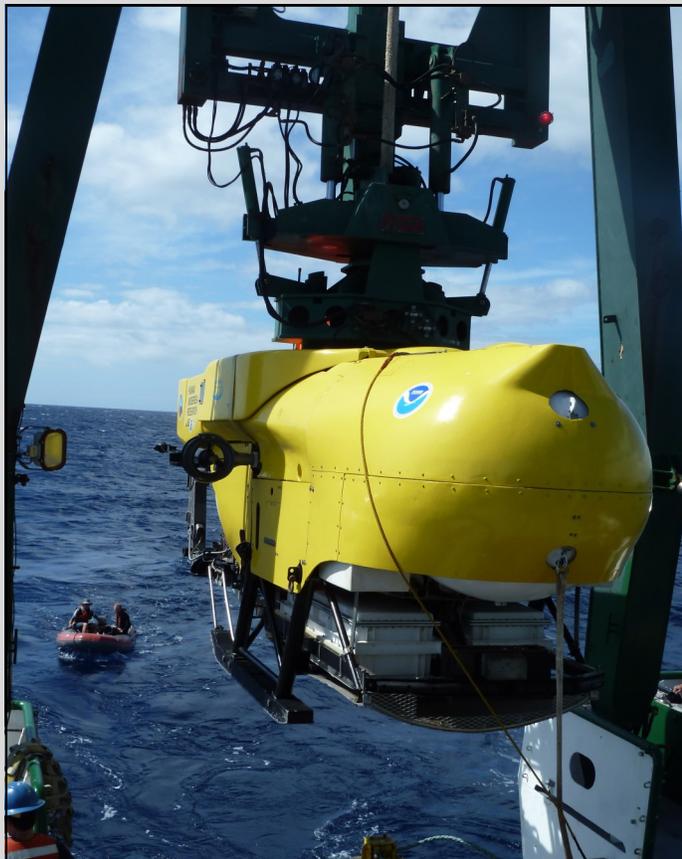


CBARR NEWS

Edgewood Chemical Biological Center

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*A worldwide leader
in CB solutions*



On the heels of a presidential inauguration that took place on Martin Luther King, Jr. Day, the month of February celebrates both Black History and the Presidents who have written our country's story. As we reflect on the past, the Chemical Biological Application and Risk Reduction (CBARR) Business Unit of the U.S. Army Edgewood Chemical Biological Center continues to look forward. In this issue, you will discover how project managers are rewriting the chapter on international customer service, not to mention exploring new territories—even the ocean floor. Going to great lengths for customers is part of CBARR's commitment to serve, whether it is establishing effective working relationships at home and abroad, or successfully analyzing chemical samples on a boat in the middle of the Pacific. Enjoy the next few pages of CBARR's continuing story.

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For more information about CBARR's mission, visit:
<http://www.ecbc.army.mil/cbarr>



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SAFETY: Point/Counterpoint

IS HIGH-VISIBILITY GEAR EFFECTIVE?



ECBC recently issued a policy to improve safety on project sites by mandating the use of high-visibility outer garments. As a result of several incident and near-miss assessments, CBARR has embraced the new policy and is in the process of issuing a variety of high-visibility gear that complies with Department of Transportation regulations to all personnel. Through an internal policy, CBARR has also issued guidance on the activities and locations where it will be required for personnel to wear the provided gear. Implementation of high-visibility gear reflects various contracting policies, and the evidence of its effectiveness is observed at any construction site with a roadwork crew. Or at a local convenience store when they're getting their cup of coffee in the morning. However, some feel that the widespread implementation of high-visibility gear will actually diminish its effectiveness. Below, Jarad Tucker provides a counterpoint opinion to a December 2012 article in "Professional Safety," a publication of the American Society of Safety Engineers.

POINT: The overuse of PPE reduces its effectiveness for safety

In an article titled, "Diminishing Returns, Diminishing Awareness: the Overuse of Reflective Vests and Other PPE," author John Olesky makes the following points:

1. "I believe that the overuse of these vests will actually diminish the safety factor that was originally provided by the vests both for the workers and for the general public...when the general public drives by a construction site they see everyone on the site wearing a vest. I believe this takes away from the public's conscious awareness and reduces the safety of everyone on that site—and on all sites."
2. "These vests are normally used and were specifically designed for use when there is some kind of vehicular traffic on or near the worksite, or if heavy equipment such as a dozer or crane is moving around the site and workers will be exposed to the dangers of being struck by that vehicle traffic."
3. "The overuse of safety vests can affect the safety on a jobsite, first by having a negative affect (when not required) on the worker's attitude and, second, by numbing the visual awareness of the public over time."

COUNTERPOINT: 'Diminishing returns' does not apply

BY JARAD TUCKER

Safety and Occupational Health Specialist

I personally don't think the author's "overuse" claim would have a significantly negative "diminishing returns" effect on the value high-visibility PPE adds to a worksite. I believe just the opposite would happen on a worksite where high-visibility PPE requirements are fragmented.

The author says that properly a conducted job hazard analysis would identify the correct PPE, and uses the example that electrical workers in a building wouldn't need it. He also mentions behavior-based safety and how requiring high-visibility all the time will diminish

workers' attitude towards safety. He uses the example of a project safety manager requiring respirators for an entire worksite as opposed to just task specific jobs.



These points and scenarios make me believe the author has never been in the project safety positions he is critiquing and does not realize the benefits gained from this type of "blanket" requirement of PPE. The "policing" of a fragmented high-visibility policy that would require high-visibility here, but not there, and at this time, but not at that time, would be a nightmare for management to perform consistently. Not only that, but

I would expect this would lead to worker frustration and discontent with safety and management over a confusing policy and potential inconsistent enforcement.

The value gained from consistent use and enforcement of a clearly defined "blanket" high-visibility PPE requirement on a worksite far outweighs the potential diminishing returns the author speaks of.



CBARR personnel wear high-visibility gear during project operations.

The role of the Program Manager

Dennis Bolt offers advice for managing projects while deployed



Newsletter Series

Dennis Bolt is the primary Program Manager (PM) for a project with the Defence Science and Technology Organisation (DSTO) Precinct. The project involves a chemical warfare investigation and the assessment of various buildings and laboratories within Marigrnong, Australia where chemical warfare agents may have been used. CBARR PMs fill a vital role as the direct face-to-face link to the customer, and are responsible for all planning and communications. Many projects require the PM to play an active role on project site, which may require extensive temporary duty (TDY). During his support as PM, Dennis has been deployed to numerous locations in Australia and has offered the following useful tips for performing well in this role.

1) Reach-back

Reach-back is the most valuable and important tool available when managing a project overseas. Use the expertise available to you from the various resources within ECBC. By far, the resources I have used the most have been from our Safety and Risk Management Office, PM Office and the Environmental Monitoring Laboratory.

2) Laptop and Blackberry Services

A good laptop and blackberry with international capabilities are a must. Make sure prior to leaving overseas you schedule an appointment with the ECBC Help Desk (417-ECBC) to have your laptop updated with the latest software, including both VPN and Citrix log-in capabilities. Also, make sure your blackberry is updated and has international calling capabilities.

3) Communications

Communications via phone and email are critical while deployed, however not all projects are located within the Eastern Standard Time zone. For example, the time difference between Melbourne, Australia and Edgewood, Md. is 15 hours. As such, it is not always easy or convenient to make a call back to CBARR headquarters. Try to set up routine conference calls ahead of time and create a schedule that is convenient for all parties involved.

4) Scope of Work and Project Requirements

The project manager must be familiar with all project requirements and ECBC's role in successfully completing the mission. It is recommended that the PM read all site-specific documents and pose questions to the appropriate authority. The PM may also be required to provide technical input during the execution of daily activities; therefore, knowledge of site-specific procedures and requirements is invaluable when providing guidance.

5) Establish Working Relationships

Establish a rapport with the customer and their staff. The successful completion of the mission depends on a concerted team effort from all organizations involved. The PM must provide technical support and guidance to all agency staff; likewise, ECBC's success is directly tied to support provided by these organizations. Establishing a relationship that fosters teamwork, cooperation and trust is essential.

6) Plan for Transition

Plan for an on-site transition with the current PM. Ensure that your travel plans provide enough time for 1-2 days onsite with the current PM to discuss lessons learned in order to become familiar with the site layout and operational workforce. It is suggested that the PM requests and read Daily Situation Reports starting at least one week prior to deployment. These documents will provide insight to the current status and conditions onsite, normal conditions and alert the individual to any issues which they should be aware.

Employee Profile: DENNIS BOLT



CBARR Mechanical Engineer,
Project Manager for Australia

Q: How long have you worked at ECBC?

A: Thirty years.

Q: What's your favorite part about working for CBARR?

A: The nature of the work we do as well as the people you get to work with in CBARR is what makes the job great.

Q: How would you define the role of a project manager?

A: The project manager's role is to plan, organize and support the execution of all tasks related to the project.

Q: What are their responsibilities?

A: To clearly understand the customers' need and communicating those needs to the various support elements within or outside of CBARR that will be involved in the project. From there, conduct all of the necessary planning and organizing of all the resources needed to execute the project.

Q: What is the most challenging part about being a project manager?

A: Meeting the customers' needs.

Q: What is the most rewarding part?

A: Completing the project, meeting all of the customers' needs and providing the best possible outcome for them.

Navigating New Waters

**CBARR samples
ocean floor for
HUMMA project**



Five miles off the southern coast of Oahu, Hawaii, a three-person submersible was being lifted off the back of a boat by a mechanical crane. The underwater vehicle floated on the surface of the ocean for a few moments as the crew in the chase boat unhooked the submersible as it prepared for its 550-meter journey into the depths of the ocean. Crisp light blues faded slowly into darker shades of color, and the temperature grew colder in the vast blackness. Even with the underwater lights, the researchers inside could only see 20 meters in front of them, through portholes barely as big as their faces.

One of those researchers was Mike Knudsen, the field remediation air monitoring manager for CBARR. Knudsen was part of a CBARR team that supported a multi-phase research effort called the Hawaii Undersea Military Munitions Assessment (HUMMA) to investigate sea-disposed military munitions along the Hawaiian coast.

“A typical dive is between 8 and 9 hours in a small metal sphere that is seven feet in diameter, and there are three people in there,” Knudsen said. “It was a small, cold space. But an absolute, can’t-pass-up-opportunity. I was excited.”

According to the HUMMA project website, both conventional and chemical munitions were discarded south of Pearl Harbor following World War II, including 16,000 M47A2 100-pound mustard-filled bombs. For two weeks beginning on Nov. 23, CBARR supported its second mission for HUMMA, and provided chemical analysis for nearly 300 samples collected by the submersible, including 165 sediment samples, five water samples and 36 samples of shrimp tissue.

“Our job on the dive was to provide chemical warfare material sampling expertise and to help locate items on the

bottom of the ocean. One of the big pieces of the job was to watch the sonar to make sure the sub doesn’t run into things or get snagged on other hazards,” said Knudsen, who has made a total of six dives down in the submarine.

Old munitions deteriorating on the sea floor decorated the muddy sediment like railroad tracks on the sonar map. There are no plants at these depths and few animals, but every once in a while the crew caught a glimpse of a shark or sting ray. Knudsen attributes the sightings not to luck but to the bait traps used by the submersible to catch shrimp for bio analysis.

John Schwarz, CBARR analytical chemistry laboratory manager and project lead, took the equivalent of a mobile analytic platform and stationed it on a boat in order to analyze the collected samples. A glove box was used for sample preparation and MINICAMS accurately monitoring air inside the designated laboratory space. All equipment in the designated onboard laboratory, including computer monitors, had to be tied down due to the ship’s movement on the ocean surface. Schwarz said the experience was more unique than anything else he’s done for CBARR.

“On the ship we were able to successfully execute the quality of analytical procedures and protocols for samples as we would in our fixed laboratory back at our headquarters at the Aberdeen Proving Ground,” Schwarz said. “To me that’s why it was a big achievement. We did it on a boat in the ocean.”

While Knudsen and CBARR teammate Jim Swank, the designated explosive ordnance disposal technician of Pine Bluff Arsenal’s Field Technology Branch, spent their days in darkness underwater, Schwarz spent his nights working in the lab analyzing samples and clearing them of chemical agents.

(CONTINUED P. 8)

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Mike Knudsen, air monitoring manager, boards the PISCES submersible operated by the Hawaii Undersea Research Laboratory.

“It was a small, cold space. But an absolute, can’t-pass-up-opportunity.”

-Mike Knudsen



The front of the PISCES submersible had three viewing portholes, robotic arms and crates to collect various samples. Photo credit: Environet.

ECBC CONNECTION



The RDECOM Insider newsletter

The February issue of the RDECOM Insider newsletter features CBARR's chemical remediation efforts in Albania.

The Page 3 write-up includes U.S. Ambassador to Albania Alexander A. Arvizu's note of gratitude thanking the CBARR team for their "professionalism and expertise" in a successful operation that destroyed a recently discovered stockpile of chemical munitions in Tirana, Albania.

What's the Word?

Contact us!

Send us your feedback. For article suggestions, questions or comments please contact CBARR Communications Officer Kristen Dalton at kristen.a.dalton.ctr@mail.mil

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FEBRUARY forecasts



WEATHER AROUND THE WORLD

CBARR LOCATIONS

Aberdeen Proving Ground, Md.
 Pine Bluff Arsenal, Ark.
 Washington, D.C.
 Deseret Chemical Depot, Utah
 Umatilla, Ore.
 Melbourne, Australia

AVG. HIGH (F)	AVG. LOW (F)	AVG. PRECIP. (in)
44	27	2.97
56	36	4.60
47	31	2.71
45	26	1.80
47	31	0.81
78	59	1.80

★ CBARR Star Darren Hicklin ★

CBARR chemist Darren Hicklin prepared a mobile Real-Time Analytical Platform (RTAP) for MINICAMS confirmation DAAM monitoring in support of waste shipment monitoring at Port Arthur, Texas. Hicklin helped reconfigure the RTAP into a mobile laboratory with a gas chromatography-mass spectrometer and gas chromatography-flame photometric detector. Hicklin then drove the vehicle from Pine Bluff Arsenal, Ark. to Port Arthur. While onsite, he certified class three methods for GA, GB, HD, L and VX for MINICAMS confirmation monitoring in support of waste shipments out of Deseret Chemical Depot, Utah, to Port Arthur. The laboratory will also be used for future planned waste shipments from Umatilla, Ore. to Port Arthur.



Darren Hicklin inside a mobile analytical platform.

Black History Month

At the Crossroads of Freedom and Equality



Carter Woodson
Photo: NMAAHC

The Aberdeen Proving Ground and people across the nation are celebrating Black History Month, an annual celebration of achievements by black Americans in the United States. Since 1976 when President Gerald R. Ford officially recognized February as Black History Month, every president has designated it a time for recognizing the central role of African Americans in U.S. history. The theme of the 2013 Black History Month is “At the Crossroads of Freedom and Equality,” which marks the sesquicentennial of the Emancipation Proclamation and the 50th anniversary of the March on Washington.

On Jan. 31, 2013, President Barack Obama issued a Black History Month proclamation that read: “This dream of equality and fairness has never come easily—but it has always been sustained by the belief that in America, change is possible.”

Black History month began when Harvard-educated historian Carter G. Woodson, Ph.D., raised awareness of African Americans’ contributions to American society when he founded the Association for the Study of Negro Life and History (ASALH) in 1915. By 1926, Woodson had created the first Negro History week to coincide with the birthdays of Abraham Lincoln (Feb. 12) and Frederick Douglas (Feb. 17).

When Dr. Woodson died in 1950, Negro History Week had become an integral part of African American life and the celebration was further catalyzed by the Civil Rights Movement of the 1960s. This time signified a shift in the American conscious to discover more about the contributions of African Americans to our country’s history and culture. For more information about Black History Month, visit www.asalh.net.



Did you know?

The NAACP was founded on Feb. 12, 1909 — the centennial anniversary of the birth of Abraham Lincoln.

The African American bio-chemist Emmet W. Chappelle worked for NASA and discovered a method for detecting bacteria in food, water and body fluids.

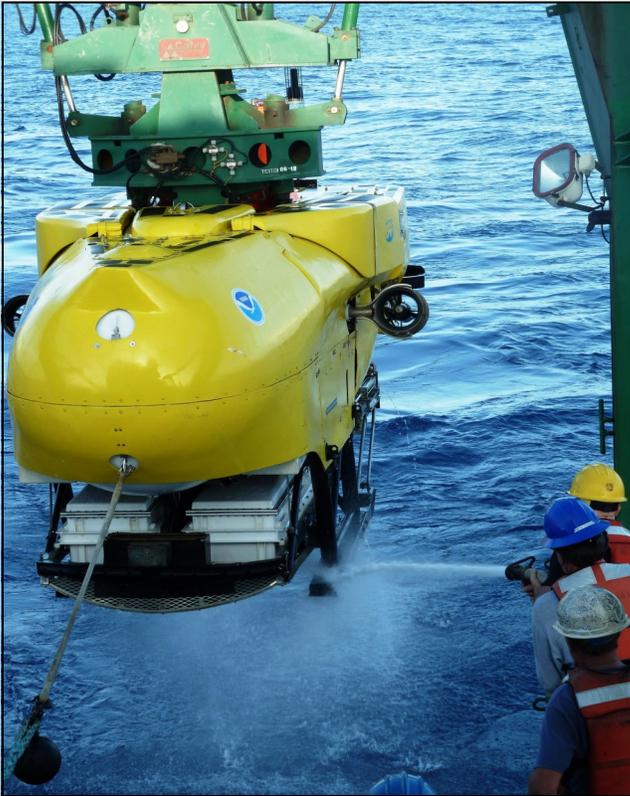
Garrett Augustus Morgan, born in 1877, invented a gas mask that was used to protect soldiers from chlorine fumes during WWI.

Presidential facts you never knew...until now



- In 1917, President Woodrow Wilson issued a proclamation designating Gunpowder Neck, Md. as the site for the first chemical shell filling plant in the United States. This later became the site of ECBC.
- President James Garfield could write Latin with one hand and Greek with the other hand simultaneously.
- James Buchanan was the first American President to send a transatlantic telegram on August 16, 1858. The recipient? Queen Victoria of Great Britain.
- Rutherford B. Hayes was the first president to use the telephone.
- William Henry Harrison, our ninth president, was the only one who studied to become a medical doctor.





LEFT: Crew members wash off the PISCES submersible before docking it on the boat. Photo credit: Environet.

TOP: (L) A Brisingid sea star was collected and shipped to Smithsonian scientists to study. (R) The underwater vehicle prepares for its 30-minute dive nearly 550 meters below the water's surface to collect samples. Photo credit: Environet.



BOTTOM: A Brisingid sea star hovers near the ocean floor, where scientists have discovered its natural habitat near old chemical warfare munitions. Photo credit: HURL.

(CONTINUED FROM P. 5)

According to Schwarz, the munitions themselves are too dangerous to lift from the ocean floor and are unlikely to wash ashore due to the depth of their location, where the water temperature hovers around the 40 degree Fahrenheit mark. The possible chemical agent inside the WWI-era weapons would be frozen at that temperature. But there was one thing that was curious about the munitions, Schwarz said. They were home to an increased population of Hawaiian Brisingid sea stars that made the deteriorating munitions a natural habitat. During HUMMA, a few sea stars were collected and sent to Smithsonian scientists to study.

CBARR was first brought on as chemical experts in 2009; two years after the HUMMA project began. The research effort is funded by the U.S. Army and led by the University of Hawaii to investigate the environmental impact of the sea dumped munitions on the surrounding environment. During that time, prime contractor Environet and the University of Hawaii mapped the ocean floor and used the PISCES submersible to collect samples within 10 feet of a munition.

"The Army considers this research effort extremely important to both helping close data gaps in DoD's understanding of the effects of chemical munitions in the ocean environment and helping validate and improve upon procedures developed for investigating sea disposal sites, particularly those in deep water," said Hershell Wolfe, the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health, in a November press release.

"The Army considers this research extremely important to improve procedures developed for investigating sea disposal sites."

-Hershell E. Wolfe, deputy assistant secretary of the Army for Environment, Safety and Occupational Health

Wolfe recognized Schwarz and the CBARR team in a letter of appreciation dated Jan. 10, 2013, citing "a selfless willingness to duty by working nearly around the clock in support of HUMMA's demanding mission goals."

University of Hawaii Principal Investigator Margo Edwards, Ph.D., shared a similar sentiment for CBARR's efforts. In a press release, she stated, "UH's partnership with the U.S. Army and Environet significantly increased Hawaii's and the

world's understanding of sea-disposed munitions: how they were disposed in the past and how they have deteriorated right up to the present time.

The forthcoming field program will hopefully allow us to

expand our understanding of the potential environmental impact of munitions that may contain chemical agent, and develop methods for monitoring and modeling future deterioration."

The Army and UH are finalizing the research report for their latest mission. The next phase of the project will evaluate performance differences between human-occupied submersibles and remotely operated vehicles, and also test new sensors and instruments that will improve the visual mapping and sampling of the munitions.

For more information about the HUMMA project, visit www.hummaproject.com or <http://www.youtube.com/watch?v=TUxE3YrMSrU>.