



Energy Source

April 2011

Defense Logistics Agency Energy

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Joint fuels team hones management at Bagram Airfield

By Air Force Capt. Scott R. Thomas
DLA Energy Middle East

They launch aircraft into the sky for close air support of combat operations; they power the countless number of security convoys 'outside the wire,' or off base. And, they serve as life support to all personnel on the ground.

"They" are the million gallons of fuel that pass through Bagram Airfield each week. Vital to the overall Afghanistan effort is the proper management and accountability of this highly-valued resource. Two new contracts at Bagram help hone that management and accounting.

Bagram's fuel is jointly managed by several organizations. These include the Army's 101st Sustainment Brigade, the 17th Combat Sustainment Support Battalion, the Air Force's 455th Expeditionary Logistics Readiness Squadron, and Defense Logistics Agency Energy, a field activity of DLA. This ensures Team Bagram can supply the right fuel, at the right time in support of the Afghanistan mission.

Four expeditionary airmen led by Bagram Re-

sponsible Officer Air Force Capt. Rob Sonnenberg work within the construct of the 101st Sustainment Brigade to track each gallon of fuel at Bagram Airfield. This small team represents the work horse of the accounting machine as they report daily inventories, gains and losses to DLA Energy. This daily report drives strategic and operational planning and translates into hundreds of millions of dollars in fuel each year.

Air Force Maj. Nicholas Moore of the DLA Energy Middle East office understands the challenges Sonnenberg and his team face. "It's a daunting task in an expeditionary environment to properly account for each gallon of fuel as it is received, stored and ultimately passed to the customer. And, essential to this degree of oversight is the absolute need for precision accounting equipment," explained Moore.

In spring 2010, DLA Energy awarded a contract to ensure all fuel meters supporting DLA Energy direct delivery sites within Afghanistan are properly calibrated. In total, this contract will support hundreds of meters at 11 operating locations. Accurate metering of product allows DLA Energy and its customers to properly fund, track and support fuel operations, Moore said.

The contractor calibration team operates hand-in-hand with DLA Energy representatives to ensure all meters are inventoried and maintained within the contract parameters. Meters located at forward operat-

The sun rises over the South Fuel Farm on Bagram Airfield, Afghanistan. Fuel inventory control here was improved by installing pre-configured TACFUELS kits, electronic gauging systems designed for the rubberized, collapsible storage tanks commonly used in an expeditionary environment. Photo courtesy of DLA Energy Middle East.



ing bases are shipped to Bagram where they are inspected, calibrated and returned to the customer.

Bagram Airfield has also initiated testing of a unique system known as TACFUELS, a product of Varec Inc. It is an electronic gauging system designed for rubberized, collapsible storage tanks commonly employed in an expeditionary environment. This state-of-the-art, completely automated system replaces a decades old, manual gauging method.

Then-Bagram Responsible Officers Air Force Capt. Dara Hobbs and Air Force Master Sgt. Tate Thomas began the acquisition process for electronic gauging technology in fall 2009. Believing in the electronic gauging technology, Hobbs and Tate initiated a purchase request, lobbied for funding and configured an order for the first phase of testing. In March 2010, the Bagram Central Contracting Office, via the 82nd Sustainment Brigade, directed Varec Inc. to install and commission an automated tactical fuel measurement system.

That fall, 16 pre-configured TACFUEL kits were installed at Bagram for use on 210,000-gallon collapsible fuel storage tanks. The kits included all the required system components including gauges, ruggedized laptop computers, data capture units and associated cables. This installation enabled the Responsible Officer to capture all fuel movements in and out of the entire JP8 tactical system. Users are able to capture data on multiple tanks simultaneously, thereby reducing the gauging time to a fraction of the manual gauging process.

In January 2011, Bagram moved approximately 20 million gallons of JP8 through various fixed and tactical systems.

Sonnenberg has seen immediate results with the new equipment. "Since installing TACFUELS, we have experienced a whole new level of accuracy and consistency in the tactical environment," he said.

With the ability to offer precision gauging, track historical data and depict valuable trends,



Specialists at the Red Star Fuel Facility on Bagram Airfield, Afghanistan, calibrate fuel meters as part of inventory management procedures. Defense Logistics Agency Energy awarded a contract last spring to ensure all meters supporting DLA Energy direct delivery sites within Afghanistan are properly calibrated to help DLA Energy and its customers properly fund, track and support fuel operations. The contract will support hundreds of meters at 11 operating locations. Photo courtesy of DLA Energy Middle East.

electronic gauging offers many advantages. In minutes versus hours, Bagram Responsible Officers are able to track temperature, volume correction, and gross/net inventories for each collapsible storage tank.

In a tactical environment, this is extremely valuable when gathering causative research and correcting processes, said Sonnenberg. "The system ultimately adds consistency, reliability and real-time visibility of physical stocks, and it greatly improves the transparency of fuel accounting," he explained. "Initial testing indicates electronic gauging of tactical storage tanks has the capability to become a true game changer." ●

The face of the
Defense Logistics
Agency Energy...

One Face



Name: Mark Brewer

Job: Project manager for petroleum equipment in the Defense Logistics Agency Energy Executive Agent Office. I work with the different military services to identify opportunities for joint applications to meet their equipment requirements. When I see an opportunity, I work to persuade the services to leverage their resources to develop joint solutions to common problems on petroleum handling equipment. A lot of emphasis is placed on standardization and interoperability with the focus being on the Department of Defense rather than on the Army, Air Force, Navy, Marines or DLA Energy. Joint solutions are more cost effective and improve interoperability, so it makes sense to find appropriate opportunities for a standardized approach.

Energy experience: I came to work for the Defense Fuel Supply Center, as DLA Energy was then known, as a student trainee in contracting in January 1989. After graduating from college, I returned to the contracting field, earning my DAWIA [Defense Acquisition Workforce Improvement Act] Level III Certification in 1997. I worked as the ordering officer in the Balkans Office in Croatia as part of the DLA Contingency Support Team. I completed the Multi-Functional Training Program in 2001 and transitioned from contracting to inventory management. I've been in the current job since 2007.

Challenges and rewards of the job: The most challenging aspect of my job is wading through the complex policies and procedures of one military service and then trying to integrate those with the different complex policies and procedures of another service. The end goal is an application that all the parties can agree to, but it's tough going to get there. To accomplish this, I work closely with representatives from all the military services and their entry control points. That relationship is rewarding, especially when a service comes to me for assistance with one of their initiatives—like tactical automatic tank gauging, fuel quality mapping and a tactical automated service station. I'm also able to seek and share information in an international forum as a member of the U.S. Delegation to the NATO Petroleum Handling Equipment Working Group. It's very interesting to see how our NATO allies approach the tactical refueling mission and compare the equipment they use to do it.

A memorable mission: One of my strongest memories involves a collapsible fuel storage tank, sometimes called a fuel bladder, one of the types of equipment I seek to standardize. In 2008, I witnessed the first article testing of the first collapsible tank built to joint specification—the MIL-PRF-32233, which was developed in an effort facilitated by DLA Energy. It was the first time I'd seen a collapsible fuel tank this big—think of it as a 210,000 gallon water bed mattress. This was also my first experience with a group of military and DoD civilian personnel that I have come to depend on for subject matter expertise on all aspects of collapsible fuel tanks.

Future plans: Tactical automatic tank gauging seems to be the next big thing in fuel handling equipment. The military services have been approaching this initiative on their own so far. But, we hope to be able to steer this into a single DoD direction rather than two to four service directions. It's equipment ripe for a joint solution.





DEFENSE LOGISTICS AGENCY Energy

2011 Commander's Guidance

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