,” Knopp said.

Looking ahead, PET expects for planned expansions to be well underway in the first quarter of FY2012.

“This has been a great example of how well the Center can work if we take down the walls between Directorates, extend an arm and help one another shine,” McNally said. “This is how we are fortunate.” 