Energy Source

Spring 2012

Defense Logistics Agency Energy

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Americans Missing In Action

Green Strike Group

Cryogenics Support

FROM THE Commander

Patrick J. Dulin
Acting Commander, Defense Logistics Agency Energy

Warfighter support is at the core of the Defense Logistics Agency Energy's mission. Enhancing that support to be able to fulfill the requirements of our customers more efficiently and effectively goes beyond the focus of this edition of the Energy Source as something we strive for every day.

On an organizational level, DLA Energy is in the process of restructuring itself to better support the warfighter through our Enterprise Business Systems Energy Convergence process. Energy Convergence will align DLA Energy to the majority of the DLA enterprise, allowing the organization to evolve to better suit the needs of our suppliers and customers.

DLA Energy's support to the warfighter can be seen across the world, in many forms. Both domestically and in our regional offices, DLA Energy is commended for our top-notch support for the training exercises that keep the services ready for any situation, from combat training to disaster relief. Working with other countries on these exercises, along with fuel exchange agreements and memorandums of understanding, presents an opportunity to strengthen our forces and our ties between nations.

We also come to the aid of nations in their times of need, and supporting disaster relief had no clearer example than the exemplary efforts seen during Operation Tomodachi. One year after the earthquake and tsunami, DLA Energy continues to ensure uninterrupted fuel and cryogenics support to the region.

Additionally, while we are responding to increasing demand in Africa, it comes at a time when we are adapting to changes in our warfighter support mission relating to the drawdown in Iraq. DLA Energy continues to support fuel requirements during the Department of Defense drawdown from Iraq and the stand-up of the Department of State's U.S. Mission-Iraq requirements. We are working closely with both departments to ensure contracts are in place on time, and that all needs are met during this transition.

As a final note, the DLA Energy fiscal 2012 Annual Operating Plan is now available on the DLA Energy website, www.energy.dla.mil, for more information on our ongoing efforts involving our goals, initiatives and objectives for warfighter support and how they align with those of DLA.

Energy Source

Acting Commander
Patrick Dulin
Acting Deputy Commander
Mike Scott
Chief of Staff
Navy Capt. Charles Race
Public Affairs Officer
Irene Smith
Editors
Susan Lowe
Terry Shawn
Christopher Goulait
Layout/Design
Idella Fletcher

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Address correspondence to:
ATTN: DLA Energy-DCA
8725 John J. Kingman Rd.
Suite 4950
Fort Belvoir, VA 22060-6222
Commercial: 703-767-4108
Address email to:
EnergySourceMagazine@dla.mil

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The face of the Defense Logistics Agency Energy.


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Front cover photo by: U.S. Army Corps of Engineers Afghanistan Engineer District-South. Taken July 12, 2011, in Afghanistan.

Back cover: stock photo of the United States Capitol Building by Orhan Cam.

The Central and South America Mission of DLA Energy Americas East

By Irene Smith, DLA Energy Public Affairs

Delivering fuel to support the interdiction of drug trafficking and providing disaster relief during international disasters like Operation Unified Response in Haiti in 2010 are a few of the challenges faced by the Defense Logistics Agency Energy Americas East office.

The region

DLA Energy Americas is one of four regional locations ensuring the successful accomplishment of the DLA Energy mission. The Americas East office, also located in Houston, is one of two subordinate regional offices. Army Lt. Col. Martine Kidd is the commander of the Americas East office.

U.S. Southern Command is one of the four combatant commands that the Americas East office supports. The USSOUTHCOM region comprises 31 countries and 15 areas of special sovereignty. The region represents about one-sixth of the landmass of the world assigned to regional unified commands, according to its website.

As commander, Kidd is responsible for ensuring the Americas East office provides energy solutions to both U.S. forces and non-Department of Defense customers within a 31 country area of responsibility by executing distribution, inventory and quality assurance functions.

"DLA Energy Americas receives, stores, distributes and provides quality assurance for a full range of fuels, including F76 marine diesel, JP8 and Jet-A1 fuel to motor gasoline, or MOGAS, across the entire SOUTHCOM AOR. Additionally, the Americas East office coordinates for delivery by a number of transportation modes, including air, sea and truck, to forward operating locations in South and Central America," Kidd said.

"We accomplish our mission by ensuring efficient execution of the bulk fuels distribution plan," Kidd continued. "Specifically, we arrange transportation by pipeline, tank truck, barge or ocean liner from a variety of storage locations, including both government and commercially-owned storage facilities. More importantly, we ensure the quality of fuel from procurement source to final point of sale."

To accomplish its mission, the DLA Energy Americas East office oversees 54 into-plane

SOUTHCOM Joint Petroleum Office, Scott Kastner and DLA Energy Liaison Officer, Leo Bryant during a conference call for an upcoming contingency operation. Photo courtesy from DLA Energy Americas.

locations supporting the military and the federal civilian agencies with commercial aviation fuels at commercial airports. There are three international fuel support agreements in the USSOUTHCOM area of responsibility, with agreements in place in Peru, Argentina and Chile. Additionally, there are 35 gas and oil bunker locations, four operation locations and a network of distribution sites including five defense fuel support point locations throughout the SOUTHCOM AOR.

Supporting exercises and drug interdiction

"Our focus is meeting SOUTHCOM requirements," DLA Energy Americas East office Deputy Director Bo Luzey said. "We provide fuel to support a variety of exercises throughout the year using three principal defense fuel support points located within to the SOUTHCOM AOR. The three DFSPs are at Soto Cano Air Base, Honduras, Naval Station Guantanamo Bay and DFSP Rodman in Panama. We work tirelessly to satisfy the requirements in support of their mission demands. Our support enables improved surveillance and the larger SOUTHCOM counter-narcotics mission through increased loiter times (time on station). The more we can increase their ability to remain in the area performing necessary surveillance, the more they are able to identify and counter terrorist drug activity in the AOR."

"In the Americas East offices, we are responsible for more than 300 customers just in the continental U.S. alone," Luzey explained. "Unimproved highway and road networks, unreliable telephone networks and limited bulk fuel storage availability provide logistical challenges. We have oversight of 20 main supplier contracts as well as the transportation aspect to make sure quality and quantity are there. We're the face of DLA Energy; the Americas East office is the interface with the customer and supplier."

The DLA Energy Americas East office also provides fuel support to critical exercises in the area. From January 2011 through January 2012, the DFSP throughput was 38,321,651 total gallons, Luzey noted. Bunkers' marine gas oil accounted for 386,048.8 barrels per year at a cost of $42,805,657.40, and jet fuel, Jet A1 without fuel system icing inhibitor, came to 384,246.70 barrels per year at a cost of $44,451,635.44, he said.

Drug trafficking represents a significant threat to security and stability in the Western Hemisphere. Drugs are smuggled into the U.S. through cargo ships and maritime containers destined for ports on the Eastern Seaboard. U.S. Navy, U.S. Coast Guard and partner nations routinely patrol the waters in the Caribbean Sea, Gulf of Mexico, and the eastern Pacific on a year-round basis on drug interdiction missions, according to the 2011 National Drug Threat Assessment produced by the Department of Justice.

These combined exercises with South American and Central American countries not only foster partnerships and build inter-operability; they also help stimulate local economies where ground fuels may be purchased under local procurement authority, Luzey explained.

"We're constantly watching the weather, and how it affects shipments of tankers going through the Panama Canal," Luzey said. "We've been a critical element in ensuring the success of the warfighter in the AOR. We support the PANMAX exercise, an annual U.S. Southern Command-sponsored multinational exercise that focuses on ensuring the defense of the Panama Canal that takes place in July and August. About 22 ships and 3,500 personnel from 16 nations, including the United States, participated in live and simulated training scenarios in the vicinity of Panama and from various U.S. locations."

Providing support and building relationships

DLA Energy Americas has two petroleum liaison officers, one supporting NORTHCOM and the other supporting the SOUTHCOM mission. The LNO to SOUTHCOM is based in Miami. Additionally, there is a team of quality assurance representatives, based at Homestead Air Force base, Fla. Together, the QARs and LNOs provide critical support to South and Central

America fuel operations, including Bermuda, Mexico and the southeastern U.S. This team is responsible for a bilingual, five-person team that supports exercises and operations throughout the region. Inventory and transportation branches track and transport products, and the auditability branch works closely with the DFSPs to monitor and resolve fuel accounting issues. This ensures the government's multimillion dollar inventory of fuel in the region is properly managed and accounted for, Luzey explained.

The Homestead QAR office, led by supervisory quality assurance specialist Clay Allen is critical for the support for Central and South America. He oversees eight inventory and quality assurance representatives stationed in Homestead who support the SOUTHCOM AOR.

"We are responsible for contract pre-award survey requests on prospective vendors, contract performance assessments at commercial airports and sea ports as required, and property administration at DFSP Rodman in Panama," Allen said.

Quality Assurance Representative Trent Buck and Roberto Silguero from NuStar testing fuel in Baltimore, Md. Photo courtesy from DLA Energy Americas.

"We also respond to customer complaints as requested," Allen continued. "We are usually called upon to respond to natural disasters to act as DLA Energy liaisons on the ground, as we are always prepared to deploy. We provide sampling and testing support to the presidential support team."

The most satisfying aspect of the job is customer support visits to DoD customers, civilian industry partners and working with the vendors, Allen noted.

"The day-to-day management is more about having good relationships with the suppliers and the customers. We ensure that our vendors understand what we expect of them, and a result is knowing they provide a quality product safely to our warfighters," he said. "Also, by providing 'boots on the ground' knowledge to our region and our contracting staff, we ensure they have the best information available and provide the best solution to our customers."

"You might think the language barrier is a challenge, but we work through that," Allen explained. "When critical communication is required, such as in pre-award surveys, our vendors have people involved who read and speak English. Routine assessments with small into-plane providers provide the biggest challenge, but there is an 'app for that' [in the form of mobile translation applications]."

A native speaker on the team and a DLA Energy-provided language learning program also assist with reading reports and ensuring polite interactions, Allen said.

A U.S. Coast Guard observing boarding officer and a Trinidad and Tobago Coast Guard boarding team conduct a drug smuggling exercise aboard a Federal Bureau of Investigation small boat off the coast of St. John's, Antigua and Barbuda, March 15, 2011, during exercise Tradewinds 2011. Tradewinds is a chairman of the Joint Chiefs of Staff-directed, U.S. Southern Command-sponsored joint/combined annual exercise designed to improve cooperation and interoperability of partner nations in responding to regional security threats. U.S. Coast Guard photo by Petty Officer 3rd Class George Degener/Released.

In times of hurricanes and national disasters, Allen and his QARs serve as Federal Emergency Management Agency liaison officers. A fuels contingency contract was awarded in September 2011 to provide fuel for FEMA regions IV and V. When the earthquake struck Haiti, DLA Energy Americas provided humanitarian assistance and disaster relief efforts at multiple locations in Haiti.

"The biggest challenges come with trying to get petroleum and energy support in some of the most austere locations within Latin America," Allen said. "To name a few, some things that make it challenging are small requirement quantities, extremely rugged terrain and frequent changes in mission requirements."

"The scope of this position changed dramatically with the Haiti earthquake," Allen explained. "We were forced to work outside the box, especially in the first week following the initial tremor. Because you can never predict the severity of a natural disaster, even the best developed plans cannot provide all the answers when a disaster of this magnitude strikes."

Allen explained how the biggest challenge to quality assurance in Latin America and the Caribbean is ensuring force protection.

"Force protection is a matter of awareness and relying on our embassies to provide us current events. Prior to travelling, normally 30 days in advance, we submit a theater/country

A U.S. Coast Guard observing boarding officer and a Trinidad and Tobago Coast Guard boarding team conduct a drug smuggling exercise aboard a Federal Bureau of Investigation small boat off the coast of St. John's, Antigua and Barbuda, March 15, 2011, during exercise Tradewinds 2011. Tradewinds is a chairman of the Joint Chiefs of Staff-directed, U.S. Southern Command-sponsored joint/combined annual exercise designed to improve cooperation and interoperability of partner nations in responding to regional security threats. U.S. Coast Guard photo by Petty Officer 3rd Class George Degener/Released.

clearance request, Allen said.

We got advice on threats and acceptable hotels by staying in contact with the local news and State Department bulletins, as well as just talking with each other, Allen noted.

Bridging the region

Leo Bryant is the liaison officer assigned to USSOUTHCOM in Miami, Fla. A DLA employee since 2004, Bryant serves as the principal DLA Energy planning advisor and consultant to the directorate of operations and logistics for USSOUTHCOM regarding bulk petroleum logistics planning, in support of USSOUTHCOM and its components' war planning and contingency execution efforts.

"I think of myself as a facilitator, a bridge between the stakeholders, customer, vendors, contracting and quality folks. I get everyone together," Bryant said. "I work in coordination with the combatant command joint petroleum officer, Scott Kastner, to bridge the gap between SOUTHCOM components and DLA Energy, which enables the command to efficiently achieve its mission goals by satisfying their petroleum and energy needs."

"The biggest challenge to the SOUTHCOM mission, outside of disaster and humanitarian relief efforts, is the counter-narcotic effort," Bryant said. "The bad guys constantly change routes, operating in the most austere locations you can think of. During the rainy season, dirt and gravel roads get washed out and trucking becomes out of the question. Some of the areas of delivery may even require security assets in order for the fuel to get there."

"DLA Energy has to figure how to deliver fuel in the most remote regions, under the most challenging circumstances. We have to think outside of the box all the time and be very creative in our efforts," Bryant continued.

Bryant credits Direct Delivery Fuels, led by Kathryn Fantasia, for their success in supplying fuel to remote locations.

"We do a lot of work with Kathryn Fantasia's group," Bryant said. "They've pulled off a lot of miracles. We've found contractors where none existed before."

As a result of the SOUTHCOM mission, the Americas East office has created many opportunities for new vendors in the region as well as helped stimulate local economies.

"A lot of the people we do business with are 'mom and pop'-type operations where they require training on how to get in the DLA Paperless Ordering and Receipt Transaction Screens system; and on how to use it," Bryant said. "Vendors like it because it expedites payments and the customers enjoy the ability to track their purchases. Army South is one of our biggest components with the majority of the exercise planning requirements. We assist them putting together their requirements so that DLA Energy can get a contract awarded. The biggest challenge is to nail down the requirements." ES

Operational Energy

By Susan Lowe, DLA Energy Public Affairs

Assistant Secretary of Defense for Operational Energy Plans and Programs Sharon Burke at the Joint Petroleum Seminar Dec. 14, 2011, in the McNamara Headquarters Complex at Fort Belvoir, Va. Photo by Christopher Goulait.

Assistant Secretary of Defense for Operational Energy Plans and Programs Sharon Burke briefed Joint Petroleum Seminar attendees Dec. 14 in the McNamara Headquarters Complex at Fort Belvoir, Va.

The presentation was titled Energy for the Warfighter-The DoD Operational Energy Strategy.

Burke told the joint petroleum officer audience that her office was established because the Defense Department uses "a significant amount of petroleum" and Congress wants "the department to take a look at the way it uses fuel."

"The Department of Defense accounts for 80 percent of all federal government use [of fuel] and 2 percent of liquid fuels when it comes to the [entire] country's consumption," she said. "As a single institution user, we are a very significant player in consumption terms."

The operational energy plans and programs office reports to the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, which, as Burke points out, makes perfect sense.

The keys to changing the way the department uses fuel, she said, are in the acquisition community. Burke also pointed out there are technological questions to be addressed and "it's very much a part of the logistics world."

"So you need to be aware of all three if you're going to change the way the department uses energy," she said. "Being in the same group and reporting to the same undersecretary has been extremely helpful."

We're looking at energy consumed directly during military operations as well as in readiness activities, Burke said.

She reminded the group that "our mission makes us a huge consumer of energy; we're a global force capable of rapid deployment for a very broad range of missions." The department needs to be able to do whatever the president asks, and that inherently requires a great deal of energy, she said.

The department is being asked to do more with less, Burke said. The reality is the DoD has

been tasked with more missions, and even though the troops have improved capabilities, the energy challenge is getting more complicated, she explained.

It's a strategic challenge to move the kind of fuel the DoD does. A lot of fuel has to move through countries that the U.S. may not have robust relationships with. And it's a tactical challenge as well, she said.

"DLA Energy does a fabulous job of moving fuel to main supply points," Burke said to the group.

But because our troops require so much fuel, we're creating a huge supply line that is vulnerable to attacks. The supply line becomes a target. So if we can use less fuel and take trucks off the road, it reduces the risk of casualties along the supply line, she explained.

"Congress can tell us to do something and the president can make a commitment, but ultimately this is about what is best for the warfighter and what they need and want. The goal of this energy strategy is to make sure the forces have the fuel they need. That's what you all do, and you do it brilliantly," Burke said.

Going forward, there are three ways to make sure that our forces continue to have the fuel they need, Burke said.

The first is more fight for less fuel. That means reducing the volume of fuel needed for operations. Improving fuel efficiency or effectiveness is another way to say that, Burke explained.

The second is more options for less risk. Diversify the range of options there are for fueling so there are a variety of sources that can meet the mission; protecting the security of the supply is imperative, she said.

Burke continued by saying, the third way to ensure our forces have the fuel they need is more capability for less cost. The department must think about how it builds the future force, and take energy considerations into that.

"We're required by law to change the system, and we will, but when you build a future force, there's not a one-stop shop," Burke said.

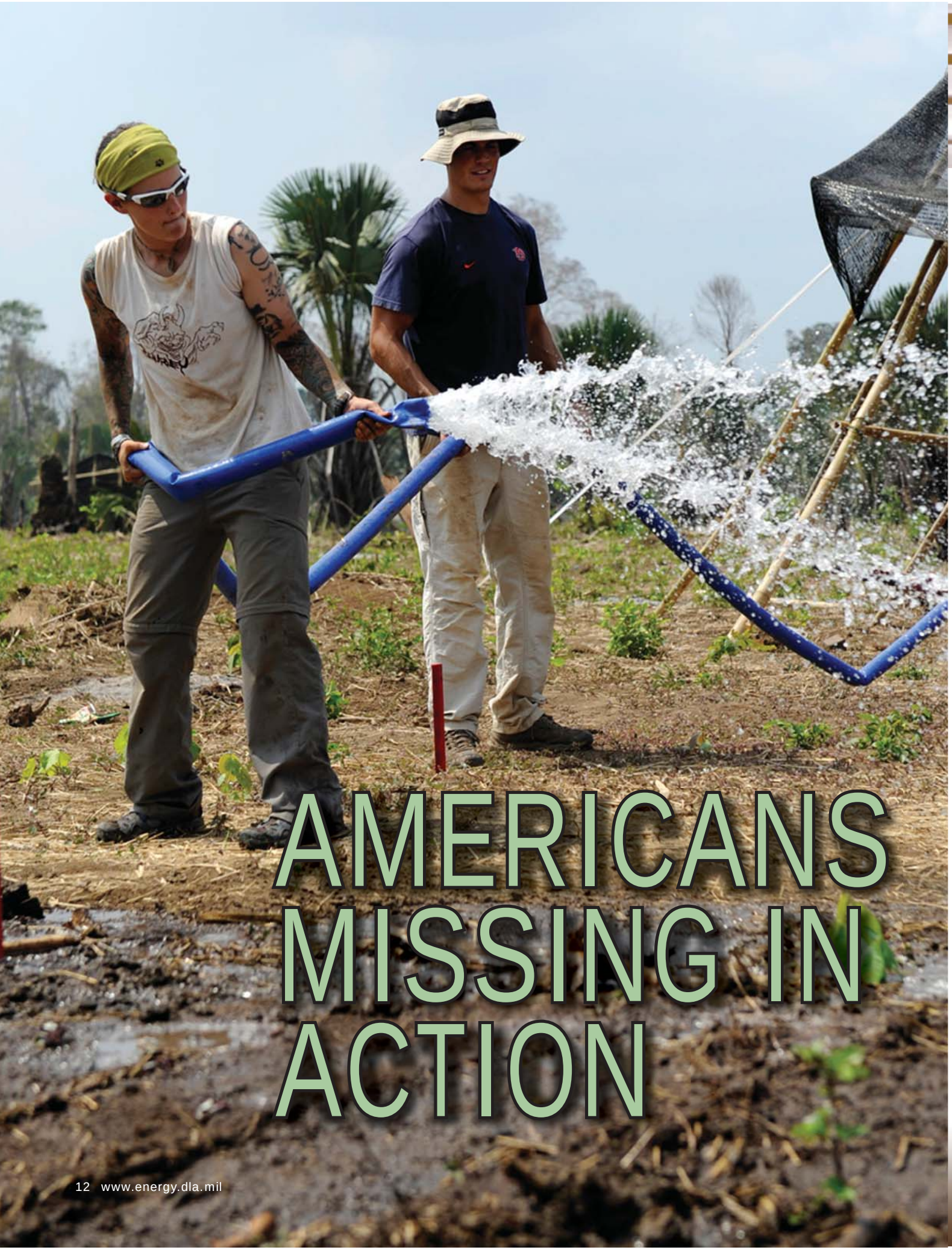
"We can't just ask for fuel and expect we'll get it; we need to think about energy requirements in the early stages of planning. This type of planning will provide more military capabilities, lower the risk to our forces and result in lower costs for our future force," she said.

Burke reminded the audience that the acquisition process is complicated and it will take some time to change the system.

"We're required by law to change the system, and we will, but when you build a future force, there's not a one-stop shop," Burke said.

We're working with the services to come to some kind of meaningful metric, such as getting more military output for the energy input. This is a tough metric to get to, but that's where we're going, she said.

After the presentation, Burke and retired Army Lt. Gen. Claude Christiansen, director of the Center for Joint and Strategic Logistics at the National Defense University, took questions from the audience. ES



AMERICANS MISSING IN ACTION

By Terry Shawn, DLA Energy Public Affairs

While the Defense Logistics Agency Energy and its regional offices are known to carry out humanitarian aid or fuel and logistical support when disasters strike around the world, efforts in other areas of worldwide aid and assistance are sometimes overlooked.

With fuel support provided by DLA Energy, the Joint Prisoners of War, Missing in Action Accounting Command, known as JPAC, send their investigative and recovery teams around the globe as part of their ongoing mission to recover more than 83,000 American warfighters still missing from past conflicts.

"JPAC's main goal, for any recovery operation, is to return home those brave Americans who paid the ultimate sacrifice as a result of war," Army Maj. Ray Osorio, JPAC public affairs said in March.

The JPAC conducts global search, recovery and laboratory operations to identify unaccounted-for Americans from past conflicts in order to support the Department of Defense's personnel accounting efforts, according to the JPAC website. The command, activated in 2003, is located on the island of Oahu, Hawaii, and employs more than 400 joint military and civilian personnel.

During JPAC's ongoing mission to recover American warfighters still missing, the command has sent investigation and recovery teams to Vietnam, Cambodia, Republic of Philippines, Panama, Okinawa, the Solomon Islands, Indonesia, China, New Guinea, Germany, France, South Korea and Laos, as well as other sites of American combat.

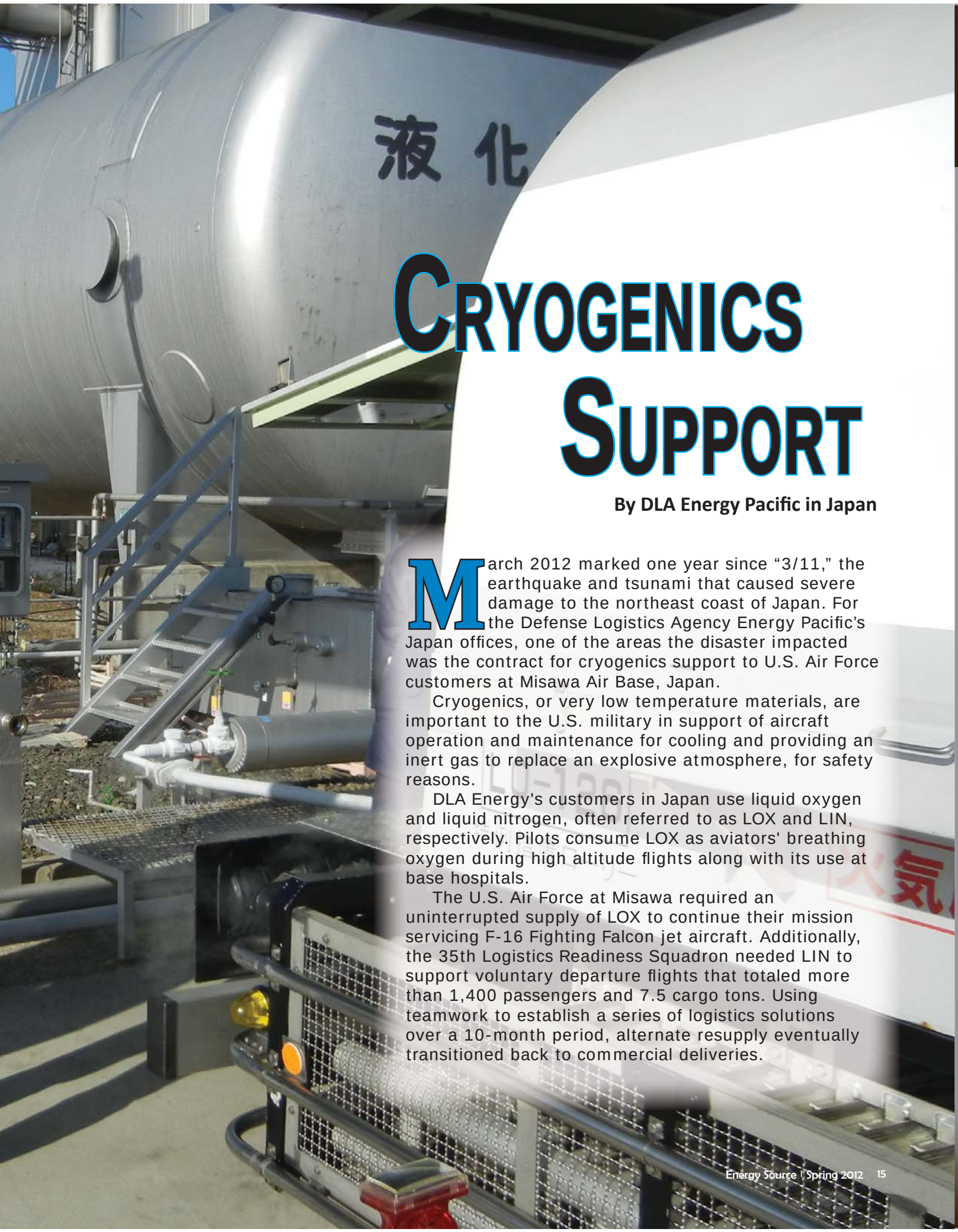
DLA Energy Pacific stands at the ready to supply drums of diesel, gasoline and kerosene to support JPAC's mission. For example, the Korea sub-region is equipped to coordinate their efforts with JPAC's logistics team. The sub-regional office is prepared to volunteer support in the form of quality assurance representatives to ensure fuel drums and the necessary equipment, such as drum pugs, hand pumps and bung wrenches are delivered and arrive in agreement with contract requirements, DLA Energy Pacific in Korea Deputy Commander Ralph Wells said.

The JPAC maintains four permanent detachments to assist with command and control, logistics and in-country support during investigation and recovery operations. Detachments have been established in Hanoi, Vietnam; Vientiane, Laos; Bangkok and Honolulu. In order to facilitate logistical support to teams, the JPAC maintains storage facilities in Hawaii, Thailand, Vietnam, Laos, Europe and Papua New Guinea. Having these facilities strategically placed around the world minimizes costs and provides quick access to supplies for teams in remote locations, according to the command's website, http://www.jpac.pacom.mil/. ES

Left: Kracheh, Cambodia (Feb. 8, 2011) – U.S. Army Staff Sgt. Lauren Shaw (left) uses a water hose to soften soil during recovery efforts in Cambodia. Shaw is deployed with a specialized recovery team from the Joint POW/MIA Accounting Command that is excavating an aircraft crash site searching for two Americans missing from the Vietnam War. The ultimate goal of JPAC, and of the agencies involved in returning America's heroes home, is to conduct global search, recovery, and laboratory operations in order to support the Department of Defense's personnel accounting efforts. DoD photo by Mass Communication Specialist 1st Class Barry Hirayama, U.S. Navy.

Right: Joint Base Pearl Harbor-Hickam, Hawaii (Sept. 9, 2011) - Members of the Joint POW/MIA Accounting Command escort a transfer case from a U.S. Air Force C-17 during an Arrival Ceremony to honor fallen U.S. personnel whose identities remain unknown. The remains receiving full military honors represent losses associated with the Vietnam War and were transported to the Central Identification Laboratory to undergo analyses. The ultimate goal of JPAC is to achieve the fullest possible accounting of Americans lost during the nation's past conflicts. DoD photo by Staff Sgt. Aaron D. Allmon II, U.S. Air Force/Released.

At Misawa Air Base, Japan, personnel at a cryogenics facility in Sendai, Japan indicate the height of the tsunami wave that washed through their plant March 11, 2011. Photo courtesy of DLA Energy Pacific.



Cryogenics Support

By DLA Energy Pacific in Japan

March 2012 marked one year since "3/11," the earthquake and tsunami that caused severe damage to the northeast coast of Japan. For the Defense Logistics Agency Energy Pacific's Japan offices, one of the areas the disaster impacted was the contract for cryogenics support to U.S. Air Force customers at Misawa Air Base, Japan.

Cryogenics, or very low temperature materials, are important to the U.S. military in support of aircraft operation and maintenance for cooling and providing an inert gas to replace an explosive atmosphere, for safety reasons.

DLA Energy's customers in Japan use liquid oxygen and liquid nitrogen, often referred to as LOX and LIN, respectively. Pilots consume LOX as aviators' breathing oxygen during high altitude flights along with its use at base hospitals.

The U.S. Air Force at Misawa required an uninterrupted supply of LOX to continue their mission servicing F-16 Fighting Falcon jet aircraft. Additionally, the 35th Logistics Readiness Squadron needed LIN to support voluntary departure flights that totaled more than 1,400 passengers and 7.5 cargo tons. Using teamwork to establish a series of logistics solutions over a 10-month period, alternate resupply eventually transitioned back to commercial deliveries.

WARFIGHTER SUPPORT

In 2007, DLA Energy Aerospace Energy awarded Tohsan Company Ltd. contract line items for LOX and LIN deliveries to Misawa Air Base. But on March 11, 2011, during the same contract period, Tohsan's cryogenics facilities at Sendai and Hachinohe, Japan, were both destroyed. The tsunami crushed materials in its path, washed away anything not firmly secured and left behind a deep layer of mud. That same day, DLA Energy Pacific's Japan office started work with its U.S. Air Force counterparts to ensure uninterrupted support to Misawa—especially given their disaster response role for Operation Tomodachi.

In the days following the event, even highway travel was in question for the North Honshu, Japan, area. Initial cryogenic support to Misawa came via airlifts from Yokota Air Base, Japan. Contracting channels confirmed Yokota cryogenics suppliers Tachikawa Sanso and Shin Sagami Sanso could supply increased quantities of product to the 374th LRS Cryogenics Plant at Yokota. Once received, LOX and LIN were transferred into 400-gallon containers and loaded on a C-130 Hercules aircraft for the flight north.

This initial support, while necessary, was labor-intensive. It also involved small parcel quantities, double-handling of product and "burn-off" product loss during transfers, shipping and purging, as well as a large expense for each air movement.

As the next method, DLA Energy Pacific in Japan's Army Sgt. 1st Class Caleb Whitaker, petroleum distribution supervisor, worked with the 374th Contracting Squadron to establish contract truck support. Starting April 2011, trucks moved the full cryogenic containers north to Misawa, emptied and purged them, then returned the empty tanks back to Yokota for refilling. This was a big step forward, cost-wise, but still a huge effort to manage full and empty containers with a 1,400 kilometer roundtrip.

About that time, the original supplier, Tohsan, offered to supply liquid nitrogen from a west coast facility at Akita, Japan, unaffected by the earthquake. Contracting officer Sylvia Urias-Vallejo and contracting specialist Janell Davilla at DLA Energy Aerospace Energy confirmed acquisition procedures and put this solution into motion.

First, quality assurance representative Richard Knapp received a pre-award survey tasking to evaluate the Akita facility. An onsite inspection confirmed the plant met U.S. government and Department of Defense requirements for quality, and Tohsan's contract was reactivated.

The first commercial delivery of LIN, audited at the load and delivery points by QAR Richard Dennis, commenced May 2011. That success relieved the 374th LRS and 35th LRS of the LIN portion of the container filling and management, plus decreased the truck movements.

"That's our last remaining Operation Tomodachi support effort," Air Force Staff Sgt. Samuel Aldritch noted at the 374th LRS Fuels Service Center on Yokota.

However, container deliveries over the highways remained the resupply method for LOX for the following months.

Cryogenics, or very low temperature materials, are important to the U.S. military in support of aircraft operation and maintenance for cooling and providing an inert gas to replace an explosive atmosphere, for safety reasons. DLA Energy's customers in Japan use liquid oxygen and liquid nitrogen, often referred to as LOX and LIN, respectively. Pilots consume LOX as aviators' breathing oxygen during high altitude flights along with its use at base hospitals. Photo courtesy of DLA Energy Pacific.

Air Force Master Sgt. Michael Twyman of 374th Logistics Readiness Squadron, left, and Army Sgt. 1st Class Caleb Whitaker of the Defense Logistics Agency Energy Pacific in Japan observe the loading of filled 400-gallon cryogenics tanks May 2, 2011, at Yokota Air Base, Japan. The locally contracted truck delivered the containers 700 kilometers north to Misawa Air Base to ensure uninterrupted support of the U.S. Air Force mission and Operation Tomodachi disaster support. Photo courtesy of DLA Energy Pacific.

Later in 2011, the scheduled cryogenics solicitation and contracting process resulted in Tohsan's award to supply LIN to Misawa Air Base, continuing their ongoing commercial deliveries. Additionally, Tohsan indicated their Sendai facility had recovered, and LOX production tested to DLA Energy's quality requirements and deliveries could resume. In support of Tohsan's offer, Dennis performed the pre-award survey Nov. 22, 2011, to confirm production status and quality at Sendai. Tohsan eventually received the LOX Contract Line Item award and stood ready to supply liquid oxygen to the 35th LRS.

For the first delivery, Knapp witnessed the truck loading and laboratory analysis of the LOX Jan. 25. While the Sendai area still showed evidence of damage, Tohsan's cryogenics plant had little visible effects almost a year following the disaster. The few tell-tale signs of the tsunami included a high water mark of about nine feet on the LOX storage tank and the closed laboratory building.

The facility fully restored truck loading and production areas, and the laboratory operations used a temporary building to house new analysis equipment. Loading procedures and lab testing were validated, and the trucks moved north.

At the close of Sendai business, Tohsan and longtime point of contact Tsutomo Mori communicated through local personnel how they all deeply appreciated the support of the United States and its military services. U.S. personnel performed a large portion of the cleanup effort at Sendai Airport and the general Sendai area, including the industrial section supplying cryogenics. Their thanks were gratefully accepted.

As scheduled, the cryogenics delivery arrived at Misawa Air Base Jan. 26. The 35th LRS personnel met and escorted the truck to their cryogenics plant. After Air Force receipt quality procedures, the supplier transferred the 2,000 gallon cargo to the customer's tank. The successful first delivery and Tohsan's previous contract history allowed DLA Energy Pacific's Japan office to request certificate of conformance procedures for reduced inspections.

"This delivery closes the last part of Operation Tomodachi support for us," Air Force Master Sgt. Christopher Lasher said on behalf of the 35th LRS Fuels Service Center at Misawa Air Base, echoing earlier sentiment from the 374th LRS at Yokota.

The road to recovery for North Honshu cryogenics represents successful teamwork among DLA Energy, its U.S. Air Force customers and the commercial suppliers in Japan. All parties involved overcame challenges with logistics solutions that can benefit future crises.

The experience can be summed up with the ethos of the Operation Tomodachi symbol: "Tomodachi" meaning friends, with the supporting line "Don't Give Up!" ES

UNINTERRUPTED FUEL SUPPORT

By DLA Energy Pacific in Japan

A long term transition to larger rail tank cars in support of U.S. operations in Japan is at hand.

This team effort by the United States government, the Japan Oil Transportation Company Ltd. and manufacturer Nippon Sharyo Ltd. worked through planning challenges over a period of several years. On the U.S. side, Defense Logistics Agency Energy Pacific's Japan office, Naval Supply Fleet Logistics Command Yokosuka, 374th Logistics Readiness Squadron and Yokota Air Base's 374th Contracting Squadron are key players in making the transition a success.

Rail movements of bulk petroleum are an important delivery mode for DLA Energy customers, and rail tank car design is important.

To haul liquid petroleum, common tank car design is a horizontal steel tank with a dome top access hatch. The tank bottom of the conveyance drains into a piping manifold that can be connected to a customer's receipt hose line. The tank car can be top-loaded through the hatch or bottom-loaded through the manifold. Tank cars have come a long way since the first banded wooden "tanks" were mounted on flat cars and moved over the rails in the 1800s.

The importance of rail cars to the Department of Defense is probably best shown during World War II, as virtually all tank cars in use moved oil supporting the war effort.

By the 1950s, rail remained important for petroleum, even in competition with other transportation modes like pipelines and tanker trucks. Based on the wide range of commodities hauled, tank car design now considers requirements including insulated or non-insulated, pressurized or non-pressurized, top- or bottom-loading, and other variations.

In recent years the government of Japan mandated changes in rail gauge and operating speeds that affect shipments for U.S. customers. As a result, the leased 35-ton rail cars previously in use could not continue to safely operate at the higher speeds needed, or move in large enough groups to meet demand.

Additionally, the 35-ton cars were reaching the end of their useful service life. Contract solutions were sought to resolve new transportation requirements and provide uninterrupted support.

Market research by DLA Energy's transportation manager, Army Master Sgt. Larry Gillead, began October 2006 and indicated a shortfall for tank car availability. Research expanded in 2007 to identify manufacturing sources.

At Toyokawa, Japan, Chiyonori Shimizu of 374th Contracting Squadron and Hiroyuki Taniguchi of DLA Energy Pacific in Japan assist facility personnel to roll out a newly manufactured 45-ton rail tank car that has passed inspection. Photo courtesy of DLA Energy Pacific.

During the planning stage that followed, DLA Energy, the involved defense fuel support points and 374th Contracting Squadron on Yokota Air Base, Japan, closely cooperated to combine real world requirements with proper contract procedures. The language skills and contracting experience of DLA Energy Pacific in Japan's administrative officer, Christina Dennis, and supply distribution specialist, Hiroyuki Taniguchi, were especially valuable to resolve issues.

Considering the changes, U.S. concerns focused on the ability to move quantities meeting customer needs, rail car staging at receipt locations and compatibility of off-loading connections. A proposal by the JOT to use Japan's Model TAKI 1000 45-ton railway tank car addressed all these items, plus safety issues:

- *The car has a capacity to hold 16,270 gallons of product with a total load weight of 45 tons, and reaches a maximum speed of 95 kilometers per hour, which is the highest speed allowed in Japan.*
- *Its construction uses corrosion-resistant rolled steel in a "frameless" structure. The tank and under-frame are permanently joined by welding to strengthen the overall tank body.*
- *In support of staging the cars for receipt, the outlet manifold allows product discharge on both sides of the car.*
- *Internal pressure is maintained using a pressure and vacuum valve. This safeguard prevents potential damage caused by pressure created during unloading or severe temperature changes. Without that feature, if the car was steam cleaned, then the hatches sealed up, a resulting vacuum could collapse the tank.*
- *For safety, uncontrolled leakage of fuel is prevented by both the bottom valve and side valves.*

The actual transition from 35- to 45-ton rail tank cars played out over several years, managed from 2008 by DLA Energy Pacific in Japan's petroleum distribution supervisor, Army Sgt. 1st Class Caleb Whitaker. The plan used available 36-ton rail cars until new 45-ton cars could be manufactured.

In April 2008, site visits to U.S. loading and discharging locations confirmed car staging requirements. These staging activities ensured safety and operational requirements were met and the following contract performance work statement benefitted from the surveys.

In June 2008, DLA Energy Pacific in Japan, 374th Contracting Squadron, Fleet Industrial Supply Center Yokosuka and Japan Freight Railway Company finalized contract solicitation details for a lower cost rail car leasing program to be executed during fiscal year 2009. Additionally, that month, the Nichiyu Co. Ltd.'s new QUICKER quick disconnect couplers were identified as a way to ensure a secure, spring-loaded connection to attach and remove hoses at the rail car manifold.

An example of the QUICKER quick disconnect coupling is examined at Yokota Air Base, Japan. Photo courtesy of DLA Energy Pacific.

QUICKER Connection installed on rail car manifold and receipt hose line is demonstrated at Yokota Air Base, Japan. Photo courtesy of DLA Energy Pacific.

By January 2009, a post-award conference approved conversion from older 35-ton to modern 36-ton rail cars, reducing the total fleet from 110 to 55 rail tank cars, resulting in a $276,000 savings, with a target start date of April 1, 2009.

Leading up to contract performance, inspections by Whitaker and quality assurance representatives Richard Knapp and Richard Dennis ensured the operating condition and clean state of all 36-ton rail cars before they were received.

The contractor delivered the rail tank cars on schedule and the first alignment and loading took place at DFSP Tsurumi April 1 and 2, 2009. A total of 13 rail cars were loaded with 11,900 gallons each and delivered to the customer at Yokota Air Base. The team closely observed hoses, adapters and cam-lock connection functions.

Whitaker declared it a "flawless overall operation on both ends—no leaking, good loading and discharging times."

Periodic performance plan inspections continued this oversight.

Phase-in of the larger 45-ton rail cars under the second option of the contract also met the schedule for 2010. As planned, the contractor delivered the first set of 12 45-ton rail cars to DFSP Tsurumi in August. Having the cars on-site also allowed DFSP personnel to align them to ensure top-loading headers and catwalk ramps operated properly.

The U.S. government accepted all 12 rail cars and put them into service in October 2010, as planned. Over three years, an additional 36 leased 45-ton rail cars will be put into service to make a total of 48 in the fleet serving U.S. customers.

In 2011, rail car manufacturer Nippon Sharyo Ltd. offered DLA Energy Pacific's Japan offices the opportunity to visit their construction facility at Toyokawa, Japan, near Osaka, Japan. Whitaker attended the first date in July with members of JOT.

In August, distribution specialist Hiroyuki Taniguchi and Knapp, with Chiyonori Shimizu from 374th Contracting Squadron, made the second visit and participated in the inspection of completed rail cars on site. Intense quality control scrutiny checked weld points, interior and exterior paint, interior zinc tank coating thickness and the function of each moving part, like the hand brakes or manifold valves.

The end date for transition to the 45-ton rail tank cars is set for Sept. 30, 2013, under a lease contract valued at $4,466,760.

Working across several years, the project showcases the kind of stewardship DLA Energy performs to ensure the warfighters get the energy they need to perform their mission. It is also a credit to the U.S. Navy's NAVSUP FLC and U.S. Air Force's 374th LRS for their involvement in the process. The combined U.S. and Japan effort to ensure uninterrupted resupply by rail during a time of transition stands as an example of how cooperation with DLA Energy Pacific's Japan office's host nation is a big part of DLA Energy's and Japan's shared success. ES

Earthquake Preparation

By DLA Energy Americas West

Stock Photo

DLA Energy Americas prepares for "the big one"

The residents of Southern California regularly joke about the massive earthquake that is predicted to hit their region. Every day, it seems, Southern California has some minor tremor, so the inhabitants don't think too much about it.

The last major quake to hit the region was the 1994 Northridge earthquake at 6.7 on the Richter scale. Some inhabitants believe the region is due for a big one at any time. Defense Logistics Agency Energy Americas actively supports federal, state and local government emergency efforts and preparation for an occurrence such as a large-scale earthquake.

Lee Oppenheim, deputy director of the DLA Energy Americas West office at San Pedro, Calif., and recent transplant from Virginia, said he didn't notice the tremors.

"The first two times an earthquake rumbled through, I did not even realize it was an earthquake," Oppenheim said.

Oppenheim, along with Daniel Schmidt, operations management specialist DLA Energy Americas West and Chuck McWilliams, DLA Energy Americas' liaison officer to U.S. Northern Command and the Federal Emergency Management Agency, attended the Dec. 8 Los Angeles Earthquake Resilient Angel Tabletop exercise, or TTX. The event was hosted by the Greater Los Angeles Federal Executive Board, the U.S. Department of Homeland Security, FEMA Region IX and the Los Angeles Area Continuity of Operations Leadership Working Group.

More than 275 people attended the exercise representing more than 150 different federal, state, county and municipal agencies. The TTX built upon five years of previous tabletop exercises and focused primarily on continuity of operations theory and enhancement.

The TTX plenary session opened with introductory remarks from John Torres, the Los Angeles Federal Executive Board Chair and special agent in charge with the Bureau of Alcohol Tobacco and Firearms. An exercise overview by Farley Howell, FEMA Region IX federal preparedness coordinator, followed.

To provide a frame of reference for the TTX, Margaret Vinci, Ph.D., Caltech Seismological Laboratory, and Doug Given, Ph.D., U.S. Geological Survey, presented on the likelihood of a 7.8 earthquake occurring along the San Andreas Fault and the anticipated impact of such an event on the populace, buildings and homes, transportation networks, gas and fuel pipelines, water conveyance tunnels, pipes and aqueducts, electrical transmission towers and lines and telecommunication cables.

This part of the plenary session highlighted several aspects. First, the San Andreas fault historically doesn't produce small earthquakes. If the San Andreas fault does slip, the magnitude of the earthquake will most likely be above 7.0 on the Richter scale, according to Vinci and Given.

Secondly, the road and utility infrastructure supporting the Los Angeles Basin is channeled through several narrow passes in the San Gabriel and San Bernardino mountains, and many of the transportation and utilities networks cross the San Andreas fault itself in a number of places. A 7.8 earthquake, as presented in the scenario, would produce widespread and lengthy disruptions of transportation networks and utilities. These disruptions would also complicate emergency response and restoration of essential services and functions, according to the seismologists.

Following the sobering plenary session, participants moved to their pre-determined exercise session breakout groups. These groups, composed of a wide-spectrum of federal, state, county and municipal agency representatives, brought many different perspectives and a wide array of challenges to

Stock photo by Dariusz Kantorski - released

the table.

The focus of the exercise session breakout groups was on continuity of operations plans. Volunteer facilitators led the breakout sessions and guided the groups through how a COOP may unfold within a major earthquake scenario.

"I found the breakout sessions to be incredibly beneficial in understanding [continuity of operations] planning, theory and implementation," Schmidt said. "I was surprised at the sheer sophistication of the agencies' COOP."

The breakout groups noted overarching common strengths and areas of improvement of the agencies' continuity of operations plans as they progressed through the scenario. Following the breakout sessions, a representative from each breakout group briefed the strengths and areas of improvement identified to the entire plenary, called a "hot wash."

"The main overarching strength identified was the exceptional interaction and coordination between volunteer agencies, private sectors, local, state, federal agencies and the intensive [continuity of operations] planning that has already taken place by all agencies," McWilliams said.

McWilliams explained that a main weakness that had been identified was not knowing how long operations could be sustained before having to transfer essential functions to offices outside the disaster zone.

"Resilient Angel provided the combined DLA Energy Americas team with invaluable information in preparing for a variety of natural disasters and in developing, implementing and enhancing organizational continuity of operation plans," Oppenheim said.

Resilient Angel dovetails into a larger Los Angeles Basin earthquake exercise, Golden Guardian, to be held in May 2012.

"We're looking forward to participating in Golden Guardian 2012," McWilliams said. "I believe DLA Energy and its support of DHS and FEMA requirements will be key to addressing sustainability of continuity operations challenges in the event of a major catastrophe in the L.A. Basin, as well as other areas in the United States." ES

Cope North 12

By Army Master Sgt. Michael Hubbert, DLA Energy Pacific in Guam

Exercise Cope North 12 and the three nations taking part were fueled by the Defense Logistics Agency Energy during the exercise's three-week run from Feb. 11 to Feb. 24 at Andersen Air Force Base, Guam.

More than 1,000 military members from the United States Air Force, Japanese Air Self Defense Force, and Royal Australian Air Force throughout the Pacific participated in this field training exercise focused on coordination and evaluation of air tactics, techniques and procedures.

Since the first Cope North exercise was conducted in 1978, the goal of the exercise has been for participating units to demonstrate their ability to rapidly deploy forces and train together to improve their aircrews' ability to employ tactical air power as a multinational force. Andersen Air Force Base hosted Exercise Cope North for 10 years as a bilateral training event between the JASDF and U.S. Air Force. This year's exercise was the first time that the RAAF participated.

The 36th Logistics Readiness Squadron provided exceptional support to the forces participating in Cope North 12. The squadron provided nearly 2.7 million gallons of fuel through the use of R11 and R12 refueling vehicles. They refueled numerous U.S. Air Force aircraft such as the F15, F16, E3, KC135, KC10, C5, C17, B52 and C130, in addition to JASDF F16, F2, and E2, as well as RAAF F18 and 737.

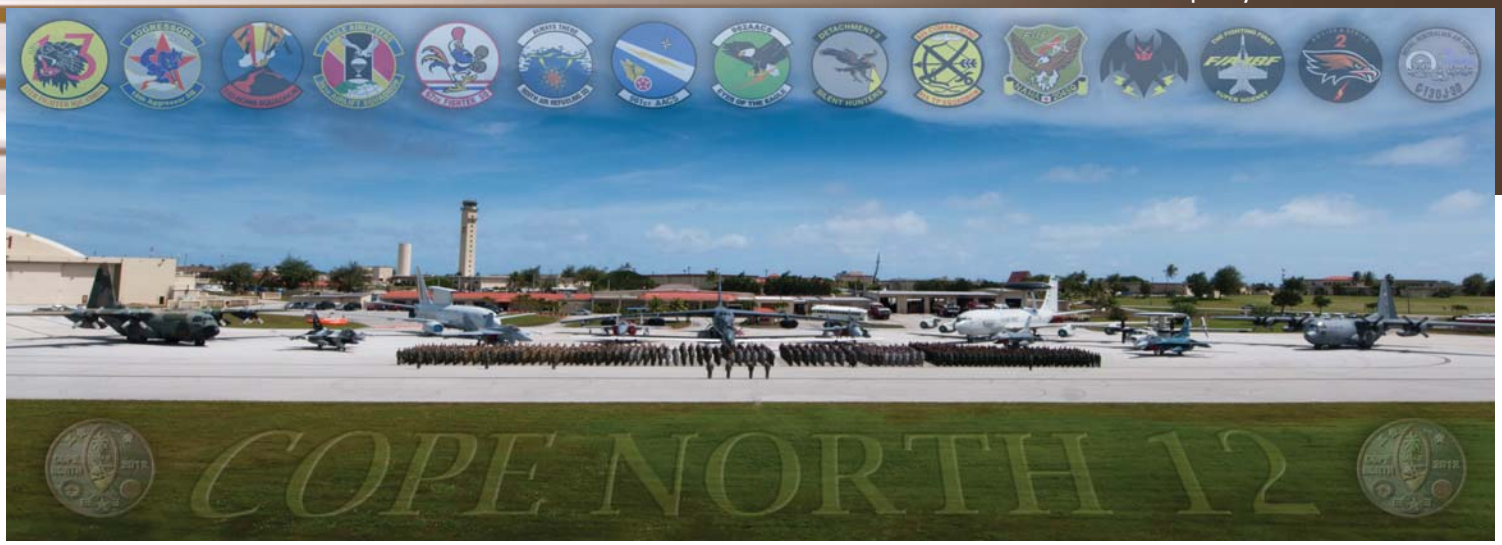
Seventy-seven aircraft participated in Exercise Cope North, conducting more than 1,066 sorties. Sixty-seven airmen from the LRS conducted 24-hour-a-day operations for 10 consecutive days, ensuring that each sortie was launched without delay. The average response time was 7.16 minutes.

Defense Fuel Support Point Guam on Naval Base Guam indirectly supported this critical exercise as well through increased pipeline transfers of JP8 fuel to DFSP Andersen. In all, DFSP Guam pushed 3,229,379 gallons of JP8 to Andersen Air Force Base over a 10-day period.

Although DLA has a fuel exchange agreement with Japan, both Japan and Australia elected to use the "direct bill" method of payment for the fuel they received during the exercise. DLA Energy facilitates this method of billing and payment by issuing Department of Defense Form 1896 Fuel Identaplates to the foreign countries with the applicable foreign government customer DoD Activity Address Code, known as a T-DoDAAC, embossed on the identaplate. The JASDF and RAAF aircraft then present this identaplate to the LRS personnel for refueling operations.

The LRS fuels personnel use the information from these identaplates to process fuel transactions in the fuels enterprise system. Once the information is transmitted to the Defense Finance and Accounting Services, the specific digits in the T-DoDAAC tell DFAS to generate a bill or invoice and which country to send it to for payment. This method of payment simplifies the billing and payment process for both the U.S. and the foreign country, and allows the on-the-ground warfighter to focus on the mission at hand. ES

Graphic by Senior Airman Carlin Leslie



Left: U.S. Navy Airman Catrina Tessier, an aircraft crew chief assigned to Electronic Attack Squadron (VAQ) 136, prepares an EA-6B Prowler electronic attack aircraft for a mission during Exercise Cope North at Anderson Air Force Base, Guam, Feb. 12, 2010. The U.S. Air Force and the Japan Air Self-Defense Force conduct Cope North annually at Andersen Air Force Base to increase combat readiness and interoperability, concentrating on coordination and evaluation of air tactics, techniques and procedures. U.S. Air Force photo by Staff Sgt. Jacob N. Bailey/Released.

Right: Air Force Staff Sgt. Jason Ornellas from the 36th Logistics Readiness Squadron assists in refueling for Exercise Cope North 12 at Andersen Air Force Base, Guam. The United States Air Force, Japanese Air Self Defense Force and Royal Australian Air Force were fueled by the Defense Logistics Agency Energy during the exercise's three-week run from Feb. 11, to Feb. 24. Photo courtesy of DLA Energy Pacific.

Energy

Green Strike Group

The aircraft carrier USS Ronald Reagan (CVN-76) leads a mass formation of ships from South Korea, Thailand, Japan, Singapore, France, Canada, Australia and the United States July 24, 2010, during Rim of the Pacific 2010. RIMPAC, the world's largest multinational maritime exercise, is a biennial event that allows participating nations to work together to build trust and enhance partnerships needed to improve maritime security. The U.S. Navy will be using 450,000 gallons of biofuel procured by the Defense Logistics Agency Energy during RIMPAC 2012. U.S. Navy photo by 1st Specialist Class Scott Taylor.

By Christopher Goulait, DLA Energy Public Affairs

Making it happen

The U.S. Navy's Green Strike Group will receive the largest single government purchase of biofuels, as announced by Navy Secretary Ray Mabus and U.S. Department of Agriculture Secretary Tom Vilsack Dec. 5, 2011, resulting from the Defense Logistics Agency Energy's 450,000 gallon alternative fuels contract award to Dynamic Fuels, LLC of Geismar, La. Nov. 30, 2011.

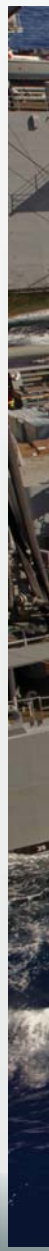
Working with Navy requirements, DLA Energy contracted to have 100,000 gallons of hydrotreated renewable JP5 jet fuel and 350,000 gallons of hydrotreated renewable F76 marine distillate fuel, known as HRD76, available for delivery between Jan. 1 and May 1, 2012. Feedstocks used to develop the fuels do not compete with food production.

Fuel will be used in the 2012 rim of the Pacific exercise. Since the fuel is designed to be a "drop-in replacement," to traditional petroleum fuels, no engine modifications are needed for use in Navy-tested ships and aircraft. The Navy will receive "neat," or unblended, biofuels and blend the product themselves before use.

"The Navy has always led the nation in transforming the way we use energy, not because it is popular, but because it makes us better war fighters," Mabus said. "This unprecedented fuel purchase demonstrates the Obama Administration's commitment to seeking energy security and energy independence by diversifying our energy supply."

Making it possible

Fuel purchases like this wouldn't be possible without the efforts of DLA Energy. Its Bulk Petroleum business unit coordinated the contract between the Navy and Dynamic Fuels. From the request for proposal June 27, 2011, to the Nov. 30, 2012 award, the business unit adapted their processes to meet the Navy's requirements for the sizable biofuels contract.



"What's different about the way that we purchased this fuel as opposed to our standard way of purchasing is that the contract is going to be fixed price per gallon," Bruce Blank, Bulk Petroleum director, said.

"It's going to be funded through the Navy, and not through the Defense Working Capital Fund. For this particular effort there is a domestic restriction, which means that the feedstock source needs to come from the U.S. or Canada," Blank continued. "We also needed to ensure that given these parameters, our selected supplier could provide the fuel within the timeframes required by the customer."

Blank noted that DLA Energy's efforts this time are in support of the Navy's Green Strike Group local operations 2012 effort, but that the bigger goal is eventually sailing the Green Fleet in 2016. ES

PACIFIC OCEAN (July 13, 2010) The Military Sealift Command fleet replenishment oiler USNS Guadalupe (T-AO-200) extends fuel lines toward the amphibious assault ship USS Bonhomme Richard (LHD 6) during Rim of the Pacific 2010 exercises. RIMPAC is a biennial, multinational exercise designed to strengthen regional partnerships and improve multinational interoperability. The U.S. Navy will be using 450,000 gallons of biofuel procured by the Defense Logistics Agency Energy during RIMPAC 2012 U.S. Marine Corps Lance Cpl. Orlando Perez/Released.

CONVERSION DESIGNED TO SAVE

By Irene Smith, DLA Energy Public Affairs

The Defense Logistics Agency Energy has partnered with the Air Force to expand its use of commercial grade jet fuel for military aircraft in an effort to save millions of dollars in fuel costs.

Jet fuel is designed for use in aircraft powered by gas-turbine engines. As the largest consumer of jet fuel among the military services, the Air Force spent $7.2 billion on 2.7 billion gallons of fuel in 2010, according to the Air Force Petroleum Agency.

"The move away from military specification fuel, known as JP8, to commercial fuel, known as Jet A in the continental U.S., is going to provide huge dollar savings," Air Force Petroleum Agency Commander Air Force Col. Tom Redford said. "The conversion is part of the Department of Defense's efforts to maximize the use of commercial fuels. We can achieve significant price reductions because the fuel production ratio is dependent on demand."

DoD's fuel consumption varies from year to year in response to changes in mission and the tempo of operations. Most of DLA Energy's bulk fuel purchases are for JP8 and ranged from 60 to 74 million barrels annually over the past decade, which is the equivalent of 165,000 to 200,000 barrels per day. The Air Force and the Army represent the primary consumers of JP8. The Navy consumes JP5, which is another type of aviation fuel that is less flammable, allowing for safe storage on ships, according to the DLA Energy's Fiscal 2010 Fact Book.

By moving toward greater use of commercial fuels, the DoD can take advantage of more competition and less handling costs, which mean a reduced price for jet fuel. Air Force Petroleum Agency Jet A Program Manager Air Force Master Sgt. Greg Carrow said. In addition, by implementing a more efficient and effective global supply support network for storage and distribution, DoD should see even greater savings, Carrow pointed out.

"The Jet A conversion is about taking advantage of supply chain efficiencies and combining it with operational flexibility to create greater energy savings and security," Carrow noted. "It also complements the DoD's strategic alliance with the airlines by using alternative fuel and commercial Jet A blends."

Increased Jet A fuel usage will allow more use of commercial pipelines, thus making it easier to resupply DLA bulk fuel terminals, which will reduce transportation and inventory storage costs, Richard Jaekel, DLA Energy Jet A program manager said.

Baseline studies performed by DLA and the Air Force Research Laboratory showed use of Jet A in transport aircraft depended not on technical considerations, but on logistics, cost and policy considerations.

U.S. Air Force personnel with the 379th Expeditionary Logistics Readiness Squadron, hook up the 6-inch refueling hose from the R-22 fueling equipment on a commercial receipt truck, at an undisclosed location. As the largest consumer of jet fuel among the military services, the Air Force spent $7.2 billion on 2.7 billion gallons of fuel in 2010. Photo by U.S. Air Force Airman 1st Class Desiree Hayden.

"Although aircraft are cleared to fly on Jet A," Redford explained, "we must make sure nothing hampers the operational missions flown by the Air Force, Army or Navy since we share supply chains."

"One of the research projects dealt with the fuel freezing point differences between JP8 and Jet A. Testing B52s, B1s, F-15s and the KC-135, the Air Force Research Laboratory determined there would be little operational impact with the conversion to Jet A based on the 7 degree difference in the specification fuel freezing points. The fuel freezing point of JP8 is minus 47 degrees Celsius maximum, while Jet A fuel freezing point is minus 40 degrees Celsius maximum," Redford said.

Jet A is the commercial fuel within CONUS while the commercial fuel in most locations outside the continental U.S. is Jet A1, which has the same specification fuel freezing point as JP8.

In order to meet military requirements, DLA ensures three additives: an anti-static additive, a fuel system icing inhibitor and a corrosion inhibitor/lubricity improver, are added to the commercial Jet fuel, Jaekel said.

"This involves injecting the additives somewhere along the supply chain, which starts at the refinery and ends when the fuel is issued to an aircraft or other end user," Jaekel added.

In November 2009, the Air Force began a pilot demonstration at four Air Force locations. Since then they have expanded and now a total of nine locations are issuing Jet A with additives. Over a two year period, more than 255 million gallons of Jet A have been

purchased from Air Force locations and another 234 million gallons was purchased from commercial airports. This means nearly half a billion gallons of Jet A have been purchased over a two year period without any known operational or maintenance impacts. Additionally, two Air Force locations operating on commercial airports have been using Jet A with additives since 1995, again without impact.

Throughout 2012, the Air Force plans to expand the use of commercial aviation fuel to an additional 14 bases within the continental U.S.

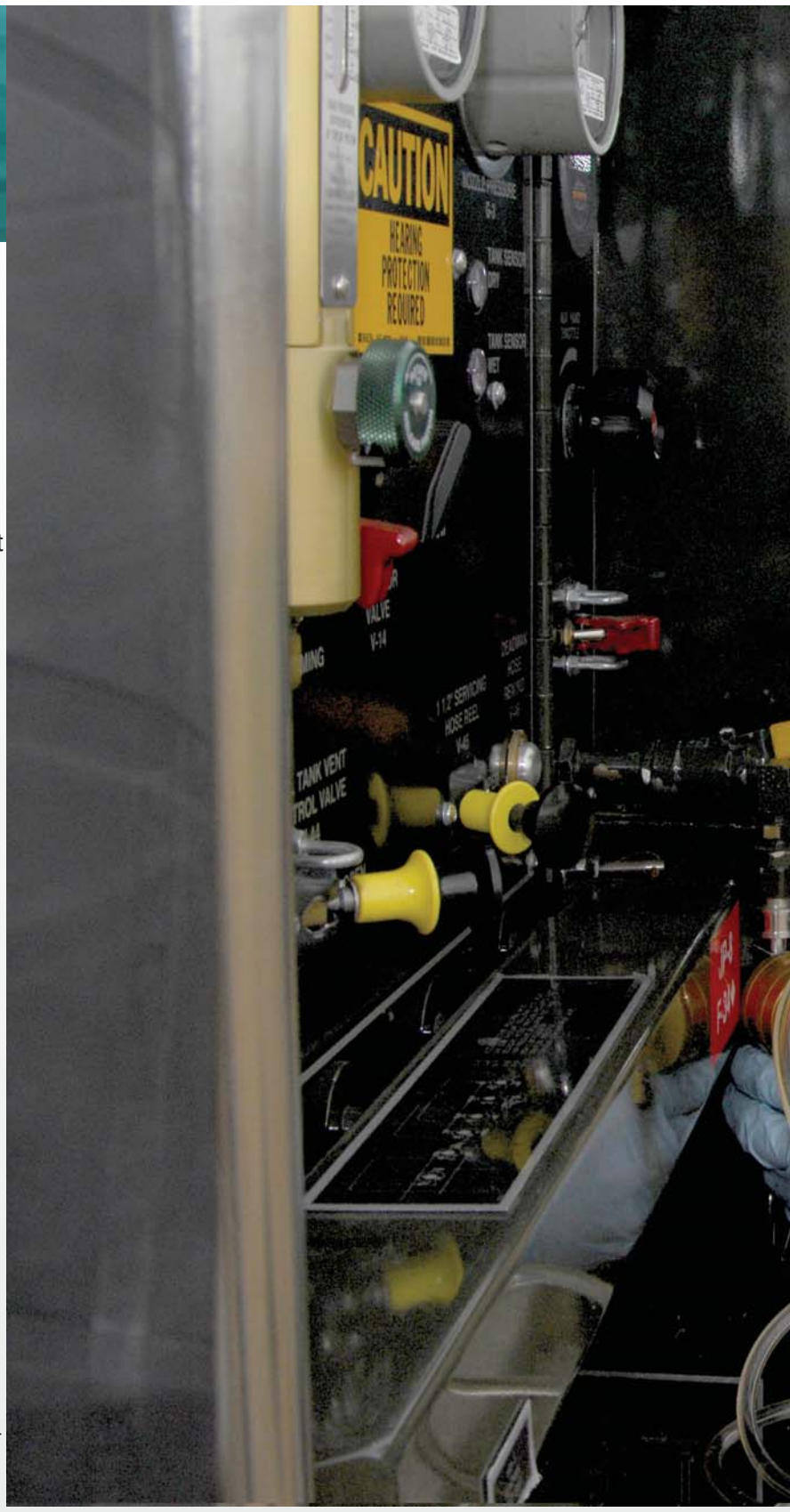
A complete cost benefit analysis has recently been completed with resounding success. As a result, the Air Force Petroleum Agency plans to initiate a decision package to Air Force senior leadership early May recommending conversion of its remaining locations in CONUS to Jet A. Long-term, the plan is to expand conversion to commercial specification product worldwide, Redford said.

There were a total of 148 operable petroleum refineries in the United States as of Jan. 1, 2011, according to the U.S. Energy Information Administration. Jet fuel makes up 9 percent of refinery production. More gallons of Jet A fuel are produced in CONUS than JP8, meaning volume and competition drive the market.

Minimizing the DoD's use of military specification fuels has its advantages.

Demand for crude oil in the U.S. has remained relatively flat over the past 20 years, but international demand has been surging, driving up global oil prices. China is the world's second largest oil consumer and the country's demand for energy remains very strong at about 9.2 million barrels of oil a day. Chinese oil demand is up 10.5 percent in the past year and analysts project the nation's oil appetite is increasing at a rate that exceeds 1 million barrels per day, according to the Associated Press.

Prices of JP8 and Jet A fuel were the same until June 1, 2011, when the Office of the Secretary of Defense and DLA recognized the potential savings and dropped the price of Jet A fuel by two cents, providing $1 million in savings from June – October 2011 to DoD customers using Jet A. ES



Senior Airman Justin Gilbert collects a fuel sample for testing at Royal Air Force Lakenheath, England, on May 26, 2011. Gilbert is a fuels laboratory technician assigned to the 48th Logistics Readiness Squadron. Department of Defense photo by Senior Airman Eboni Reams, U.S. Air Force. Released.

FOREIGN MILITARY SALES

Two members of the Canadian 435th Air to Air Refueling Command prepare the squadron's C-130 Hercules for a refueling. DLA's Foreign Military Sales Program team recently met with Canadian representatives about buying spare parts for C-130 Hercules aircraft the country purchased. Photo by Navy Petty Officer 1st Class John R. Johnson.

DLA Energy works with foreign militaries through programs like fuel exchange agreements, direct bill agreements and fuel support agreements as Implementing Arrangements under the acquisition and cross-servicing agreement process, as well as through foreign military sales programs.

By Jonathan Stack, DLA Energy Public Affairs

Last year, a South American country used the Defense Logistics Agency's Foreign Military Sales Program to purchase an old, rusted-out fire truck and turn it into something useable.

"The 1947 fire truck was just a big piece of rust and never looked like it would drive again," Linda Kimberlin, DLA Logistics Operations logistics management specialist said. "The next picture they show me, it's beautiful: It's painted beautiful red, with new ladders, wheels and tires on it."

She said it looked spectacular, and now that country has a fully operational fire truck thanks to FMS.

The FMS Program is the government-to-government method for selling U.S. government vehicles, equipment, and other goods and services to foreign militaries. The foreign governments pay total costs, and all deals are marked by a signed government-to-government agreement.

FMS is part of security cooperation authorized by the Foreign Assistance Act of 1961 and the Arms Export Control Act of 1968. In order for a foreign country to purchase DoD items, Kimberlin said, a letter is sent from an eligible foreign nation's government to its U.S. Embassy. The embassy forwards the request to the State Department, which then determines what the requestor may or may not have. Following that, requests are sent to a case manager.

FMS cases are assigned to DLA or one of the military services for management by the Defense Department's Defense Security Cooperation Agency. The Army, Air Force and Navy oversee cases involving service-managed equipment.

DLA manages the spare parts that go with the services' weapons systems, so in those cases, the agency has a secondary support role, Kimberlin said.

"We support military department-managed FMS cases with our logistics processes, which are receiving, storing and issuing material, processing requisitions, billing for the material, and financially tracking those

Canadian Navy Lt. James Classen, navigator for the frigate HMCS Calgary (FFH 335), observes operations from the bridge of the littoral combat ship USS Freedom (LCS 1) with Lt. Aaron Geary, Freedom's officer of the deck. Freedom and Calgary participated in Rim of the Pacific 2010, the world's largest international maritime exercise. U.S. Navy photo by Lt. Ed Early.

processes," she said.

The two types of cases DLA manages are cases involving DLA Logistics Information Service and excess defense items managed by DLA Disposition Services, she said.

DLA Logistics Information Service provides foreign customers with codifi-cation services and cataloging data for DLA- and service-managed items. The information ranges from national stock numbers and sources to descriptions and weights.

"DLA Disposition Services manages excess defense articles," Kimberlin said. "Excess material is turned into DLA Disposition Services, which can sell it at a reduced price to a foreign country."

DLA Disposition Services doesn't sell any actively used combat uniform, U.S.-only technology items, items containing friend or foe identification, or anything with a digitized pattern, including uniforms and accessories.

"We sell to foreign customers, not so they can be aggressors, but so they can defend their own country or their own region, keep balance of power, and … help us as a partner," Kimberlin said.

DLA sells to Canada, Mexico, all of Western Europe, Israel, Taiwan, Australia, Singapore, Malaysia, Indonesia and Japan, among many other countries, she said. In total, DLA deals with more than 100 countries, involving nearly $2 billion in annual sales.

She said countries buy items from DLA daily, and she recently met with Canadian representatives about buying spare parts for C-130 Hercules aircraft the country purchased.

"They had one C-130 last year. Two more are being delivered early," she said. "So we're scrambling to keep up with the spare parts because they came off the production line early."

Kimberlin also recently met with Israeli representatives who told her they have more than 10,000 requisitions in DLA's system.

"Israel is usually one of our top five purchasers," she said. "Saudi Arabia, Taiwan, Korea, Egypt and Israel are usually always vying for the top five positions."

As a part of the FMS Program, representatives of foreign countries can visit DLA activities, such as DLA Disposition Services, to view excess material and determine if they want to purchase an item, Susan Witek, DLA foreign visit coordinator, said.

"Excess material is sold as is, where is," Kimberlin said. "So it behooves them to come and look at the material because it can be in poor condition or it can be salvageable, and they want to know that before they spend the money."

This is one of two types of visits a foreign representative makes to a DLA activity. The other is when foreign flag and general officers visit DLA Headquarters and meet with the director or another senior leader.

"They will generally do a courtesy visit and ask for a DLA overview that tells them how we are set up and structured," Witek said.

She said representatives use these visits to learn about DLA and how it works, and most say they appreciate the idea of all of the services buying their supplies through one agency rather than all of them doing it on their own.

"The visits are very important because VIPs like to come here and see how this side of the world works," Kimberlin said. ES

DLA director visits fuel facilities in Hawaii

By Monique Randolph

Defense Logistics Agency Director Navy Vice Adm. Mark Harnitchek visited DLA disposition and fuel facilities on Joint Base Pearl Harbor-Hickam, Hawaii, March 13 as part of a weeklong trip to see the agency's operations in the Pacific theater.

During his first stop at DLA Disposition Services Pearl Harbor, the director was given a tour of the sprawling 27-acre operation currently located at former Naval Air Station Barbers Point but scheduled to relocate to Pearl Harbor in 2013 due to 1999 Base Realignment and Closure legislation.

DLA Disposition Services is the last Department of Defense site to vacate the former naval air station, said Dennis Baxter, acting deputy director of DLA Disposition Services Pacific.

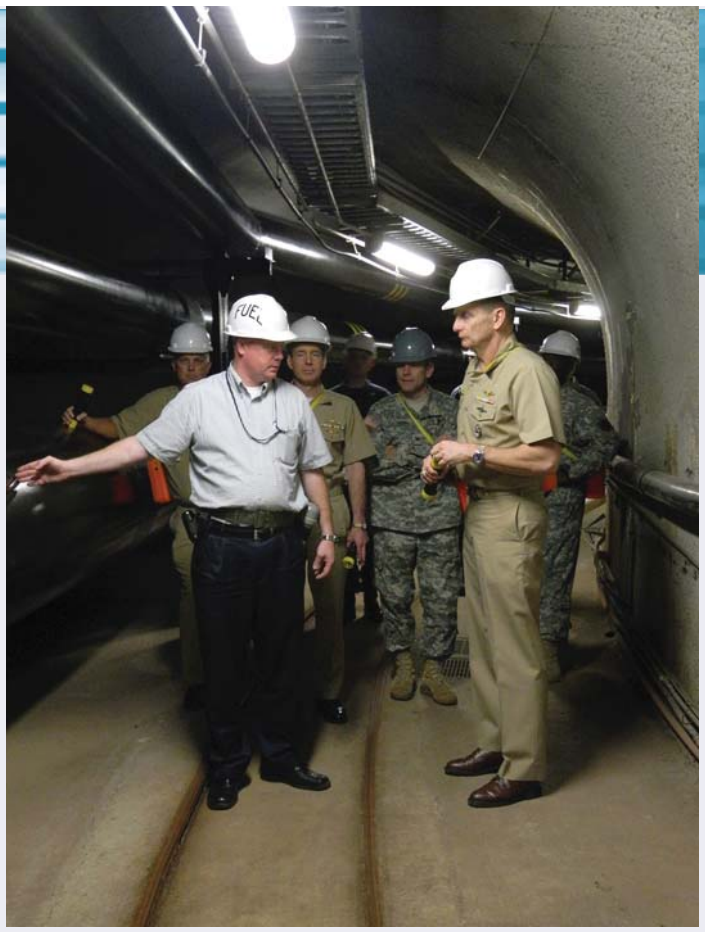
The site processes everything from clothing and furniture to electronics and ship parts, affording every opportunity for eligible property to be reused or sold before disposition, Baxter said.

"It's really amazing when we can reutilize the items for military customers, because it keeps [those items] active with the warfighters. Our entire inventory is also posted on our website, so it's available worldwide," Baxter said.

The Army transports much of the material to and from the facility, including items that must be shipped to the mainland to be destroyed, Baxter said. These items, marked "demanufactured," are deemed to have no reutilization or resale value and must be incinerated at a stateside demilitarization center.

Harnitchek also visited the Navy's Fleet Logistics Center, where he received a briefing on and a tour of the Red Hill underground fuel storage facility. The facility consists of 20 fuel tanks located hundreds of feet below ground and was constructed between 1940 and 1943 to replace vulnerable above-ground fuel storage tanks that were located around Pearl Harbor.

Scott Hedrick, deputy director of fuel and facility management at U.S. Naval Supply Systems Command Fleet Logistics Center Pearl Harbor, and DLA Director Navy Vice Adm. Mark Harnitchek at the Red Hill underground fuel storage facility on Joint Base Pearl Harbor-Hickam, Hawaii, March 13. Photo by Monique Randolph.



Navy Vice Adm. Mark Harnitchek was briefed on and had a tour of the Red Hill underground fuel storage facility. The facility consists of 20 fuel tanks located hundreds of feet below ground and was constructed between 1940 and 1943 to replace vulnerable above-ground fuel storage tanks that were located around Pearl Harbor. Photo by Monique Randolph.

"Each tank is 250 feet tall, 100 feet in diameter and holds 12.6 million barrels of oil," said Scott Hedrick, deputy director of fuel and facility management at U.S. Naval Supply Systems Command Fleet Logistics Center Pearl Harbor.

Also essential to fuel operations at FLC Pearl Harbor is the upper tank farm, which consists of six above-ground fuel tanks located a few miles from the Red Hill facility.

"The upper tank farm provides us the capability to receive and distribute fuel at the same time, but is in need of recapitalization," Baxter said.

DLA Energy provides funding for sustainment, restoration and modernization, and military construction projects for FLC Yokosuka, Japan, and Pearl Harbor — including Red Hill — in the Pacific theater.

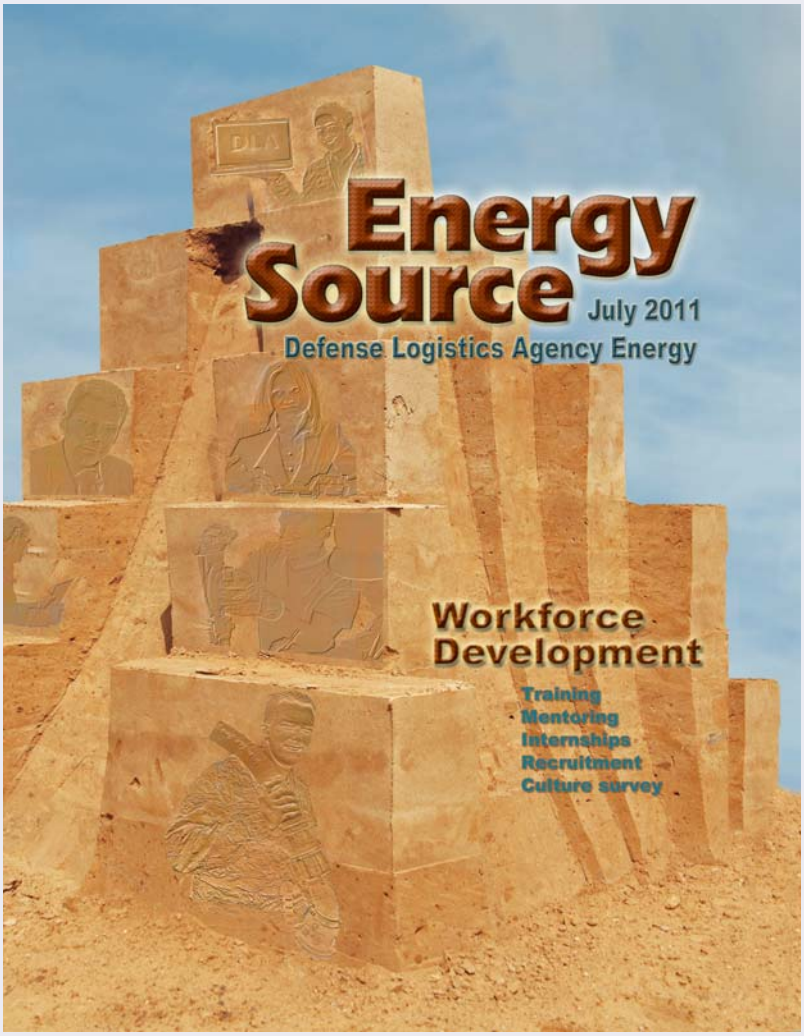
Harnitchek's FLC visit concluded with a driving tour, during which Hedrick showed him some of the military construction improvements that were funded by DLA, including a $5 million upgrade to a pier used to refuel Navy aircraft carriers at Pearl Harbor and a $22 million project to replace aging underground piping with new above-ground pipes, Baxter said. The upgrades also included the installation of a new plant that monitors the temperature and measures the amount of fuel piped into the pier, providing more accurate metering and accounting during fueling operations, he said. ES

Scott Hedrick, deputy director of fuel and facility management at U.S. Naval Supply Systems Command Fleet Logistics Center Pearl Harbor, gives DLA Director Navy Vice Adm. Mark Harnitchek a tour of the Red Hill underground fuel storage facility on Joint Base Pearl Harbor-Hickam, Hawaii, March 13. Photo by Monique Randolph.

DoD announces Excellence in Journalism awards

By Terry Shawn, DLA Energy Public Affairs

Energy Source cover July 2011 graphic by Susan Brown



The winners of the 2011 Defense Media Activity Excellence in Journalism Awards Program were announced by the Department of Defense March 16. The awards program recognizes print and broadcast journalists for outstanding achievement in furthering the objectives of the Department of Defense Internal Information Program, according to the DoD's DMA website.

Among the winners were: Defense Logistics Agency Energy public affairs team, winning first place in the Unit Magazine Format category for the Energy Source magazine. Irene Smith, Idella Fletcher, Susan Lowe, Terry Shawn and Christopher Goulait were all recognized for their contribution and production of the quarterly publication.

Also recognized by DMA were: Beth Reece, DLA public affairs, who won first place in the News Feature category by an individual for her article titled "DLA disposal team enters final stage of equipment drawdown in Iraq"; Goulait placed second in the Series category for his three-part series on social networking; and DLA public affairs members Kathleen Rhem, Beth Reece, Sara Moore, Jonathan Stack and Jacob Boyer earned second place in the Unit Website category.

The winners of the DMA program advance to compete in the Department of Defense Thomas Jefferson Awards, which recognizes military and civilian employee communication professional for outstanding achievement in furthering the objectives of the DoD's Internal Information Program. ES

The face of the Defense Logistics Agency Energy...

One Face

Name: Charlene Smoot

Job: Logistics management specialist in the Defense Logistics Agency Energy Aerospace Energy business unit, Materiel Support branch in San Antonio. I have a broad spectrum of logistics responsibilities; a "Jacqueline-of-all-trades" if you will. My customer relationship management duties include: working with new Aerospace Energy customers for new business leads, answering customer inquiries, and doing marketing and customer outreach to our broad Department of Defense and non-DoD customer base by attending conferences and explaining to customers the wide scope of our products and services.

I am also a branch lead for transportation and services, including forecasting and program execution. I currently serve as backup and because I am hazardous materials certified by the Department of Transportation, coordinate the transport for several of the hazardous materials we ship. Additionally, I'm an Aerospace Energy subject matter expert for our transition to Enterprise Business Systems, as well as Web content manager for the Aerospace Energy. Because of my varied background, I can quickly identify support for our customers. If I don't know the answer, I can usually find it. I pride myself on performing the best customer support possible.

Energy experience: I've been a logistics management specialist since I transitioned from the Air Force when DLA Energy took over my organization in 2001. However, previously I was an inventory management specialist and IMS supervisor in the USAF for this same organization since 1989. Prior to working in fuels, I began my government career as an inventory manager for jet engine parts for the Air Force at Kelly Air Force Base, Texas, in 1985.

Challenges and rewards of the job: I really enjoy helping our unique Aerospace Energy customers, ranging from DoD warfighters using our gases for flight line and reconnaissance balloons, to federal civilian agencies and commercial companies using our rocket and missile propellants. The biggest reward is the knowledge that the small part we play in providing the propellants and gases support some really big programs. I mean, how many people can say they helped provide the fuel to launch a rocket or put up an important DoD satellite to support our troops?

My most recent challenge was filling in for my boss for several months to keep the transportation office going-- while doing some of my regular job, too! We had a continuous stream of new containers that required acceptance, transport to and from vendors for filling, and on to sites overseas. Setting up supply chains with multiple modes of shipment, figuring out how we could ship certain containers, working with DOT to secure special permits, and changing destinations were some of the more unique challenges we've worked through. Without my great co-workers and their can-do attitude, we couldn't have succeeded.

A memorable mission: I've had many memorable moments and unique opportunities in my career. I've seen the Space Shuttle in preparation for flight and launch at Cape Canaveral, Fla. I've found myself in a face to face conversation with Buzz Aldrin, discussing future propulsion systems at a conference. And, I've seen the now-retired Titan rocket being prepared for launch at Vandenberg AFB, Calif. Not bad for a farm girl from Texas!

Future Plans: After the EBS transition, I will be a demand planner under EBS and keep many of my customer support responsibilities, except transportation.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