
NEWSLETTER OF R&DA ASSOCIATES • 16607 BLANCO RD., SUITE 501 • SAN ANTONIO, TX 78232 • 210-493-8024

R&DA SUPPORTS WOUNDED WARRIORS

R&DA Members and supporters are exceptionally proud of our **Wounded Warrior Program**. Our efforts provide assistance for the wounded and their family members when all other programs fail to meet their needs. The following summarizes our program:

Support to Wounded and Families	\$1,449,345
Collection Costs	\$0
Overhead Costs	\$0
Employee Costs	\$0

In 2011, we plan to expand our support to both of the **US Marine Corps Wounded Warrior battalions**, as well as **Bethesda Naval Hospital** and **Ft. Bragg, North Carolina**. This will increase the number of military locations we support to eleven. Our current fundraising effort will continue until the fall meeting this year, at which point our next two year program will commence. We accept donations on a continual basis and we spend our funds only after a vetting process with the leaders of the support programs on military installations. In this manner we know that our funds and support go directly to a need that is validated. Many of our members provide support directly to wounded programs by providing their food items to support Wounded Warrior Centers, USO operations or wounded related functions at military installations. You can find more information about hospital or installation specific needs on our website (*militaryfood.org*) or in our email to members.

We have a very ambitious program for 2011 and we will be asking for your support. We are often asked what the greatest needs to support the wounded are. Although the answer differs at each location, always needed are the following:

- ★ **Luggage** Warriors typically do not own suitcases and when they visit their family during rehab they require a suitcase.
- ★ **Gift Cards** We provided lower ranking wounded gift cards to allow them to order gifts for family members

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Jay McCrum and Barry McCrum winners of the "Franco Harris signed Hall of Fame Football" presented by Jim Fagan, Executive Director of R&DA. All proceeds go directly to the R&DA Military Assistance Program, Inc. assisting our wounded warriors and their families.

REGISTER NOW FOR THE 65TH ANNUAL MEETING AND EXHIBITION

In May, we will travel to *Naples, Florida*, for the **R&DA 65th Annual Meeting and Exhibition**. We last met there in 2008, and the rave comments we received from our attendees led us to contract our meeting again at the **Naples Grande Beach Resort**. The resort is part of the **Waldorf Astoria Collection** which is the standard for the finest of resorts.

This meeting will see a change in our scheduling format based on prior attendees' comments. Day one will include sessions on *Wounded Warrior*, *NATO allies*, corporate presentations and our exhibition. Day two will focus on rations, and government presentations. This way, exhibitors will be able to attend the rations sessions.

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NEWS FROM THE EXECUTIVE DIRECTOR

We are pleased with the many new R&DA members who are listed in this edition of *The Link*. It is through new members, with new ideas, new needs and new voices that allow us to grow as an association. This “new blood” keeps us progressing; challenging where we are today and leading us into the future. The military marketplace can appear daunting to new members. R&DA can assist them in developing an understanding on the best ways to meet the needs of the military. Too, these new members create dynamic energy, pushing us to exceed the military’s need to improve support in a more cost effective manner.

This dynamic energy has been flowing around the R&DA office, as well. **Marygene Fagan** has officially retired from R&DA. For me this is a mixed blessing. She has been my work and life partner for many, many years, and I will miss her counsel and expertise in the R&DA office. However, she has earned her retirement and will use her time to visit family, be active in the community, and take on projects that will benefit from her considerable skills. She will continue to do some work at R&DA meetings, probably around the registration booth, because she never wants to miss a meeting.

Marygene’s departure has prompted me to reflect on my own workaholic lifestyle, and we are beginning to make changes in the office that should gradually ease me into thoughts of my own retirement. To that end, we have hired **Laurie Gleason** as **Assistant Executive Director**. Many of you probably met Laurie at our fall meeting in Lake Tahoe. She will take on all of Marygene’s former duties and also document all duties of the Executive Director. Eventually, she should be able to perform all of these duties so that when my successor takes over, the organization will operate smoothly until he/she deems that changes are necessary. This will also mean that the next Executive Director will not have to be physically located in San Antonio; therefore the potential pool from which to select a new leader will be much larger. I hope to continue on in my current position for about three years as long as I am physically and mentally able to do so.



The Women of R&DA: Mary Frances Prescott, Marygene Fagan, Jan Cook & Laurie Gleason.

Personnel changes are also taking place within the military organizations which work with us to guide us in meeting the specific needs of the services. Some of these changes will be indicated elsewhere in this edition of *The Link*. However, other key personnel changes are still to be finalized, so we will wait to announce them at the **65th Annual Meeting** in Naples, Florida, which will take place **23–25 May 2011**.

FOOD BROKERS NEEDED

R&DA is in the process of creating a listing of food brokers who have the ability to represent food manufacturers in both the food service and rations portions of the military market. This listing will provide details on how to contact these firms and which areas of the marketplace require representation.

If you are interested in being listed as a food broker, please provide us with the following data:

1. Name of your company
2. Address and telephone number
3. Contact person and email address
4. Areas of representation (dining halls, rations, all)
5. Website

This listing will be provided to companies asking for such data and be available on the R&DA website. All firms listed must be members of R&DA. The Executive Director will contact all approved brokers and verify contact data prior to finalizing this listing. It is requested that all data be provided electronically to: jfagan@militaryfood.org.

SUITES STILL AVAILABLE FOR THE 65TH ANNUAL MEETING

R&DA has arranged executive suites at the **Naples Grande Beach Resort** for those attending the **65th Annual Meeting and Exhibition**. Suites are at least 1,000 square feet and offer views of the Gulf of Mexico. These suites are specially priced at \$399 and \$449 per night. We have also arranged special pricing on **Bungalow Suites** which are adjacent to the **Naples Grande Tower**. These suites are about 800 square feet, have private access and surround a private swimming pool. These feature a private location for breakfast (included) which is also available for evening use. The Bungalow Suites can be reserved for only \$399 per night. **Suites will sell out quickly, so if you are interested please contact Jan at the R&DA office (210-493-8024).**

THE LINK

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On Monday, we will have a presentation by a Wounded Warrior who will give us a feeling of the hardships of the recovery process. Then two chefs, one from Italy, will explain the current trends and issues affecting food service operations. We will also hear corporate updates and presentations by our NATO allies. The always enjoyable R&DA exhibition will round out day one.

A well-known speaker will deliver a keynote address to kick off day two. Rations and government presentations, as well as the rations work groups will be the main focus on day two. Be prepared for a full day of pertinent information and explanations of where government programs are headed. Key government and military leaders will give presentations of importance.

This meeting will include additions to the **R&DA Hall of Fame** and a change in the Board of Directors' leadership as **Jon Geisler** will be succeeded by **Barney Guarino** as Chairman of the Board.

We will also offer *Boot Camp 101*, spouse activities, a golf tournament, and many social and networking events. Make your reservation now as space is limited!

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over the holidays. Most do not have credit cards and they can use the gift cards to order online.

★ **Diapers** Many have small children and the family centers need diapers when families meet. We provided about 25,000 last year.

★ **Transportation** Wounded with families not located at the hospital usually cannot afford airfare home to visit spouses and children. We assist in these situations.

We are proud of what we do, and it is your support that allows us to assist our wounded and their families during the long and painful recovery period at military hospitals. We do this because it is the right thing to do!



Government Workgroup Chairman Awards presented by Jim Merryman, R&DA President of the Board (left): (L to R) Michele Richardson, Jim Lecollier, and Harry Streibich.

THE CHAIRMAN'S CORNER

I truly appreciate the opportunity I have had to serve as Chairman and work with R&DA to fulfill its long term mission to support the US military forces. R&DA has supported the warfighter during peace time and war time. There have been many changes in rations and food service support to the services over the years, but the members of R&DA have always recognized that our efforts go far beyond the financial results of our businesses. I am proud to work with an organization and an industry that focuses more on the individuals that we impact than the institutions for which we work.

As much as the news is focused on troop reductions and withdrawals, there are still large numbers of service personnel that are in harm's way. Given the unrest and uncertainty that exists in the world today, it is hard to imagine a time when our armed forces can stand down. **The Wornick Company** has had a National Guard or Reserve employee deployed in theater for well more than the last five years. It is amazing to me how appreciative they are of care packages from the office, when they are the ones to be appreciated.

There are days in all of our lives when we think the hill is too steep to climb or that we have been dealt an unfair circumstance, but the success stories, and unfortunately sometimes heart wrenching stories, of the service people that protect our country drive us every day to perform better than the day before. I would suggest that you put these two websites in the favorites list of your web browser: <http://warriorcare.dodlive.mil/> and <http://www.army.mil/warriorcarenews/>. There are always many stories published here that will drive you to success. I thank you for the opportunity to hold the position of Chairman of the R&DA and the opportunity it provides to support our warfighters.

Jon Geisler



R&DA Board of Directors at the 2010 Fall Meeting in Lake Tahoe. (Top, L-R) John Likovich, Bob Ripp, Diana Dupont, Jim Fagan, John Simmons, Don Vtipil, Dan Weiss, and Joe Renta. (Bottom, L-R) Dr. Joe Marcy, Jim Merryman, Dan Weil, John Knapp, Jon Geisler, Ron Hoffman, Pete Motrynczuk, Elizabeth Lauer, and Bill Masden. Not pictured: Barney Guarino, Tim Zimmerman, Bill McCreary, Jack Maas, Barney Rosner, Sophy Mae Mitchell, Lonnie Thompson, Dave Reid, David DuBose, Gabe Castillo and James Kennedy.

MARVIN BYER SCHOLARSHIP

R&DA awards scholarships under the **Marvin Byer Award Program**. Each year we award up to four scholarships to deserving students in the food service, food technology, and related fields. The requirements to submit a nomination can be found on the R&DA website (*militaryfood.org*), and submissions are accepted on a continual basis. We have received multiple nominees from more than forty universities and colleges. To support this program, we solicit funds on a two year basis. We greatly appreciate the kindness of our supporters. The donation program is spearheaded by the R&DA Vice President of Awards, **Joe Mancini** of *Quantum*. Below is a listing of donations under the current program:

Gold Level

Lamb Weston/Conagra Foods
 Michael Foods
 Oregon Freeze Dry
 Quantum Foods
 Sopakco

Silver Level

AmeriQual Group, LLC • Ms. Byer-Pemsler
 Military Food Program Consultants • Shasta Sales, Inc.

Bronze Level

Creative Business Ideas, LLC • J.T.M. Food Group
 Trans-Packers Services Corp. • GFS Consulting
 Unilever Foodsolutions • The Ya-Hoo Baking Co.

We are in the process of evaluating future Byer Awards each month. For 2010 and 2011, the following lists the winners to date:

Alexander Youst, Pennsylvania State University
Michael Wiederoder, University of Maryland
Katelyn Harvey, Saint Joseph's University

This issue will be my last with The Link. After a wonderful teaching career of twenty-nine years and seventeen with R&DA, it is time to enjoy this "golden" time with my children and grandchildren. My years with R&DA have been filled with new learning experiences and working with many very special people in both government and industry. For all these years I am very grateful. Thank you for your friendship and your professionalism. Jim and I grew to be a true team, and we have enjoyed this time enormously. I leave R&DA knowing that Laurie Gleason is the person we can both trust to learn all the various facets of R&DA and be someone upon whom you can rely. So, I will see you at most meetings and I thank you for many memories and, especially, for all of your prayers and thoughtful gestures last spring.

Marygene Fagan



NEWS FROM NSRDEC: NATICK

COMBAT FEEDING DIRECTORATE WELCOMES NEW EMPLOYEES

Submitted by Evan Bick, Program Marketing Analyst, Outreach and Education Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

In September of 2010, **Justin Ruddock** joined the **Systems Equipment and Engineering Team (SEET)** as a mechanical engineer. Justin graduated from **University of Massachusetts Lowell** in May 2010, with a Bachelor of Science degree in Mechanical Engineering. When he wasn't in the classroom, Justin served as the Senior Reactor Operator at UMass Lowell's research reactor. In fact, some of the radiation sources he employed there had previously been used at the Combat Feeding Directorate for irradiation studies in the 1960's and 70's. Originally from Merrimack, NH, Justin currently resides in Nashua, NH, where he enjoys riding his motorcycle, weather permitting. As a Mechanical Engineer, Justin helps provide product development services and engineering support to the Navy, Air Force, and Marine Corps. Through his experience and hard work he has already begun to make significant contributions to SEET's work.

The **Food Processing, Engineering and Technology Team (FPETT)** welcomed **Lauren Pecukonis** as a Food Technologist in November 2010. Lauren received a Bachelor of Science degree in Food Science and Technology at **Framingham State University** in 2010. During college she held several internships with local food companies, including **Vitasoy USA** and **Cains Foods, L.P.**, where she conducted research and development, product development, analytical testing and sensory evaluations on a variety of products including soy-based products, artificial and natural sweeteners, gums and starches, salad dressings and sauces. As a Food Technologist on FPETT, Lauren works directly with other food technologists and chemists on the development of new intermediate moisture ration components, ration storage studies, and novel food processes that will improve ration quality and expand menu variety. Her experience and knowledge of food analytical techniques, coupled with her specific education in Food Science and Technology, have made Lauren an immediate asset and valuable team member of the Combat Feeding Directorate.

Carlos Correia joined the **Office of the Director (OD)** in January. He is an Army Acquisition Fellow, working with DoD CFD as part of the Competitive Development Group. While he is new to DoD CFD, Carlos has extensive experience at the Natick Soldier Systems Center. While on active duty, he served as an acquisition officer for Product Manager-Force Sustainment Systems (PM-FSS) and returned to PM-FSS after

his retirement from the military. In addition to advanced certifications in program management and life cycle logistics, Carlos has a master's degree in Program Management from the **Naval Postgraduate School**. A resident of Natick, Carlos is in the second year of the prestigious Army Acquisition Fellowship, and is the first Natick employee to join the Competitive Development Group. His major focus will be the Combat Feeding Research and Engineering Program (CFREP).

Welcome to all new DoD CFD team members!

DOD COMBAT FEEDING RESEARCH AND ENGINEERING BOARD ANNUAL MEETING

Submitted by Patricia Cariveau, Outreach and Education Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

On November 16—18, 2010, the DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center (NSRDEC) held the annual meeting of the **Combat Feeding Research and Engineering Board (CFREB)** in Natick, MA. The annual meeting serves several purposes in the overall **Combat Feeding Research and Engineering Program (CFREP)** business process. It serves as the culminating event for the FY10 fiscal year as well as the kickoff event of the new (FY11 fiscal year program). The meeting was led by the CFREB Acting Chair, **CAPT Dylan Schmorrow**, United States Navy; Acting Director, Human Performance, Training, & Biosystems; Office of Director of Defense Research and Engineering (ODDRE) and the CFREB Executive Secretary, **Mr. Gerald Darsch**; Director, DoD CFD; NSRDEC.

CAPT Schmorrow began the meeting with laudatory comments: "Our program is indeed the gold standard in DoD, and has phenomenal Science and Technology and excellent advanced development with the best technical and administrative team; it should be viewed as a model program." All of the Military Services and Defense Logistics Agency were represented by the respective CFREB Voting Member and/or Joint Technical Staff (JTS) representative. Also in attendance were a wide array of technical experts from organizations such as **PM-Force Sustainment Systems**, the **Joint Staff J-4**, **U.S. Army Research Institute of Environmental Medicine**, **Office of Naval Research**, **U.S. Army Combined Arms Support Command**, **DoD Veterinary Services Agency**, and the **NSRDEC** (including the Chief Scientist). During the three day meeting, technical briefings were presented covering more than 40 individual ongoing or recently completed efforts. Joint Service representatives also provided service specific updates covering issues pertinent to the DoD CFREP.

Demonstrations were conducted covering subjects such as **Equipment & Energy Technologies for Field Feeding Systems, Food Safety & Biosensors, and Green Packaging Initiatives.** Ration samplings included items from the Armed Forces Recipe Service/Common Food Management System and recently field tested items for the Meal, Ready-to-Eat™ (MRE™), First Strike Ration® (FSR®), and family of Unitized Group Rations™ (UGR™). The ten year FY11-20 program was formally approved by the board members and Chair, on behalf of the DDRE.

Also in attendance was **Mr. Robert Boyd**, Office of the Secretary of Defense/DDR&E. This was Mr. Boyd's first look at the CFREB program, and at the conclusion of the meeting, he was so impressed by the work done at NSRDEC that he asked to address the meeting attendees. Some of his comments were, "This is one of the most dynamic groups of individuals; you have made S&T a contact sport. I am now an advocate for the program. It is wonderful to see the military that supports your efforts, that's true jointness. It's clear to me you live 'purple.' I further challenge you to continue to be lean, mean and agile; continue to foster relationships." CFD takes those comments to heart, and will continue focusing our efforts on improving combat rations and field feeding equipment for Warfighters from all services for a long time to come.

DR. WILLIAM PORTER SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS LABORATORY DEDICATION

Submitted by Evan Bick, Program Marketing Analyst, Outreach and Education Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center. Photo by David Kamm/NSRDEC Photographer.



Mrs. Nancy Porter, right, is congratulated by Ms. Susan Butler, Acting Director of NSRDEC, after cutting the ribbon to open the Dr. William Porter STEM Laboratory, named in honor of her late husband.

Scientists and engineers from throughout the Natick Soldier Research, Development, and Engineering Center (NSRDEC) gathered on December 9th to remember a former colleague and honor the Army's commitment to education in the fields of science, technology, engineering, and mathematics (STEM).

The ceremony, held on 9 December, marked the official opening of the **Dr. William Porter Science, Technology,**

Engineering, and Mathematics Laboratory. This facility, a joint effort between DoD CFD and the Warfighter Science, Technology, and Applied Research Directorate (WarSTAR) provides a centralized resource for local students to access advanced equipment and the unmatched scientific expertise of the NSRDEC.

Dr. William Porter was a longtime employee at the NSRDEC, beginning in 1953 and continuing through retirement to his death in 2009. A research chemist at DoD CFD, his work focused on antioxidant chemistry and the effects of high-temperature storage on military rations. In addition to his significant efforts in the lab, he was well-known in the NSRDEC community as a mentor and had tremendous interest in developing future generations of scientific investigators.

The event began with remarks from **Dr. John Gassner**, Director of WarSTAR, and **Ms. Susan Butler**, acting director of NSRDEC, who discussed the importance of STEM education to the continued success of the NSRDEC. **Mr. Gerry Darsch**, Director of DoD CFD, described his experiences learning from Dr. Porter as a "young food technologist." **LTC Brian Wood**, representing the Natick Soldier Systems Center, presented **Mrs. Nancy Porter** with a note from **BG Greene** and the Commanding General's coin.

After Mrs. Porter officially opened the lab by cutting a ceremonial ribbon, the DoD CFD community had the opportunity to view the new facility, which was filled with the tailored experiments made possible by this new space.

"The STEM Lab will be a great resource both for the NSRDEC and for our local community," said Mr. Darsch. "It will allow us to contribute to that critical mission and ensure that America continues to generate the best technology possible to benefit both the military and commercial sectors."

ADVANCED MATERIALS ENGINEERING TEAM (AMET) NEWS

Submitted by Jeanne Lucciarini, Advanced Materials Engineering Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

AMET and CFD are pleased to welcome **Mr. Christopher Hope** home after a six month assignment in Afghanistan. This was his third volunteer deployment to support overseas contingency operations as he assisted the **Force Provider**



Figure 1. Chris setting up HVAC system.

(FP) **Technical Assistance Team** in response to an urgent operational need statement. He was instrumental in setting up, maintaining and troubleshooting of several FP modules.

Chris's experiences in Afghanistan were invaluable and enabled him to experience first-hand the overwhelming challenges faced by our Warfighters on a daily occurrence. Figures 1 and 2 show Chris setting up various components of the FP modules.

AMET is very proud of team member **Dr. Christopher Thellen**, who successfully defended his doctorate degree on October 22, 2010. This defense earned him his Doctor of Philosophy, PhD, degree in Plastics Engineering from the **University of Massachusetts Lowell**. His research focused on the development of high gas barrier films for extended shelf-life food packaging applications through the use of biodegradable and recyclable polymers. The **Polymer Film Center of Excellence**, established at NSRDEC and led by AMET, provided the facilities for the development of these film structures that utilize biodegradable polymers such as polyhydroxyalkanoates and polyvinyl alcohol as well as recyclable nanocomposite materials. Support for this work was received from the **Strategic Environmental Research and Development Program (SERDP)** and the **Waste Reduction Afloat Protects the Seas (WRAPS)** program over the past four years.



Figure 2. Chris installing lights in air-beam tent used for billeting.

AMET is also happy to announce their most recent award, "Employer Partner of the Year," from the **New England Association for Cooperative Education and Field Experience (NEACEFE)** on November 8, 2010. NEACEFE is an association that promotes the development and expansion of experiential education programs between high schools, colleges, and universities and the employers of their students. The award nomination was submitted by the Associate Director, Cooperative Education, University of Massachusetts Lowell (UML) in recognition of AMET's early participation in the new cooperative education pilot program in the Plastics Engineering Department. This award was given to all members of AMET at NEACEFE's annual meeting in Newport, Rhode Island. The recipients included: **Jeanne Lucciarini (Team Leader), Danielle Froio, Christopher Hope, Allison Johnson, Lauri Kline, Jason**

Niedzwiecki, Jo Ann Ratto, Sarah Schirmer, and Christopher Thellen. This award specifically highlighted AMET as champions as they closely collaborated with UML's team for this newly formed cooperative education program. AMET coordinated on-site visits with the UML team and gave valuable advice on the development of the program. AMET also had frequent visits to the UML campus, enthusiastically participating in an array of new programs to support the new initiative, including specific student and employer networking events, panel presentations, and information sessions. AMET currently has two Plastic Engineering junior undergraduate students, **Matthew Burke** and **Gregory Pigeon**, working with them in this cooperative education program.

COMBINATION OVEN EVALUATION

Submitted by Lou Jamieson, Dawn Woods, and Shubham Chandra, Systems Equipment and Engineering Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

The current combination ovens aboard US Navy ships are approaching the end of their service lives. As a result, the CFD and the **Warfighter Science, Technology and Applied Research (WarSTAR)** Directorate at the Natick Soldier Research, Development and Engineering Center (NSRDEC) conducted an evaluation of three manufacturers' combination ovens for possible replacement of the existing ovens aboard ships. The effort was performed in support of the Naval Sea Systems Command (NAVSEA), Naval Supply Systems Command (NAVSUP) and the Commander Naval Air Forces (COMNAVAIRFORCES) Afloat Supply Services.



The overall evaluation consisted of a technical test and a shipboard user evaluation. The technical test was performed by CFD at the NSRDEC in accordance with the controlled conditions specified in the *Associated Standard Test Methods (ASTM F 1639-95 (1a), ASTM F 1484 (1b) and ASTM F 1496 (1c)*.

The shipboard evaluation was conducted from June to November 2010 aboard a US Navy Aircraft Carrier – the **USS Abraham Lincoln (CVN-72)**. Data was collected on the candidate ovens in these areas: performance, through-

put, total installation costs, efficacy, and relevant maintainability information. At the completion of the shipboard user evaluation, an evaluation team (pictured above), comprising of members from NAVSEA, NAVSUP, COMNAVAIRFORCES - Afloat Supply Services and the CFD, administered operator (cook), maintainer, and food quality surveys to document the shipboard evaluation.

The results of all of the combined efforts will support the Navy's requirement for optimized crew sizes aboard all naval vessels by providing the best possible combination ovens for shipboard utilization. CFD, at the request of the NAVSUP and NAVSEA, contributed to the report by compiling disparate sets of data, building charts and adding technical content to their high visibility, senior leadership report. Based on the effort, NAVSUP sent a letter of appreciation to the CFD Director, commending CFD's efforts in support of this initiative, and identifying the importance that NAVSUP places on their relationship with CFD.

TECHNICAL DEMONSTRATION OF A HEATING HYDRATING COMBAT RATION (HHYCOR) POUCH

Submitted by Ms. Michelle Richardson, Food Processing, Engineering and Technology Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

On 3—4 December 2010 the Natick Research, Development and Engineering Center's Food Processing, Engineering and Technology Team (FPETT) conducted a technology demonstration of an advanced prototype **Heating Hydrating Combat Ration (HHYCOR)** pouch with the **4th Ranger Training Battalion (RTB)**, Fort Benning, GA. The purpose of the test was to obtain user feedback on the HHYCOR pouch during a cold weather training exercise. The HHYCOR is currently being developed under a Phase II Small Business Innovative Research contract by **Mainstream Engineering Corporation (MEC)**, Rockledge, FL. MEC designs, develops and manufactures energy conversion and thermal control products. The HHYCOR is intended to provide joint Warfighters the capability to heat non-potable water in the field when they do not have access to other conventional means of heating. It is a low cost, lightweight, disposable, durable, safe, and easy-to-use device for reconstituting dehydrated ration components using water from any non-saline water source. The HHYCOR heats raw water to 150°F in 10-15 minutes, eliminates microbial (cyst, bacteria, and viruses) contamination, minimizes iodine taste, and is inexpensive, flexible and disposable. The device is made of conventional ration packaging materials and flameless ration heater components, and synergistically uses heat, biocides and electropositive filter media to remove pathogens in raw water. In May 2010, Patent Number US 7,709,035 was published by the US Patent and Trademark Office for the pouch.



Heating Hydrating Combat Ration Pouch

Three methods to remove pathogens:

- 1. Heat disinfection*
- 2. Chemical disinfection iodine tablets*
- 3. Filtration electropositive filter media*

Originally the 4th RTB planned to participate in an operation with the Canadian Army retracing the route of Major Robert Rogers' 1759 raid on the Abenaki / French Canadian Indian Village. However, just prior to the exercise, the test site was changed to the Appalachian Mountains. Feedback was obtained from the test participants using surveys and focus group discussions. Initial results show that 75% of the users responded that the temperature of the food was acceptable after using the HHYCOR to heat water to reconstitute dehydrated entrées. Some respondents indicated they had some difficulty following HHYCOR directions and sealing the HHYCOR with a clip prior to filtering. Feedback will be used to improve user instructions and modify pouch sealing procedures. Following these modifications, a follow-on demonstration will be conducted and if successful, the HHYCOR is expected to transition to the Combat Rations Team for field testing with Warfighters. The HHYCOR could potentially be a supplemental item for Special Operations Forces.

Current efforts are focusing on shelf life testing in high relative humidity; further testing for dual-use application to heat entrées and hot water simultaneously; cost-to-benefit analysis; water quality certification with National Science Foundation; and identifying equipment/material for automated production.

BENCH TOP EVALUATION OF FDA APPROVED MICROWAVE STERILIZED SALMON IN ALFREDO SAUCE

Submitted by Tom Yang, Food Processing, Engineering and Technology Team and Joanna Graham, Packaging Integration Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

On 15 December 2010, the Natick Soldier Research, Development and Engineering Center – CFD received notice from CFD contractor Washington State University (WSU) that the **Low Acid Canned Foods Division** of the Food and Drug Administration (FDA) accepted the filing under low-acid canned food regulations of a pink salmon, skinless and boneless fillet in Alfredo sauce processed by microwave-assisted sterilization technology. CFD initiated, planned, and executed a multi-year project on this novel processing technology, involving a consortium of engineers and scientists from WSU and partners from major food and packaging com-

panies. The consortium contributed significant technical and funding support to build a semi-continuous microwave sterilizer at WSU in **Pullman, WA**. Microwave (MW) sterilization allows shelf-stable entrees and side dishes to be processed to commercial sterility in a shorter time and with less product degradation compared to the conventional retort process. It provides opportunities to process varieties of ration entrees and related commercial items that were previously unsuccessful or impossible due to the excess heat damage by the retort process. A successor MW consortium is now being formed to bring together both ration producers and major food corporations to drive the production of an industrial-scale continuous MW sterilization unit that is capable of producing the next generation of high quality shelf stable items for both military and commercial use.

On 4 January 2011, **Mr. Gerald Darsch**, Director of CFD, along with CFD Senior Advisor, **Dr. Patrick Dunne** and many Food Technologists, evaluated the quality of the salmon product in a bench top evaluation. All sensory attributes were received favorably during the evaluation including textural properties and flavor notes. The MW processing effects on such a delicate food item were minimal and the product was considered to be of high quality. More samples will be requested from WSU for further testing and demonstration.

The remaining challenges in transitioning this novel processing technology for specific food items to combat rations include additional effort on developmental high barrier, non-foil package equal to or better than current military packaging that contains foil. Novel packaging materials will need to be evaluated post-processing, and shelf life testing on selected MW sterilized prototypes must be completed to fully assess sensory and nutritive characteristics after three years at 80°F and six months at 100°F.



The FDA approval for MW sterilized salmon in Alfredo sauce is a major accomplishment and an enormous step forward in the transitioning of novel processing technologies to future combat ration items. The collaborative work conducted by multiple government agencies, industry, and academia has proven to be effective and successful in moving the

technology through the research process to the stage where it is ready for commercial development.

PATENT DISCLOSURE APPLICATION SUBMITTED FOR SUPERCRITICAL CARBON DIOXIDE PROCESSING OF SOLID AND SEMI-SOLID FOODS

Submitted by Nicole Favreau, Food Processing, Engineering and Technology Team and Patrick Marek, Food Safety and Defense Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

Natick Soldier Research, Development and Engineering Center's CFD submitted a patent disclosure application for processing semi-solid and solid foods with supercritical carbon dioxide (SCCO₂). The application is a result of the efforts from the CFD Science and Technology initiative "**Innovative Ration Preservation via SCCO₂**." This breakthrough processing technology has exhibited noteworthy results, including up to 100% inactivation of enzymes, a 7-log reduction of Escherichia coli in inoculated beef, 150% extended shelf-life of cut potatoes, and the inhibition of mold spores and growth. The CFD research team adapted supercritical fluid instruments used for extraction and sterilization of biological tissues for processing such food items as potatoes, sausages and avocados. This innovative processing technology may have significant impact on the future of food preservation because it is non-thermal and therefore, can be administered to foods that have been historically difficult to preserve with thermal processes.

HUMANITARIAN AIRDROP OVER POPULATED AREAS PROJECT

Submitted by Steven Groller, Packaging Integration Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

CFD has been working collaboratively with the **Warfighter Protection and Aerial Delivery Directorate** (WARPADD) in support of a nine month effort to evaluate methods to directly deliver, without a parachute, food and/or water during the first days or weeks after a humanitarian disaster in areas that are inaccessible by first responders. This effort was generated in response to **GEN Duncan McNabb**, Commander, US Transportation Command and **GEN Raymond Johns**, Commander, US Air Force Air Mobility Command request for further investigation of humanitarian airdrop capabilities over populated areas in response to natural disasters and displaced populations. The areas of investigation include evaluation of food and water prototype delivery systems, evaluation of weight and rate of descent of packaging concepts, and evaluation of a container system that will deploy and interface with aircraft without causing harm to people on the ground. The weight and rate of descent of current Humanitarian Daily Ration and other

components of the current Tri-Walled Aerial Delivery System does not allow for safe delivery over populated areas (see photo below).



Members of CFD. From left: Jason Niedzwiecki, Lauri Kline, Jeanne Lucciarini, Joanna Graham.

Representatives from the CFD have been in constant communication with the team lead, **Aerial Delivery Equipment & Systems Division**, WARPADD to monitor progress of established objectives. The areas of investigation within CFD include evaluation of viable food and water packets for aerial delivery to meet weight and caloric requirements, evaluation and production of food and water packaging concepts, and development and evaluation of a container system capable of interfacing with current aircraft roller system to achieve necessary vertical restraint. The project includes representatives across a number of government agencies and commands and a separate work group from **Massachusetts Institute of Technology (MIT)**. A proposal was submitted and selected for the MIT Soldier Design Challenge to evaluate prototype packaging concepts to airdrop water without a parachute. A kickoff meeting was held at the Natick Soldier Research Development and Engineering Center with students and faculty from MIT who are participating in the competition. Concepts are currently being developed at MIT and the results will be shared and incorporated into the overall data generated for the humanitarian airdrop effort.

COMBAT FEEDING EXHIBIT AT PACK EXPO 2010

Submitted by Jeanne Lucciarini, Advanced Materials Engineering Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

The CFD at the Natick Soldier Research, Development and Engineering Center (NSRDEC) exhibited a booth at **PACK EXPO International 2010**, which is sponsored by the **Packaging Machinery Manufacturers Institute**. This large exposition, with over 1600 participating companies, provided a great opportunity to highlight research efforts within CFD's **Advanced Materials Engineering Team (AMET)** and **Packaging Integration Team (PIT)**. The exhibit allowed CFD to emphasize the unique processing and testing capa-

bilities of the **Polymer Film Center of Excellence** and the advanced development efforts in novel packaging designs for all ration platforms. NSRDEC was indicated as a "Green" exhibitor, highlighting sustainable and environmentally-friendly solutions that are currently being investigated for packaging applications. Over 200 leading organizations representing private industry, government, academia, and/or the press visited the NSRDEC booth and expressed interest in future research collaborations, testing service agreements, and/or interviews. Several notable companies who visited the booth included **Ampac, Rollprint, Zip Pak, Heinz North America, DOW, Kraft Foods, Ball Corporation, PepsiCo, Mitsubishi, MOCON, Master Packaging, Berry Plastics, and Sealed Air**. The technical conference sponsored by the **Institute of Packaging Professionals** was also attended by CFD members in which topics such as sustainability development, package distribution testing, and future industry trends were presented by leading experts in the field of packaging. The participation and exposure of the NSRDEC at PACK EXPO proved to be very beneficial and is expected to result in many new partnerships, and provide opportunities for technical service agreements between industry partners, academia, and CFD.



Pack Expo attendees at CFD booth.

NEW COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT WITH STERLING FOODS LLC

Submitted by Jacqueline LeBlanc, Food Processing, Engineering and Technology Team and Judith Aylward, Combat Rations Team (CRT), DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

CFD representatives recently met with **Sterling LLC** representatives to develop a *Cooperative Research and Development Agreement* (CRADA). The objectives of the CRADA are to explore new baking and preservation technologies for shelf stable baked items that meet the extended shelf life requirements for all military ration platforms. Once approved, this CRADA will facilitate the improvement of fielded ration components and will allow CFD and Sterling to collaborate on development of new bakery type items. The CRADA will directly support specific work efforts by the CRT and the Food Processing, Engineering and Technology Team (FPETT). CRADA efforts that support the Continuous Product Improvement Programs for Group and Individual Combat Rations will focus on improving the nutritional content of current and newly developed baked items, to include decreasing/eliminating trans fatty acids and increasing fiber to meet the new Nutritional Standards for Operational Rations, AR 40-25. CRADA efforts will also support two ongoing FPETT projects: **Applying Statistically Designed Experiments for the Development of Baked Items** and **Next Generation Combat Bakery Items**. Statistically Designed Experiments is a tech base project that utilizes Design of Experiment and Response Surface Methodology software to statistically predict the most desirable levels and ratios of selected ingredients to achieve a pre-determined parameter. This software technology is currently being used to improve a fielded bread component and will also be employed to facilitate development of new bakery item prototypes. The Next Generation Bakery project involves the collaborative development of the most “field requested” baked items such as shelf stable pita bread, bagel thins and other baked sandwich bread type items. The collaborative Research and Development efforts coupled with access to a commercial production base early in a prototype’s lifecycle will greatly enhance the overall development process and facilitate a speedy transition for service procurement of all selected items. The CRADA is scheduled to be finalized in 2Q FY11.



FY10 FIELD EVALUATION OF THE MODULAR OPERATIONAL RATION ENHANCEMENT™ (MORE™) – HOT WEATHER

Submitted by Julie Smith, Combat Rations Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development and Engineering Center.

The **Modular Operational Ration Enhancement™ (MORE™) – Hot Weather** field evaluation was successfully conducted from 14–16 August 2010, with Soldiers participating in the Pre-Ranger Course held at **Fort Benning, Georgia**. Fifty-five Soldiers participated in the field evaluation. The weather was hot and humid throughout the training period.

Three prototype MORE™ – Hot Weather enhancement packs which included 17 new items were tested and acceptance data was gathered. The **First Strike Ration™ (FSR™)** was used as the Soldiers’ primary ration throughout the field evaluation.

Initial feedback indicates that the Soldiers found the MORE™ – Hot Weather and FSR™ to add value and provided many helpful comments and suggestions. Acceptance data was collected and provides the Soldiers’ opinions of the MORE™ – Hot Weather enhancement pack and FSR™.

The field test results and recommendations for the MORE™ – Hot Weather concept and components will be compiled and briefed to the Joint Services Operational Rations Forum (JSORF) in February 2011. The CFD’s recommendations to the JSORF are based on Warfighter acceptance, consumption, shelf stability, nutrition, and menu design.

Procurement documents for the JSORF approved new items will be prepared by the CFD and sent to the Military Services, industry and other government agencies for coordination, before being transitioned to Defense Logistics Agency - Troop Support for procurement.

FY10 FIELD EVALUATION OF NEW ITEMS FOR THE MEAL, READY-TO-EAT™ (MRE™) AND UNITIZED GROUP RATION — HEAT & SERVE (UGR-H&S™)

Submitted by Sue Harrington, Combat Rations Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research and Engineering Center.

The annual field test for the Meal, Ready-to-Eat™ (MRE™) and Unitized Group Ration-Heat & Serve™ (UGR-H&S™) was successfully conducted during the weeks of 13–24 September 2010, with the **Mojave Viper Support Detachment at Camp Wilson, California**. During the first week, approximately 100 Warfighters evaluated three MRE™s per day and the second week 400 Warfighters evaluated two UGR-H&S™ meals (breakfast and dinner) per day.



Eight prototype MRE™ menus including 35 new items were tested. MRE™ XXX menus were provided as the control. MRE™ test items included eight entrees, one starch and 15 snacks/bakery items. Twenty-one new UGR-H&S™ components to include 100% bio-based cutlery were assembled into seven test menus (two test breakfast and five test dinners). These test menus were evaluated against the current UGR-H&S™ menus.



Initial feedback indicates that the Warfighters were appreciative of the new MRE™ and UGR™ components and provided many helpful comments and suggestions. Acceptance data was collected and provides the Warfighter's opinions of the test and control items.

The field test results and recommendations for the MRE™ and UGR-H&S™ will be briefed to the Joint Services Operational Rations Forum (JSORF) on February 1–2, 2011, for approval of items to be included in MRE™ XXXIII (2013 production) and UGR-H&S™ 2013. CFD recommendations to the JSORF are based on Warfighter acceptance, consumption, shelf stability, nutrition, and menu design.

Procurement documents for the JSORF approved new items will be prepared by the CFD and sent to the Military Services, industry and other government agencies for coordination, before being transferred to Defense Logistics

Agency – Troop Support for procurement. Additionally, tests will be conducted at contractor production facilities for the JSORF approved MRE™ XXXIII and UGR-H&S™ 2013 components, prior to coordination, to identify potential issues when scaling up from bench top to full-scale production. Additionally, these production tests serve to confirm the draft Performance-based Contract Requirement (PCR) documents prepared by the CFD.

Special thanks goes out to all those government and industry partners who contributed to the success of this evaluation, in particular to industry for their overwhelming support by submitting new ideas/products and to the **AmeriQual Group** for conducting both field test assemblies.

FIELD EVALUATION OF THE UNITIZED GROUP RATION-ATM (UGR-ATM)

Submitted by Sue Harrington, Combat Rations Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

The annual UGR-A™ field test was successfully conducted in August 2010, with the **2nd Brigade Combat Team, 4th Infantry Division, Fort Carson, Colorado**. Seven new breakfast and seven new dinner menus, which included 59 new items, were evaluated along with the current UGR-A™ FY10 menus as controls. Two groups of approximately 100 Warfighters each were



provided UGR-A™ breakfasts and dinners each day. Acceptance data was collected for each meal. Overall the new products were well received by the troops. The results and recommendations will be briefed to the UGR-A™ Integrated Product Team on January 31, 2010, for decision on which items to include in the UGR-A™ 2012 menus. UGR-A™ Table I (menus) and Table II (requirements) will be updated, coordinated and transitioned to Defense Logistics Agency – Troop Support this spring. Warfighters will begin to see the new UGR-A™ menus in October 2011.

Special thanks goes out to all those government and industry partners who contributed to the success of this evaluation, in particular to industry for their overwhelming support by submitting new ideas/products and to the AmeriQual Group for conducting the field test assemblies.

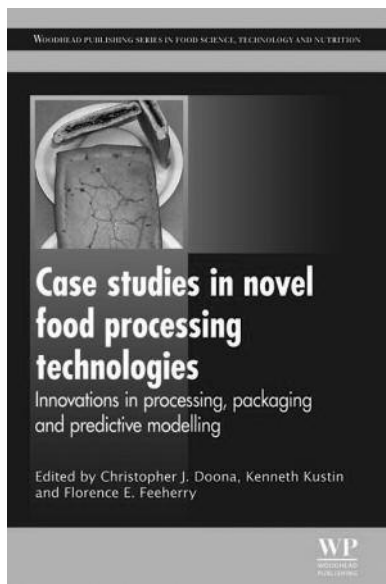
NATICK SCIENTISTS PUBLISH LANDMARK BOOK

Submitted by Christopher Doona, Molecular Sciences and Engineering Team, Warfighter Science, Technology and Applied Research Directorate and Florence E. Feeherry, Food Safety and Defense Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

Scientists at the U.S. Army Natick Soldier Research, Development and Engineering Center (NSRDEC) recently

collaborated on a book describing new developments in food processing procedures. The book, *Case Studies in novel food processing technologies: Innovations in processing, packaging, and predictive modeling*, published by Woodhead Publishing, was edited by **Christopher J. Doona, Kenneth Kustin and Florence E. Feeherry**.

Many scientific innovations and advances in food preservation have come in support of the military. Novel food processing technologies have tremendous potential to improve food product quality and process efficiency so that foods will be healthier, safer, and more convenient for today's on-the-go Warfighters. Some of the technology is already being applied to combat feeding solutions for American troops in Iraq and Afghanistan.



Cover of Woodhead Publishing's book

Doona, working in the Warfighter Science, Technology and Applied Research Directorate, along with Kustin, a Professor Emeritus of Chemistry from **Brandeis University** and Feeherry from the Department of Defense Combat Feeding Directorate, contributed the chapters of "Case Studies." The book features new information on high-pressure processing, pulsed electric field processing, dense phase carbon dioxide, ozone, ultrasonics, cool plasma, infrared, natural antimicrobials, time-temperature integrators, oxygen depleted storage atmospheres, advanced retort technology, microwave heating, and predictive modeling.

NSRDEC scientists also described recent initiatives in nanotechnology toward the development of lighter weight, recyclable packaging for military rations.

Doona, the book's lead editor, says, "We were very excited to work on this book. With today's emphasis on innovation and bringing great science out of the lab and into industry and the marketplace, this book really shows the results of so many experts working together as a team."

ENHANCING QUALITY & SAFETY OF PRODUCE DELIVERED TO THE WARFIGHTER

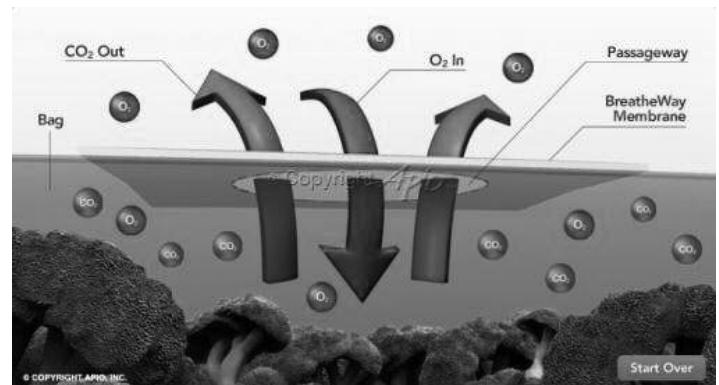
Submitted by Peter Lavigne, Equipment and Energy Technology Team, Lou Jamieson, Systems Equipment and Engineering Team, Josh Magnone, Food Safety and Defense Team, and Harry Kirejczyk, Combat Rations Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center (NSRDEC)

Fresh fruits and vegetables (FF&V) are an essential dietary supplement to operational rations, yet delivering fresh produce

to the Warfighter is not only challenging in the Military environment, the produce itself continues to ripen from the point of harvesting through distribution/storage to the final point of use. The NSRDEC CFD is exploring new technologies to control ripening, avoid spoilage losses, and ultimately improve the quality and freshness of FF&V delivered to Warfighters. The CFD has taken a multi-faceted approach to provide benefits from packaging through distribution to final consumption.

As produce respire, a number of gaseous by-products are released, to include water vapor, carbon dioxide, ethylene, and potentially other volatile organic compounds. Some fruits such as apples produce very high levels of ethylene and can greatly accelerate ripening and spoilage of other FF&V when stored in mixed loads within a refrigerated container. Ethylene-sorbent blankets and sachets traditionally used to control this problem pose significant logistic challenges in routine stocking and disposing of these short-term materials.

At the package level, a **Modified Atmosphere Packaging System** (MAPS) has recently been demonstrated to extend the shelf life of FF&V. This commodity-tailored package maintains the optimum oxygen and carbon dioxide concentrations to slow respiration, inhibiting ripening, and preserving the freshness and quality of the produce contained within the package. This polymer membrane package, developed by **Apio Inc.**, has been demonstrated to significantly increase shelf life and quality of highly perishable items (including lettuce, broccoli, tomatoes and melons) from days to weeks.



At the container level, a non-consumable, low-cost device that can be placed or installed in a refrigerated container has recently been developed to control ethylene and optimize the quality and freshness of FF&V as it is delivered to field units. This suitcase-sized device, developed by **Primaira LLC**, is placed or mounted in the refrigerated container and draws only 100 watts. The air circulating in the refrigerated container is drawn into the device to rapidly decompose the ethylene to carbon dioxide and water vapor. This UV-enhanced

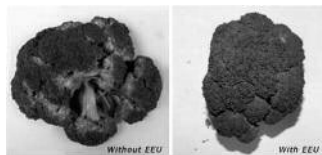


Primaira, LLC's device mounted in a TRICON refrigerated container

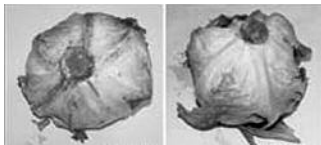
technology has demonstrated additional benefits associated with removing air-borne microbes, spores, fungus and odors. The ethylene and microbial removal is entirely contained in the unit, so the produce and the container are never exposed to damaging effects of ozone. The device has been demonstrated to reduce ethylene concentrations to below 0.5 ppm, destroying ethylene at a rate of 10 – 30 mg/hr, consistent with controlling ethylene from a TRICON fully loaded with ethylene generating produce. Mixed-load testing in a 20-foot commercial refrigerated container demonstrated that ethylene concentrations were maintained below 1 ppm, while the control-group container approached 12 ppm in which broccoli softening/yellowing appeared after two weeks, while no softening/yellowing appeared after three weeks with controlled-ethylene storage. Testing also demonstrated reduced green/red cabbage leaf abscission/yellowing and aromatic sulfur after two weeks of storage.



Reduced molding of strawberries stored with apples.



Reduced softening/yellowing of broccoli when stored with apples.



Reduced Russet Spotting of lettuce associated with ethylene exposure when stored with apples.

At the point of use, when FF&V are prepared for consumption, fruit and vegetable washes (to include **FIT®**, **Tsunami®**, **Citrofresh™**) and pathogen-specific bacteriophage cocktails are being evaluated to effectively treat pathogenic bacteria such as *Escherichia coli O157:H7*, *Salmonella spp.*, and *Shigella spp.* These no-rinse washes enhance food safety of produce provided through host nation supplies and reduce food borne illness. In recent testing, bacteriophage treatment on FF&V has reduced *Escherichia coli O157:H7*, *Salmonella spp.*, and *Shigella spp.* numbers by 90–99% (1–2 log reduction) while FF&V washes have shown a 4–6 log reduction in five minutes. A two phase approach using a bacteriophage cocktail treatment upon receipt of the FF&V and a sanitizer solution prior to consumption will deliver the greatest pathogen reduction and a safer product.

An automated vegetable wash & sanitizing sink, or **X-Green produce Sanitation System**, has also been evaluated for potential Military application. This automated system improves the safety of fresh produce and reduces the amount of labor typically associated with washing of fresh pro-



duce. The single-compartment sink used in the X-Green system provides automated agitation and injection of the vegetable washes described above, to include **FIT®**.

To date, **MAPS** has been demonstrated to provide the maximum achievable shelf life extension attributed to slowing the respiration process, yet its application is specifically tailored to select commodities. Ethylene control technology has broad application and facilitates mixed load storage, while the no rinse wash/automated sanitizer treatments ensure food safety. As the benefits of these technologies are demonstrated in FY11, the application of each approach will be characterized to provide maximum benefit and return on investment; ultimately reducing losses due to spoilage and improving the ability to move FF&V throughout the Military Theater.

CLOSED COMBUSTION APPLIANCES REDUCE FUEL CONSUMPTION AND HABITABILITY OF THE FIELD KITCHEN

Submitted by Don Pickard and Anthony Patti, Equipment and Energy Technology Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

Although military field kitchens have historically been designed for maneuver sustainment, the Army now considers the ability to support expeditionary base camps a critical requirement and that the kitchen appliances must be modular and man portable to enable movement into buildings that provide better force protection. The **DoD Combat Feeding Program, Equipment and Energy Technology Team** is using this opportunity to redesign the appliances to make them more fuel efficient as well as quieter, cleaner, and with improved cooking performance including thermostats and timers. The first step was to determine if a JP8 fired burner could be operated in a closed combustion chamber integrated with a commercial gas fired appliance. A JP8 burner manufactured by **Hawkmoor Limited** in the UK was selected because it was designed as a military burner for the **UK Modular Field Kitchen**, had the right output and consumed very little electric power (<40w). A combustion chamber was designed and integrated in a commercial gas fired **Accutemp Griddle**. The griddles thermostat was connected to the burner to make the burner cycle on and off depending on temperature. A wood stove type honeycomb catalyst was added to the exhaust to ensure clean emissions.

Compared to the current MBU/griddle, which is an open flame burner with simple impingement on an aluminum plate, the closed combustion system improved the heat transfer efficiency from 15% to 75% (based on fuel consumption and exhaust air temperatures). Side by side tests were conducted in the Mobile Kitchen Trailer where 100 hamburgers were fried. Noise was reduced from 84.5 dB to



Accutemp Griddle

a very quiet 68.5 dB. Ambient air temperature was reduced from 115°F to 94°F. And, fuel was reduced from 4.6 to 2.6 pounds per hour.

Most importantly, during all phases of operation (start-up, thermostatic cycling, and shut-down) there was not even a hint of combustion products or unburned hydrocarbons in the air. This griddle appears to operate clean enough to be used with minimal ventilation so that an exhaust system sized for removing cooking affluent will be adequate for any combustion products produced. For all intents and purposes the griddle acts like an electric griddle except it does not require a generator and it only consumes 40 watts of electric power instead of the 12,500 watts the electric version requires.

The current Accutemp griddle prototype is 36 inches wide. The **PM FSS Food Service Equipment Team** has required that all of the kitchen appliances be configured at a standard 22 inches wide, including the oven, which will hold ½ sized sheet pans. A second griddle, skillet, and oven have already



Half-sized oven

been designed and fabricated. These appliances will be tested and refined during 2011.

DOD COMBAT FEEDING DIRECTORATE HOSTS SOLDIERS RETURNING FROM DEPLOYMENTS IN IRAQ AND AFGHANISTAN

Submitted by Evan Bick, Program Marketing Analyst, Outreach and Education Team, DoD Combat Feeding Directorate (CFD), Natick Soldier Research, Development & Engineering Center.

In November, the DoD **Combat Feeding Directorate** had the privilege of hosting Soldiers from throughout I Corps who had recently returned from combat deployments in Iraq and Afghanistan. The twenty Soldiers represented a variety of military specialties, and ranged in rank from junior non-commissioned officers to captains. Their deployment experiences incorporated the full range of combat rations: some soldiers had been stationed on very large ‘Super FOBs’ like **Bagram Air Force Base** in Afghanistan or **Camp Victory** in Iraq and had enjoyed access to fresh food in contractor-supported dining facilities, while others had spent their deployments on platoon-sized patrol bases and had been wholly dependent on operational rations.

After a brief overview of the mission and capabilities of DoD CFD, representatives from the **Combat Rations Team, Packaging Integration Team, and Energy and Equipment Technology Team** answered Warfighter questions about the family of operational rations, including menu changes and new technologies. At the same time, we were able to gather crucial feedback on how DoD CFD’s products are being used in the field.

In some cases, suggested changes had already been implemented through the **Continuous Improvement Process**. One Soldier wanted peanut butter and jelly to be issued in the same MRE™ menu bags—a change already made in the 2010 menus. Other comments included continued support for the **First Strike Ration™** and **Unitized Group Ration-Express™**, which have proven themselves to be valuable additions to the family of combat rations.

This visit was a great example of how Warfighter feedback drives DoD CFD’s continuous product improvement. The more opportunities we have to learn from the Warfighters who actually consume operational rations in the real world, the more able we will be to meet their needs and continue to be **Warfighter Recommended, Warfighter Tested, and Warfighter Approved™**.



DEFENSE LOGISTICS AGENCY

Troop Support

PERSONNEL CHANGES

Below is a list of recent personnel changes at DLA Troop Support Subsistence. We wish all who have retired well in their future and welcome all of our team members as well.

- ★ **Dennis Kavanagh** retired after 23 years of federal government service on Dec 23, 2010. Dennis was a Food Technologist in the Individual Rations Branch.
- ★ **Napoleon Ciron** retired after over 30 years of combined military and federal government service on June 30, 2010. Napoleon was a Supply Planner for the Group Rations Branch.
- ★ **Eileen Friel** is a new Contracting Officer for Operational Rations Division, starting on January 31, 2011.
- ★ **Joanne Jaworski** is the new Branch Chief for the Supplier Group Rations starting January 31, 2011. In Joanne's last position, she was the Chief of the Supplier Operations for Market Ready.
- ★ **Harry Streibich** is the new Chief of Supplier Operations for Rations starting in September 2010. In Harry's last position, he was the Branch Chief for the Supplier Group Rations.
- ★ Replacing the departing **LCDR Paul DeMeyer** as the Chief of the Customer Facing Division is **LCDR Deborah Davis-Reid**.
- ★ And replacing **CDR Lawrence Coleman** as the Chief of the Customer Support Division is **CDR Steve Romero**.
- ★ **Captain Mike Hansen** is the Director of DLA Troop Support Subsistence.
- ★ **Capt William J. Terry** is the new Acting Deputy Commander of DLA Troop Support.
- ★ **Mr. Richard A. Ellis** is the new Acting Commander of DLA Troop Support.

DLA TROOP SUPPORT SUBSISTENCE MEMBERS RECOGNIZED AT DEFENSE LOGISTICS AGENCY'S 43RD ANNUAL EMPLOYEE RECOGNITION PROGRAM

Congratulations to both **Debbie Sinno** and **Pat Amendolia** who were recognized with Civilian Leadership Awards at the **43rd DLA Annual Employee Recognition** ceremony December 14, 2010 at the **McNamara Headquarters**

Complex. DLA Director Navy **Vice Adm. Alan Thompson** lauded all of the award recipients saying, "The group assembled before you today is representative of the kind of talent, innovative thinking, dedication, experience and skill that exists throughout this great agency. We recognize them today for improving our ability to forecast customer requirements, for streamlining our inventory planning and management, and for increasing the quality we provide to warfighters on the battlefield."

DLA TROOP SUPPORT SUBSISTENCE WORLDWIDE CUSTOMER CONFERENCE & FOOD SHOW 2011

Our next DLA Troop Support Subsistence Worldwide Customer Conference & Food Show 2011 is scheduled for August 16th & 17th, 2011 – Marriott in Anaheim, CA. Stay tuned to www.dscp.dla.mil/subs/conf2005/index.asp for more details in the coming months.

MEAL, READY-TO-EAT (MRE) STOCK LEVEL GOAL ACHIEVED

DLA Troop Support Subsistence recently reached the MRE stock goal as directed by Congress. DLA now has 5 M cases of MREs (60 M meals) stocked around the world, which includes 1.9 M earmarked for War Reserve. The MRE is the core combat Ration of the United States Military and is also used to facilitate disaster and humanitarian relief efforts.

2010 HOLIDAY MEALS

DLA **Troop Support Holiday Meal** effort in Iraq and Afghanistan was a success as Troop Support ramped up its planning efforts back in the early part of spring to have 244,000 pounds of turkey, 112,000 pounds of beef, 8,600 cans of sweet potatoes, 47,000 cakes and pies as well as all the other trimmings needed for the perfect holiday meal. Complete meals were delivered to over 200 dining facilities and distribution points.

The holiday meal is the most important one of the year, as it is a time when deployed troops need that touch, and taste, of home while away from their family, friends and loved ones.

EFFORTS TO PURCHASE PRODUCTS IN THE STANS

In an effort to promote better in country relationships and allow for U.S. shipments to travel the **Northern Distribution Network** with greater ease, DLA/DSCP has been making efforts to forge a business partnership with manufacturers in Kazakhstan, Uzbekistan and Tajikistan. The effort led by CENTCOM had a major DLA Troop Support presence and extended visits were made in country to different suppliers.

DLA SUPPORT TEAM (DST) FOR SUBSISTENCE

Subsistence would like to recognize and thank the following members of our team that have recently served, or will be doing so in the near future, as a DST member in theater. DST members get to experience firsthand the support DLA Troop Support Subsistence provides to the Warfighter along with gaining valuable experience and insight to the Warfighter's needs.

Recent Class I deployments:

Gene Boss – Has deployed 9 times and is currently in Afghanistan, has also served in Kuwait, & Iraq.

Cathie Sexton – Two Deployments both in Iraq.

WO4 Steve Rodriguez – One Deployment: Iraq.

CW4 Andrew Dawson – One Deployment: Iraq.

Sabrina Viruet – Currently on her first deployment for DLA Troop Support; location: Iraq.

Thomas Sallese – Currently on his first deployment; location: Afghanistan.

Carlos Garcia – One Deployment in Afghanistan for DLA Troop Support.

Sean Wood – On his first deployment in Iraq.

Christine Jones – Scheduled to deploy to Iraq April 2011.

Ana Sanders – One deployment for Afghanistan.

Class I employees who last deployed more than two years ago:

Helene Tunney – Two Deployments in Afghanistan, in 2007 and 2008; also deployed in 2005

Paula Quinones – Two Deployments: Kuwait & Afghanistan.

Robert Thompson – Two Deployments: Afghanistan.

Thomas Dougherty – One Deployment: Afghanistan.

Marherlia Bynum-Tillman – Two Deployments: Iraq & Kuwait.

LT Lee Eubanks – One Deployment: Afghanistan.

LT Eric Decker – One Deployment: Afghanistan.

HURRICANE RELIEF 2010

Thankfully, this past hurricane season was a relatively quiet one. DLA Troop Support worked with **Federal Emergency Management Agency** (FEMA) to ensure that all relief requirements were satisfied.

QUALITY ASSURANCE

Throughout the year DLA Troop Support Quality Assurance Branch conducts a number of **Food Quality Audits** where vendor product is tested to ensure that product conforms to our specifications and needs. We also conduct a number of **Quality Systems Management Visits** (QSMV), where not only vendor product is examined, but end user customers are visited for their valuable feedback. In 2010, 56 Food Audits were conducted, while ten QSMVs were conducted. Food Audits and QSMV include all DLA Troop Support Subsistence Food products, Operational Rations, Food Service and Produce.

DLA TROOP SUPPORT USAGE OF NORTHERN DISTRIBUTION NETWORK (NDN) IN THEATER

In an effort to alleviate congestion of the **Pakistan Ground Lines of Communications** (GLOC), DLA Troop Support and DLA-E have worked with commercial transportation to establish a Northern Distribution Network (NDN) to transport containers of subsistence product to Afghanistan. The NDN initiative decreased the OST to 60 days with the use of trucks vice rail.

NEW SUBSISTENCE PRIME VENDOR FOR IRAQ AND KUWAIT

ANHAM, a Dubai-based company that was awarded the prime vendor contract in Iraq for all perishable and non-perishable food items in April 2010, has continued to make a successful transition with the guidance and assist of DLA Troop Support and DLA Support Team (DST) members in theater.

In its new subsistence prime vendor role for Troop Support, ANHAM manages the purchasing, storing and delivering food and beverages to the troops in theater. ANHAM is also responsible for storage, stock rotation and delivery operational rations.

ANHAM will use the subsistence total ordering receipting electronic system to take customer orders, allowing Troop Support total visibility.

The contract between DLA Troop Support and ANHAM has 3-1/2 years of options for a total of five years.

NATO MAINTENANCE & SUPPLY ACTIVITY (NAMSA)

NAMSA is a new DLA Troop Support customer. NATO operates dining facilities in Afghanistan to support the Coalition of Forces. Many of the US troops that comprised the Coalition did not favor the product being served at NAMSA dining halls and requested the same food as the US troops in theater. This was the catalyst for NAMSA using DLA Troop Support SPV in theater as a supplier.

RATIONS INCREASE IN AFGHANISTAN AND DRAWDOWN IN IRAQ

With the United States Military efforts changing focus in theater, DLA Troop Support have begun to support the mission by facilitating rations requirements increase in Afghanistan and decrease in Iraq to support **Operation New Dawn** (OND) which has replaced **Operation Iraqi Freedom** (OIF). In some cases, product has been cross-leveled from Iraq Prime Vendor warehouses to those in Afghanistan.

Subsistence Sustainment Plans have reflected the surge of requirements for Afghanistan. Some rations programs, such as the First Strike Ration (FSR) and the Unitized Group Ration-Express (UGR-E), will experience limited availability for U.S. CONUS training requirements as OEF/OIF requirements are given top priority.

JOINT SERVICE POLICY BOARD (JSPB) DECEMBER 2010 MEETING

DLA Troop Support recently hosted the bi-annual **JSPB meeting** in Philadelphia, Pennsylvania. The main action item from the meeting was a joint service catalog for all OCONUS customers, including Europe, Pacific, SWA, etc).

USAF TRANSFORMATION

The Air Force recently implemented a transformation effort with DLA Troop Support aimed at improving the variety and availability of meals, in addition to changing the way they support dining facilities, officers clubs and non commissioned officer's clubs.

The transformation has enhanced the AF's capability to meet the needs and preferences of airmen and their families as well as transforming food service operations to become more efficient.

This has given civilians, families and retirees access to dining facilities, thus increasing demand.

The transformation has facilitated usage of different funding. The Air Force officer's and NCO clubs were operating on non-appropriated funding to buy food. Under this new effort, the operations will be financed with appropriated funds, the same as any defense dining facility. Vendor personnel responsible for food operations at the clubs will now use Troop Support catalogs to order product.

Six air bases located throughout the United States were chosen for the first phase of this new initiative: **Elmendorf AFB**, Alaska; **McDill AFB**, Florida; **Patrick AFB**, Florida; **Little Rock AFB**, Arkansas; **Fairchild AFB**, Washington State; and **Travis AFB** located in California.

NATIONAL OCEANIC AND ATMOSPHERIC ADMIN (NOAA)

National Oceanic and Atmospheric Administration's mission is to understand and predict changes in Earth's environment and to conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs.

In July 2009, NOAA approached DLA Troop Support Hawaii Regional office. DLA Troop Support agreed to supply all NOAA ships with subsistence food products and services. Currently 15 NOAA ships are actively using STORES Web. Sales for 2010 were approximately \$522,000. The home ports of these ships are located on both the east and west coasts, including Hawaii and Alaska. We have serviced NOAA in Hawaii, Guam, Alaska, Washington, Massachusetts, South Carolina, California, Mississippi, Virginia, Oregon and Texas.



Register now for the R&DA 65th Annual Meeting at the beautiful Naples Grande Beach Resort this May.



ACES (JCCoE) ACTIVITIES

PROVIDING MAD SUPPORT

CW4 Ellen M. Magras, Chief, Management Assistance Division (MAD)

The MAD wants to take this opportunity to introduce you to **a team of food service professionals, known as the Food Management Assistance Team (FMAT)** that travel thousands of miles annually to provide sound assistance and training to the food service community worldwide. Although you may have heard of the FMAT, it is best to give you an up-close and personal look at who the team members are and what they do. There are six positions assigned to the MAD comprised of a Warrant Officer, two Sergeants Majors, a Master Sergeant, and two Department of the Army Civilians (DAC)—all focused on excellence and dedicated to improving the Army Food Program.

CW4 Ellen M. Magras is the Division Chief whose proficiency and over 25 years of food service experience, provides added value to the mission. In her position, she is able to provide mentorship, training, and coaching to the Command Food Advisors and other advisory support personnel. She provides Commanders and Food Program Managers technical assistance and on-site training to improve food service operations and the overall Installation Food Program. She also provides the JCCoE and Operations Directorate with quality feedback and concerns from the field which are addressed and answered as a team. This information may eventually be added into policy and updated regulations. In the end, the information recorded on MAD missions, are forwarded to the Army G4.

Mr. Raymond Arnold, DAC, is a Food Service Systems Analyst and Retired Sergeant Major. He has been involved with the Army Food Program for 33 years. He serves as a Team Chief/Lead Analyst on the FMAT and is responsible for the analysis of system problems relating to the development, assessment and improvement of the Department of the Army (DA) Food Program at the Installation level. He is responsible for the coordination of missions, provides training and assistance to the Food Program Management Office, and is responsible for the Entrance and Exit briefing to the Installation leadership. Mr. Arnold is also responsible for the *Memorandum of Visit* provided to the Installation Commander and any follow-up actions pertaining to the Installation Food Program.

Mr. Ron Bellamy, DAC, is a Food Service Systems Analyst and a Retired Master Sergeant. He has been involved with the Army Food program for 27 years. He serves as a Team

Chief /Lead Analyst on the FMAT and is responsible for the analysis of system problems relating to the development, assessment and improvement of the DA Food Program at the Installation level. He is also responsible for the coordination of missions, provides training and assistance to the Food Program Management Office, and is responsible for the Entrance and Exit briefing to the Installation leadership. Mr. Bellamy is also responsible for the *Memorandum of Visit* provided to the Installation Commander and any follow-up actions pertaining to the Installation Food Program.

SGM Reginald Uzzell brings 26 years of Food Service experience to the FMAT and a wealth of knowledge. SGM Uzzell assists in raising the quality of the **Installation Food Service Program** and increases the effectiveness by identifying programs that function well or may require improvements, while ensuring all regulatory policies and procedures are uniformly applied to the Installation Food Service Program. SGM Uzzell also teaches, coaches and mentors Food Service NCOs on the latest knowledge in Food Service and to strive for excellence.

SGM Michael Dixon has been serving his country for more than 29 years. His assignments have been wide spread from overseas tours, and various conus assignments. His experience has enabled him to become a subject matter expert on a vast array of food service subjects. He now serves as the NCOIC of the **Army Food Management Assistance Team (FMAT)**, and has held this position for 13 months. His vision is to continually contribute to the Army Food Service Program by grooming, and mentoring junior enlisted service members. Additionally, he is equally responsible for ensuring all food service regulatory guidance is followed in all Army Dining Facilities worldwide. SGM Dixon is continually sought out for advice and is always available to address Food Management subjects.

MSG Dewayne Johnson has served over 18 years as a multi-functional Food Service NCO. He now serves as a member of the **DA FMAT** and is responsible for rendering assistance in raising the quality of food service. He also ensures regulatory policies and procedures are uniformly applied along with exchanging, searching for and collecting new ideas regarding food service for possible adoption and dissemination to all installations. MSG Johnson records observations and recommendations to assist in improving the Installation Food Program and meeting the standards of the Army Food Program worldwide.

SUPPORTING WARRIORS

Cara Vartuli-Dusablon, Chief, Concepts, Systems, and Policy Division, Joint Culinary Center of Excellence, Operations Directorate

To all food service professionals serving our nation- we are here to provide you with World Class service. The purpose of this article is to introduce Concepts, Systems and Policy Division personnel and to invite you to take advantage of the assets we offer. There are a total of seven persons assigned to CSPD with various levels of duties and responsibilities aimed at improving the Army Food Program.

Mr. Stephen J. Primeau is a Food Service System Analyst within Concepts, Systems and Policy Division. He serves as the lead action officer for **Automation** (AFMIS & CFMS) and actively engages in Subsistence Prime Vendor Program related issues. Additionally, he has assisted with the development and writing of the *Army Food Service Policy/Procedures and Field Doctrine*.

Mr. Jose A. Millan is a Food Service Systems Analyst within JCCoE, Concepts, Systems and Policy Division. He serves as the action officer for the Food Service Contract management course, PWS prototype and Subsistence prime vendor program issues. He has assisted with the development and writing of the *Army Food Service Policy/Procedures and Field Doctrine*.

Ms. L'Tanya Y. Williams is a Food Service Systems Analyst within JCCoE, Concepts, Systems and Policy Division. Her daily efforts include, but are not limited to, planning, reviewing, researching, coordinating, and implementation of Army policy and procedures to achieve an efficient and effective Army Food Program.

Mr. Tommy Hill is a Food Service Systems Analyst within JCCoE, Concepts, Systems & Policy Division. His responsibilities include Researching, Analyzing, and interpreting food program policy and customer inquiries to provide appropriate advice and assistance. He also participates in collecting data from the field in preparation for future revisions to **AR 30-22** and **DA PAM 30-22**.

Mr. Frank Mottin is a Food Service Systems analyst within JCCoE, Concepts, Systems and Policy Division, providing updated information on Army Food Concepts, policies, updates and systems supporting the Army Food Program. Mr. Mottin provides this information to a worldwide audience of Food Service professionals both working in a Garrison and a Field environment. He is also a member of the Newly formed **Joint Recipe Committee** responsible to streamline all Services recipes to support the **Common Food Management System** (CFMS) and serves as Action Officer for 2011 worldwide customer conference.

Mr. Hosey is a Food Service System Analyst within Concepts, Systems and Policy Division. Responsibilities include but are not limited to managing all JCCoE budget expenditures, Action Officer for the Army Food Policy

Advisory Board, Editor of **Army Food Net**, serves as the Marketing Officer responsible for all outside media request for information. He is lead Action Officer for 2011 worldwide customer conference.

As the division chief of CSPD it is an honor to introduce you to our team. We have only scratched the surface of the areas we assist in on a daily basis. We pride ourselves in providing the best support possible to you the Army food service professional. Please call upon us to assist you with any food service issue. We will work with the rest of our JCCoE family to ensure you receive the most accurate up to date information available.

CARA VARTULI-DUSABLON NEW CONCEPTS SYSTEMS & POLICY DIVISION (CSPD)

Ms. Vartuli-Dusablon joined the Joint Culinary Center of Excellence in September of 2003 as a member of the Concepts, Systems and Policy Division bringing over twenty years of commercial food service experience with her. During her time at JCCoE she has filled the position of Food Service Systems Analyst and was promoted to Subsistence Prime Vendor Team Chief in 2009.



Among her many duties she has served as a developer and instructor of the **Food Service Contract Management Course**, action officer for quality audits/technical panels and provided assistance at installation level for dining facility service contracts. Prior to beginning her career with JCCoE she was a member of the Supply Management Intern Program here at Ft Lee, Virginia. Ms. Vartuli-Dusablon looks forward to her new challenging role as the Division Chief of CSPD.



LTC ROSSIE "ROSS" JOHNSON

Lieutenant Colonel Rossie "Ross" Johnson, Logistics Officer, is the Director of the Joint Culinary Center of Excellence at Fort Lee, VA.

LTC Johnson is a Virginia native. He graduated (1987) from **Saint Paul's College**, Lawrenceville, VA with a degree in Business Administration in 1987 and earned a Masters degree in Administration (1998) from **Central Michigan University**.

In 1988, he completed the Quartermaster Officers Basic Course and then was assigned to Fort Bragg, NC as a Platoon Leader for 406th General Supply Company, 1st Corps Support Command (COSCOM). His next assignment was to 1st COSCOM as the G3 Operations Readiness Officer where he deployed to **Operations Desert Shield** and **Storm** with them.

In 1992, he attended the Quartermaster Officers Advance Course and upon graduation was assigned to the 2nd Infantry Division in Korea. He served as **Director of Logistics** for Camp Casey and Commander, Headquarters Company Division Support Command.

In 1994, LTC Johnson returned to CONUS for an assignment at Combined Arms Support Command (CASCOM) at Fort Lee, VA. He served in the Training Directorate as a Senior Training Evaluator and became Commander of Company V, 262nd Quartermaster Battalion, 23rd Quartermaster Brigade (Jan 1996-Oct 1997).

In 1998, he was reassigned to 4th Infantry Division, Fort Hood, TX where he served in the following capacities: Division G4 Logistics Planner; S4, 2nd Brigade Combat Team; and Support Operations Officer, 204th Forward Support Battalion.

In 2002, LTC Johnson was assigned to Luxembourg where he served as Battalion Executive Officer, Combat Equipment Battalion, Luxembourg. During this assignment, LTC Johnson was deployed to CENTCOM J5 in support of **Operation Iraqi Freedom**. Upon his return to Europe (2004), he was reassigned to the 21st Theater Support Command as a G3 Logistics Plans Officer and later as the Chief, G3 Plans and Exercises Branch in **Kaiserslautern, Germany**.

In 2006, he returned to Fort Bragg, NC to the 1st Theater Sustainment Command (TSC) where he served as the Branch Chief for Supply and Services and Class VII, Support Operations Directorate. During this tour, he deployed to Kuwait in support of **Operations Iraqi and Enduring Freedom**.

In 2009, LTC Johnson was reassigned to Fort Eustis, VA where he served as the Executive Officer, 8th Transportation Brigade, US Army Transportation School.

LTC Johnson's awards include the Meritorious Service Medal (4OLC), the Joint Service Commendation Medal, The Army Commendation Medal (2OLC), National Defense Service Medal, Southwest Asia Service Medal, Saudi Arabia Kuwait Liberation Medal, Global War on Terrorism Expedition Medal, Global War on Terrorism Service Medal, and the Meritorious Unit Commendation. LTC Johnson is authorized to wear the Parachutist Badge and the Parachute Rigger Badge.

He is married to the former **Adrienne Nelson** of Washington, District of Columbia. They have one adult son, Brandon 20, and two children Andrea 12, and Alexandria 7.

DAVID J. SHERRIFF

From 3 February 2008 through 29 January 2011, Mr. Sherriff served as the Chief of **Concepts, Systems, and Policy Division** (CSPD) at the **Army Center of Excellence, Subsistence Operations Directorate** (ACES OD), **Joint Culinary Center of Excellence** (JCCoE). As the Chief of



David Sherriff

CSPD, Mr. Sherriff is primarily responsible for the CSPD mission of developing and publishing Army Food Program policies, providing the Subsistence Prime Vendor Team, providing Food Service Contract Management Oversight, developing new Garrison Food Operations concepts, managing the Army 28-Day Contingency Operations Menu and Source Verified List, and analyzing food program management

information. He has over fourteen years of foodservice experience, both in commercial restaurants and at ACES, and served in the United States Army Reserve.

Mr. Sherriff came to ACES through the Supply Management Intern Program after completing an intensive 14-month program with assignments at Fort Lee, VA; Defense Supply Center, Richmond; Fort McPherson, GA; Redstone Arsenal, AL; Red River Army Depot, TX; and Fort Knox, KY. Previously at ACES, Mr. Sherriff worked as a Food Service Systems Analyst and as a Food Service Specialist, with the primary responsibility of writing **Army Food Program Policy (AR 30-22) and Procedures (DA Pam 30-22)** and providing advice and assistance to Commanders and Food Program personnel on policy and operations. In addition, Mr. Sherriff planned and executed the previous six Army Worldwide Food Service Workshops and served on numerous working groups with Defense Supply Center, Philadelphia, the Installation Management Command, and other organizations.

He is a graduate of the **U.S. Army Quartermaster Officer Basic Course, the Army Management Staff College Sustaining Base Leadership and Management Program**, and has a Bachelors of Science Degree with honors in Exercise Science from the **University of Toledo**. He graduated in May 2008 with a Master of Business Administration degree from **Colorado State University**.

Mr. Sherriff has thrice received the **Commander's Award for Civilian Service** as well as the **Association of United States Army Award** for top performance at the Army Management Staff College and the **American Logistics Association Award** for top Civilian performance in Quartermaster Officer Basic Course.

Mr. Sherriff is married to the former Aimee K. Minnick and has two sons, Trevor and Elliot, ages 15 and 13 respectively.

GOVERNMENT FOOD SERVICE INTERVIEW WITH DAVID SHERRIFF

When did your tour officially begin?

June 2010.

What areas will you focus on during your tour?

First I would like to thank your magazine for the opportunity to appear in this issue. In regards to our training mission; I will focus on evaluating and improving the training provided to our Service members to ensure that it is current, accurate, and relevant. In regards to operations I will continue focusing on providing world-class support to our service partners & customers. Special Program functions such as the Philip A. Connelly award program, the Annual Culinary Competition and the events that the United States Army Culinary Team participate are of noteworthy attention due to their notoriety, and vast opportunities availed to every participant.

Is this a response to trends in military food service?

Trends are relative to what dictates our curriculum, for example, if fracture incurred in war or training can be linked to the lack of certain staples in a diet then we assess training and policy to determine if there is a need to alter food handling, processing, and menu planning procedures. Obesity is another trend that requires us to do an in-depth review of our processes to ensure we are in synch with the latest guidance from the United States Army Medical Command (MEDCOM), United States Department of Agriculture (USDA), and United States Department of Commerce (USDC). This is our primary objective within the organization, to ensure that JCCoE provides world-class quality training.

Tell us a little about yourself and how you came to become involved in JCCoE.

JCCoE requires a multifaceted person who is well versed in training, policies in both war and peacetime environments; and the forward thinking ability to project future requirements, and advance the department to new dimensions with collaboration from our industry partners and lessons learned from Iraq and Afghanistan. Each year we strive to exceed our own record from the past. I have over 20 years of Commissioned service, and have had a myriad of demanding logistics assignments over the years that has prepared me for this type position. When I saw that the JCCoE Director's position was going to be available, I leaped at the opportunity to serve in the billet.

How is the increasing emphasis on nutrition and performance (Soldier Fueling, Go For Green) influencing JCCoE and planning for the future?

JCCoE continues to stay well informed and engaged on the impact nutrition has on Soldiers performance. JCCoE evaluates nutrition trends, national dietary goals, and communicates with MEDCOM on nutrition issues facing our Soldiers. The recent TRADOC Soldier Fueling initiative is just one of the programs JCCoE has been involved in from the beginning. This initiative has revitalized the foodservice and nutrition community and has propelled a relook of food ingredients, recipes, menus, and how nutrients are ultimately delivered to our Soldiers.

What difference, if any, is brought about by the transition in October 2009 to JCCoE from ACES?

The main difference involves the inclusion of the US Navy and US Air Force entry level food service training to Fort Lee. This supports the 2005 Base Realignment and Closure mandate by congress, and locates all entry level food service training to Fort Lee in order to take advantage of efficiencies in training through collocation and consolidation.

What is on the horizon for JCCoE?

Facility expansion was completed to accommodate additional classrooms, training labs, training dining facilities and offices that are required to host the additional services more than 1,700 students and staff. Construction is complete and we are ready to train.

The facility expansion was completed, accepted in December 2010. The US Navy and Air Force staffs have transitioned operations into their respective areas, and are preparing to execute training.

The first joint training is expected in January 2011, is this on schedule? If so, what is planned?

The JCCoE training directorate has been conducting joint training for over a decade with the US Marine Corps, and in several functional courses. The agreement will result in the inclusion of US Navy students in entry level cooking and baking techniques training along side with US Army and Marine Corps students. The services will then conduct service specific training for their students.

Describe the roles of the military branches in JCCoE. How is the transition progressing?

Each service or military branch is responsible for their service specific training for the courses offered on Fort Lee. The US Army, as the host service, is the lead agent for all Army specific and consolidated training. However, coordination is conducted daily between the JCCoE Director of Training and each Services training Officer and Non-Commissioned Officer in Charge on all training and mission requirements. The overall vision and intent is to build a partnership and relationship between all Services, and collectively enhance training provided to improve food service operations throughout the Department of Defense. The US Navy and Air Force staff has transitioned into their respective areas, and are preparing operations to begin training in January 2011.

Describe how rations, equipment and automation are evolving.

Rations: Our food service programs are constantly evolving exploring ways to improve all processes and systems. The operational rations are also subject to our on-going review for how to feed our diners well and smartly. The Army is working with manufacturers, Natick and the Office of the Surgeon General to update nutritional targets for the operational rations, expand menus and improve ingredients, provide enhanced cooking directions, and take advantage of the better packaging and equipment that has been or will be fielded. Many of these targets overlap with the goals of the JSPB DOD Menu Standards, incorporate some of the

favorite foods of the Joint Service community, and yet are reliable products for use in remote and austere settings. One example of the menu updates includes creating more Unitized Group Rations options with split choice selections, such as looking at alternatives to pork at the same meal and providing some short order menu options.

Equipment: Today's markets are won or lost with standards, therefore the Army food service equipment program consist of buying food service equipment that is rated as energy star and meets the requirements listed in the American Society of Testing and Material (ASTM) standards. Our goal is to buy the right piece of equipment to cook the products based on the new menu standard for the Army. You will see more combi-steamer ovens and less deep fat fryers in our facilities. You will see healthier choice beverage dispensing equipment in the self-service areas compared to soft drink machines.

Give an update on progress with the Common Food Management System. A test scheduled for late 2010 is reset for January?

Answer below.

Will Common Food Management be applied outside the continental U.S.?

Answer below.

For example, Scan and Go is used in combat zone areas of responsibility. Scan and Go has undergone two implementation phases. How is the latest phase progressing?

Answer below.

How is coordination going with the National Guard and Army Reserve?

Answer below.

Automation: Is evolving rapidly within the Army Food Service Program. Our current System is the Army Food Management Information System (AFMIS). Constant updates occur within this system. We have updated the way that we oversee our accounts, manage inventory and utilized our dining facilities. To meet regulatory requirements for managing headcount in the AOR, AFMIS rolled out the Scan & Go program which allows AFMIS to capture diner information off an ID card from a hand held scanner. This Scan & Go program is progressing very well and has been accepted by the Army Reserve and Army National Guard for limited fielding. Additionally, DOD has mandated that all services look at adapting one Food Management System for all services. This is being accomplished with the development of the Common Food Management System (CFMS). The Joint Culinary Center of Excellence is actively working with Defense Logistics Agency and Defense Logistics Agency-Troop Support to develop and field CFMS. This joint operating system meets the Army's basic functionality requirements. CFMS is now scheduled to have the Operational Assessment 1 test (Increment 1) with the Marine Corps at Quantico, VA between the end of January and early March FY 11. This test will be on a stand-alone computer system connected to the DLA network for security concerns and to ensure operability. CFMS Operational

Assessment 2 is schedule for March – April FY 11 with actual testing in seven dining facilities located on Quantico, VA. All services are expected to attend and observe the Operational Assessment 2 to determine the operational efficiency of this new system and to gain an understanding of the system as currently developed. Once CFMS has proved to be successful, the fielding will continue with the Marine Corps with expected deployment completion scheduled for December 2011. The new tentative schedules for the other services are as follows, US Air Force and US Navy Ashore with fielding of increment 2 in July 2012 with completed deployment by July 2013. Military Sealift Command and US Navy Afloat are fielded in increment 3 in January 2013 with completed deployment by January 2015. Army is scheduled for fielding during increment 4 in March 2013 with completed deployment by September 2014. CFMS is scheduled to replace our AFMIS system so it will be fielded wherever AFMIS is currently operating except for the Army National Guard and Army Reserve. The specific operational requirements for the ARNG and Army Reserve will be included in CFMS at a later date to be determined.

Several nutrition initiatives aim to improve diner understanding and delivery of better food options. Describe these initiatives and the reasons driving them?

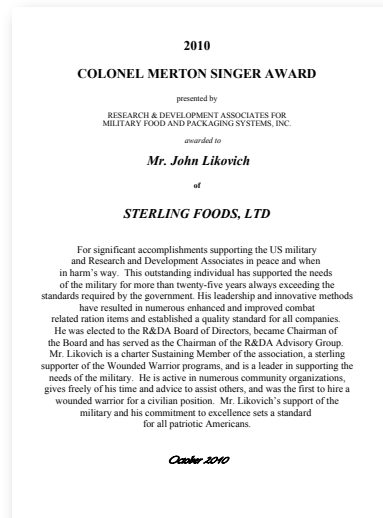
One of the nutrition initiatives that has been in the works the past year is updating the Army Food Program regulation DA PAM 30-22 to support the Joint Service Policy Board (JSPB) Department of Defense (DOD) Menu Standards. The updated Army menu standards focus on providing nutrient dense food choices that optimizes Soldiers physical performance, promotes resilience and health, and decreases risk of chronic diseases. Some examples include serving orange juice fortified with calcium and vitamin D; serving dark green leafy lettuce or baby spinach in tossed salads; increasing whole grain options; and increasing omega-3 sources. The Army is also analyzing the systems' requirements necessary to update the Army Recipe Cards TM 10-412. Some of the goals are to incorporate healthy(er) ingredients and production techniques with updated equipment, and to ensure a wider range of Soldiers' preferences, while still complying with national dietary goals and JSPB DOD Menu Standards. Examples of the updates include creating more recipes with omega 3 sources, and replacing any margarine in recipes with heart-healthy spreads that have zero trans fat. Another nutrition initiative that aims to improve diner understanding is the "Go for Green" program. "Go for Green" is a nutritional recognition labeling system which provides Soldiers with a quick assessment of the nutritional value of menu offerings and food products in the dining facility. The menu choices and food items are labeled green (eat often), amber (eat occasionally), and red (eat rarely) based on the impact the food can have on a Soldier's performance. For example, foods labeled green are high performance foods that can positively impact a Soldier's performance and foods labeled red are performance inhibiting foods which can negatively impact a Soldier's performance. Generally, foods such as fresh fruit, whole grain breads, and baked poultry without skin would be labeled green and foods such as fried meats, pastries, and soda would be labeled red.

AWARDEES RECOGNIZED IN LAKE TAHOE

Three awards were presented at the Fall 2010 R&DA meeting in Lake Tahoe to recognize outstanding contributions to the efforts of R&DA.

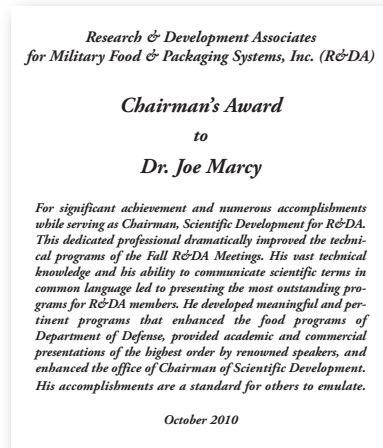
John Likovich of Sterling Foods was the 2010 winner of the **Colonel Merton Singer Award**. This award has only been awarded seventeen times in the history of R&DA. He was acknowledged for his support to the military, the community and to R&DA. Mr. Likovich's support to the military and his commitment to excellence set a standard for others to emulate.

John Likovich given "The Singer Award" presented by Jon Geisler, Chairman of the Board (left) and Barney Rosner, R&DA Emeritus (right).



The **Chairman's Award** was presented to **Dr. Joe Marcy** of Virginia Tech University for his sterling accomplishments while serving R&DA as the **Chairman of Scientific Development**. Dr. Marcy is the first person of this position to receive the award for his many contributions to R&DA.

Dr. Joe Marcy given "The Chairman Award" presented by Barney Rosner, R&DA Emeritus (left) and Jon Geisler, Chairman of the Board (right)

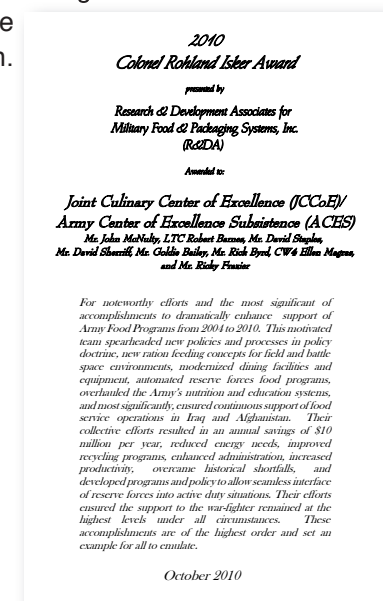


The highlight of the awards presentation was the **2010 Colonel Rohland Isker Award**. This is R&DA's premiere award presented to the government for the most outstanding of achievements. Nominations are received from all government agencies involved in subsistence and packaging support to the military. Since 1967 more than 600 nominations have been received, and the award has been presented annually. This year's award was presented to the **Army Center of Excellence/Joint Culinary Center of Excellence** for their enhancement of all Army Food Programs from 2004 to 2010. These efforts resulted in savings of more than \$10 million per year and are the basis of the unparalleled subsistence support to the warfighters in Iraq and Afghanistan. Congratulations to the following members of this team:

**John McNulty • LTC Robert Barnes • David Sherriff • David Staples
 Goldie Bailey • Rick Byrd • CW4 Ellen Magras • Rickey Frazier**



Army Center of Excellence/Joint Culinary Center of Excellence Team given "The Colonel Rohland Isker Award" (Rick Byrd, Dave Sherriff, and John McNulty) presented by Jon Geisler, Chairman of the Board (left) and Barney Rosner, R&DA Emeritus (right).



Highlights from the Fall 2010 R&DA Meeting in Lake Tahoe



Welcoming Reception: Entertainment by "The Andrews Sisters."



Welcoming Reception Networking: Marty Koss, Steve Herlehy & Bill Smith



Welcoming Reception Networking: Adam Clingerman, Guy Corr, Bob Ripp & Ryan Johnson



Special Speaker, Mr. Robin Crow speaking on "Global Issues and Effect on Business Sustainability."



Networking: Michael Truax (Ms. T's Pierogies) and David Ashby (Kellogg's).



Mr. Harry Streibich, DLA Troop Support, Rations Workgroup Session



CMDR Tom Dailey, US Navy Military Keynote Speaker



CW4(P) David Longstaff, US Army- Rations Keynote Speaker



Mr. Rick Byrd, JCCoE, "The Army's Nutrition" Session



MG (Ret) Peet Proctor, Military Keynote Speaker



Mr. John McNulty, US Army, Meeting Keynote Speaker

R&DA WELCOMES NEW MEMBERS

INDUSTRY

STARKIST COMPANY

225 North Shore Dr., Ste. 400
Pittsburgh, PA 15212
Mr. Mike Barron

(THE) ROZO GROUP

Trans, 48 No. 21-85
Cll Nilo, El Bosque
Colombia
www.therozogroup.com
Ms. Lourdes Rozo
Mr. Jamie Rozo

LIGHTHOUSE FOODS

13605 W. Hillsborough Ave.
Tampa, FL 33635
Mr. Billy Hashey
Mr. Don Holmes

GLOBAL FOOD TECHNOLOGIES

113 Court Street, Ste. 205
Hanford, CA 93230
www.globalfoodtech.com
Mr. Keith Meeks
Mr. Aaron Ormond

LTS COMMODITIES

23073 S. Frederick Rd.
Ripon, CA 95366
Ms. Terry Wells-Brown
Ms. Lori Gikas

BRUCEPAC

811 N. First St.
Silverton, OR 97381
www.brucepac.com
Mr. Wayne Shervey

DIAMOND CRYSTAL BRANDS

3000 Tremont Rd.
Savannah, GA 31405
www.dcbands.com
Mr. Ryan Johnson
Mr. Keith Carroll

WELCH'S

7405 West Shore Dr.
Edina, MN 55435
Mr. Tom Madsen
Mr. Steve Yarmowich

TIP TOP POULTRY, INC.

327 Wallace Rd.
Marietta, GA 30062
Ms. Candace Turner

HYDE & HYDE, INC.

300 El Sobrank Rd.
Corona, CA 92879
www.hydeandhyde.com
Mr. Allen Hyde

NEW WAVE CONVERTING

14808 Whittram Ave.
Fontana, CA 92335
www.nwconverting.com
Ms. Jill Hanmer
Mr. Chad Huber

ROTELLA'S ITALIAN BAKERY, INC.

6949 South 108th Street
LaVista, NE 68128
www.rotellasbakery.com
Mr. Gary Shives

KERRY FOOD & BEVERAGE

P.O. Box 274
Granby, MA 01033
www.kerry.com
Mr. Richard Mei
Mr. Christopher Dean

THE MARCHETTI GROUP, LLC

4439 Stonehaven Dr.
Long Grove, IL 60047
Mr. Dennis Marchetti
Mr. Ken Marchetti

PBI-DANSENSOR AMERICA

139 Harristown Rd.
Glen Rock, NJ 07452
Mr. John F. Solomon
Mr. Jim Margiotta

SUNOPTA GRAINS AND FOODS GROUP

3824 SW 93rd Street
Hope, MN 56046
Mr. Mike Hodgdon

SYSCO CORPORATE

12180 Kirkham Rd.
Poway, CA 92064
www.sysco.com
Mr. Steve Corkery
Mr. Brian Head

DAVISCO FOODS INT'L

11000 West 78th Street
Eden Prairie, MN 55344
Mr. Dan Mackenzie-Olson
Mr. Matus Knoblich

INSTITUTIONAL

JUTRAS, EDITH

Combat Rations Program Director
Department of National Defence
26 Paul-Verlaine
Gatineau, Quebec
Canada
J9J 2P4

CONSULTANTS

MILITARY FOOD ADVISORS, LLC

7562 Canon Gate Cove
Germantown, TN 38138
Mr. Joseph R. Rodriguez
Consultant for issues related to the
military food program

65th Annual Spring Meeting & Exhibition May 23–25, 2011 Meeting Registration Form

RESEARCH & DEVELOPMENT ASSOCIATES FOR MILITARY FOOD & PACKAGING SYSTEMS, INC.

16607 Blanco Rd., Ste. 501 San Antonio, TX 78232 TEL. 210-493-8024 FAX 210-493-8036 Email hqs@militaryfood.org

SALUTATION (Dr., Mr., Ms., LTC, COL, etc.): _____

NAME: _____

NAME FOR BADGE: _____

TITLE: _____

ORGANIZATION: _____

STREET: _____

CITY: _____ STATE: _____ ZIP: _____

TEL: _____ FAX: _____

EMAIL ADDRESS: _____

(email address for confirmation & meeting roster)

NAME OF SPOUSE FOR BADGE: _____

YOUR REGISTRATION FEE INCLUDES:

3 Breakfasts, 2 Luncheons, 3 Receptions, and 1 Dinner

Is this your first R&DA meeting? Yes No

Will you attend Boot Camp? Yes No

FULL MEETING REGISTRATION FEES:

	<i>Payment Received By May 2nd</i>	<i>Payment Received After May 2nd</i>	
<i>Industrial/Individual</i>			
Members	\$1149.00	\$1399.00	= _____
Non-Members	\$1499.00	\$1599.00	= _____
1st Time Attendee	\$1299.00	\$1399.00	= _____
<i>Educators</i>	\$599.00	\$699.00	= _____
<i>Federal Government</i>	\$399.00	\$499.00	= _____
Credit for staying in Naples Grande (\$100.00)			= _____

ADDITIONAL FEES – SPOUSE/GUESTS:

Spouse Activity (Tuesday)	\$99.00	= _____
Spouse/Guest Lunch	\$59.00	= _____
Spouse/Guest Awards Banquet	\$89.00	= _____
Golf Tournament non-Government	\$149.00	= _____
Golf Tournament Government Only	\$89.00	= _____

TOTAL AMOUNT = _____

Credit Card No.: _____

Exp. Date: _____

Name on Card: _____

Signature: _____

Please return registration form, along with payment (US funds or Credit Card) by FAX (210-493-8036). Note: R&DA accepts only AMEX, VISA, & MC. Registration fees will be refunded if written cancellation is received by May 9, 2011. Refunds requested after May 9, 2011, will be subject to a \$100.00 service fee. Note: Attendees with special needs should make this known to R&DA. There are *no* refunds on cancellations received after May 10, 2011, due to pre-payment requirements.

Hotel Registration Form

THE CUT OFF DATE FOR GUARANTEED HOTEL RATE RESERVATIONS IS MAY 10, 2011

Date of arrival: _____ Date of departure: _____ Total room nights: _____

Naples Grande Resort and Club, 475 Seagate Dr., Naples, FL 34103 Tel: 888-722-1267

Rates: Government2011 Per Diem OthersOnly \$169.00

A credit card number is required to reserve your room reservation. Any attendees with special needs must inform R&DA, so that appropriate actions can be taken. Room cancellation within three days of the meeting may result in a cancellation fee. **Please mail this registration form to R&DA, 16607 Blanco Rd., Ste. 501, San Antonio, TX 78232, fax to 210-493-8036, or scan & email to hqs@militaryfood.org.**

ALL ROOM RESERVATIONS AND CHANGES MUST BE MADE THRU R&DA

Credit Card No.: _____

Exp. Date: _____

Name on Card: _____

Signature: _____

RESEARCH & DEVELOPMENT ASSOCIATES for
MILITARY FOOD & PACKAGING SYSTEMS, INC.
16607 BLANCO RD., SUITE 501
SAN ANTONIO, TX 78232-1937

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San Antonio, TX 78232

R&DA RECOGNIZES CONTRIBUTORS TO WOUNDED WARRIOR PROGRAM

*For more Fall meeting
highlights, turn to page 25.*



*Wounded Warrior
Session Plaque Awards:
Elizabeth Lauer, Cuisine Solutions,
Jim Fagan, R&DA, and Gerard
Bertholon, Cuisine Solutions.
Jim Fagan presented Elite Donor
plaque to Cuisine Solutions.*



*Wounded Warrior
Session Plaque Awards:
Barney Rosner, R&DA Emeritus
presenting plaque to Mary Anne
Jackson, My Own Meals.*



*Wounded Warrior
Session Plaque Awards:
Barney Rosner, R&DA Emeritus
presenting plaque to Ennio
Zanotti, ZENATEK.*