

FUEL LINE

Defense Energy Support Center

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FUEL LINE

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Year 2000 computer concerns will prove false or true—or a combination of the two—in a few short weeks. How prepared is DESC for the date change?

Also in this issue: Foreign Military Sales, oil spill response training and utility distribution systems.

Deputy Notes

These are truly exciting times for DESC here at Fort Belvoir and in its activities around the world.

The Executive Council meeting held at Ft. Belvoir September 14-16 accomplished a lot for our people and our organization. Regional office leadership and DESC-Ft. Belvoir staff discussed many issues affecting our internal operations and our continuing successes in our number one mission: supporting the warfighter.

Our development and implementation of DESC's Business Plan at the EC became the focal point of the conference.

I cannot overemphasize the significance of this dynamic document. DESC's Business Plan defines our future in terms of clearly stated objectives to be accomplished over the next two to five years. Most importantly, it establishes performance goals for accomplishing those objectives, evaluating the processes we use and measuring our successes. I urge all DESC personnel to review the Business Plan when it is published and become familiar with its objectives. This is where we're going and how we're going to get there. It's a "nuts and bolts" blueprint that DESC will use to ensure we continue to support our warfighters at the highest level of efficiency and cost effectiveness.

Another key issue discussed at the EC concerned the safety of our people in the field. We live in a world where terrorist attacks against any visible representatives of our country and our military are a fact of life—even in the United States. In that world, the protection of DESC military personnel, civilian employees, our families and facilities requires our highest priority.

We devoted considerable time to discussing each office's safety and security procedures. DLA Command Security Staff Director, Col. Howard O'Brien, USA, led the

DESC-Europe still plays an active role in Bosnia and Kosovo, providing the fuel resources our warfighters need to keep the peace.

EC's Force Protection Briefing that discussed vulnerability assessment worldwide and what steps DLA planned and recommended to improve the safety of DESC personnel and families overseas. A result of these frank and important talks will be the hiring of a DESC security officer to deal specifically with DESC safety and security issues.



*DESC Deputy Director
Col. Joseph T. Thomas, USA*

The timing of the Executive Council meeting was perfect in several ways. First, it coincided with the assignment of new commanders to many of DESC's Regions and field offices. Lt. Col. Marshall J. Jones, USA, recently assumed command of DESC-Middle East, Col. Stephen P. Passero, USA, now commands DESC-Europe, and Col. David W. Russell, USA, commands DESC-Americas.

Second, it allowed field office personnel to participate in the farewell luncheon for Mr. Gary Thurber. Through many presentations and speeches, representatives from DESC offices around the world were able to express gratitude and appreciation to a director who not only often referred to DESC as a "national asset," but whose leadership greatly contributed to that reality. Mr. Thurber was called back to the Defense Logistics Agency by Lt. Gen. Glisson to become DLA's director of Corporate Administration.

The DESC community was deeply saddened recently by the passing of one of its most influential and beloved family members. Our executive officer, Marilyn Miller, served at DESC for more than seven

years, and contributed her leadership and hard work to the many changes that have taken place during those years—the move from Cameron Station, the expansion of DESC's mission to include all energy resources, and several World Wide Energy Conferences.

Her work ethic—and the energy she possessed to drive it—earned her respect from all who knew her and worked with her, from office clerk to commanding general. Beyond her professional abilities, she is best remembered as a teacher, mentor, innovator and the kind of leader that first and foremost took care of her people. Many people in the DESC organization owe promotions and career directions to a woman who always had time for them—even while working in her high-pressure job and while fighting for her life. Marilyn lost her battle with cancer on September 17, 1999.

Finally, I would like to comment on how fast the DESC mission is growing, how much our people are doing, and how well they're doing it.

The national media have moved on from events in Bosnia and Kosovo. However, DESC-Europe still plays an active role in both these theaters, providing the fuel resources our warfighters need to keep the peace.

News coverage of the devastation caused by Hurricane Floyd grows less frequent outside of New Jersey and North Carolina. Floyd's aftermath remains a very newsworthy subject to DESC-Americas, which must still move petroleum resources through North Carolina to the bases depending on it.

DESC's Information Systems division continues to test, evaluate,

review and re-test the Fuels Automated System to move us toward a paperless, real-time order-processing future.

Alternative Fuels continues to issue new contracts and acquire new natural gas customers, while closely watching the status of electricity deregulation and promoting privatization of base energy facilities around the country. They recently entered into an arrangement with the Army and the Department of Energy's National Renewable Energy Laboratory to look for industry participants to design, build and operate wind turbines.

Of course, this is all in addition to the DESC routine energy support business.

These are exciting times for DESC here at Fort Belvoir and in its activities around the world. In this organization, there's no such thing as a "slow day."

Finally, as I prepare to retire after almost 30 years of military service, I reflect on how the Military's grand scale magnificence makes the accomplishments of one person appear insignificant. All the training, effort and experience have inspired me with one goal—to become a good soldier. Although it's hard to measure success against the backdrop of phenomenal military talent and dedication, I can say that I've at least tried to achieve my goal. And it's been one heck of a ride.

I have just one regret—giving up the many relationships, both military and civilian, formed in conducting business while serving in the Army and here at DESC. I have just one piece of advice: Never forget our mission—to provide fuel and energy to the Armed Forces so they can continue to defend this great nation. ★

In Memorial



Marilyn A. Miller, executive officer/public affairs officer of the Defense Energy Support Center, died on Sept. 17 of cancer. She had served as public affairs officer at DESC since 1992 and, additionally, as executive officer since 1994. She was 55.

Before joining DESC, Ms. Miller held various civil service positions at Kelly Air Force Base in San Antonio, Texas. She also spent a number of years teaching junior high school in Europe.

Funeral services took place in Ms. Miller's hometown of Lancaster, Pennsylvania, on Sept. 22. A memorial service was held at the Defense Logistics Agency Headquarters Complex at Fort Belvoir, Virginia, on Sept. 27.

Survivors include her husband, J.D. Miller, who has also worked at DESC since 1992, two daughters, three grandchildren, both parents and a brother. ★

This edition of the *Fuel Line* is dedicated to the memory of Marilyn Miller.

NEWSMAKERS...



Lt. Cmdr. Michael LaVigna, USN, former commander of DESC-Livorno, presents 20-year service plaque to Giancarlo Casini, distribution facilities specialist.



Maj. Mark Aicher, USAF, assumes command of DESC-Yokota as he receives flag from Ed Janco, inventory manager.



Defense Energy Support Center personnel (left to right) Jane Hermani, Facilities Inventory, Chris Barnett and Keith Pladson, Bulk Fuels, and Barbara Todd, DESC-Americas, Houston, Texas, test the Oracle Energy Downstream (OED) software package. Information Systems arranged the test to evaluate if users can conduct business over the Internet using the product. DESC purchased this off-the-shelf database program to replace the Defense Fuel Automated Management System (DFAMS). The team conducted the Fuels Automated System's (FAS) first Business Acceptance Testing of OED by successfully processing shipments, receipts, stock transfers, and sales using DFAMS data entered since the beginning of July. OED will be the critical "Enterprise" portion of the overall FAS under development by Information Systems.



Sergeant First Class Keith Long of DLA's newly-formed Joint Reserve Unit accepts the command's colors from unit commanding officer Col. Chester F. Nolf, Jr. Lt. Gen. Henry T. Glisson (Director, DLA) and Brig. Gen. Joseph L. Thompson III (Mobilization Assistant to Director, DLA) presented the colors to Col. Nolf in formal ceremonies activating the command at Ft. Belvoir on October 15, 1999.

Joint Reserve Unit Stands Up at DLA

“This is a new chapter in the history of the Defense Logistics Agency,” stated Defense Logistics Agency Director Lt. Gen. Henry T. Glisson. “It’s the first time we’ve had one of these units in DLA and the first one in support of a Defense agency.”

General Glisson spoke at the activation ceremony for the U.S. Army Element, Headquarters Defense Logistics Agency Support Unit. The mission of this joint reserve unit (JRU) activated by the U.S. Army Reserve is to provide trained and ready U.S. Army Reserve soldiers to rapidly mobilize and deploy worldwide. During conflicts worldwide or national emergencies, these soldiers will bring focused DLA logistics support to the combat zone or will move into stateside billets to free active duty specialists to deploy immediately.

JRU soldiers do not drill specifically at the HQ complex, but at 15 DLA sites around the country. Of the 76 JRU billets, six are assigned to DESC field activities (DESC-Americas in Houston, DESC-St. Louis and DESC-Los Angeles) and four at DESC-Ft. Belvoir.



Lt. Col. Mitchell Hailstone, USAF, right, receives Joint Service Commendation Medal from DESC Chief of Staff Capt. John Proctor, SC, USN, for leading DESC's efforts during the government's largest award of an Energy Savings Performance Contract to Viron/Pepco Energy Services. Under the contract, the Military District of Washington will receive \$67 million in energy equipment upgrades at five Army installations, resulting in a projected savings of more than \$4 million per year in energy costs. Lt. Col. Hailstone serves as deputy director of DESC's Alternative Fuels Commodity Business Unit.



Bud Nelson, former manager of Defense Fuel Support Point Ozol, with plaque commemorating 30 years of dedicated service. Built 45 years ago and designed to withstand a nuclear attack, the terminal recently closed for return to the surrounding community near Martinez, California. Originally a contractor-owned and -operated facility, DFSP Ozol was purchased by the Department of Defense in 1980, becoming government-owned and contractor-operated.

NEWSMAKERS...



Commanders Bid Farewell to DESC Director

Former DESC Director Gary S. Thurber receives parting gifts from DESC-Pacific Commander Capt. Lynn Simon, SC, USN, top, and DESC-Americas Commander Col. David Russell, USA, right, at a farewell luncheon at Ft. Belvoir. Mr. Thurber returned to service at the Defense Logistics Agency as director of corporate administration. DESC commanders gathered at DESC-Ft. Belvoir for an Executive Council meeting in mid-September.



On the Move...



Col. Stephen P. Passero

New Commanders:

DESC-Americas:
Col. David W. Russell, USA

DESC-Europe:
Col. Stephen P. Passero, USA

DESC-Middle East:
Lt. Col. Marshall J. Jones, USA



Lt. Col. Marshall J. Jones

NEWSMAKERS...

The latest selection for DESC's **Multifunctional Program** is targeted toward employees at the GS 7/9/11/12 level who would like to broaden their skills and professional opportunities by learning new skills in other Commodity Business Units. Multifunctional training consists of contracting plus one other function found in the CBUs and requires two to six years, depending on experience. DESC employees recently selected for the program are:

Shirley Bergman
Robin Matthews
Ray Martinez
Larry Rice
Andra Rhone-Jones
Mark Brewer
Annie Gordon



Defense Logistics Agency Celebrates Navy's 224th Birthday

The Defense Logistics Agency celebrated the Navy's 224th birthday in observances held at DLA Headquarters Complex at Ft. Belvoir on October 13, 1999. Rear Adm. Raymond A. Archer, III, SC, USN, deputy director of the Defense Logistics Agency (right), delivered the Navy birthday message and a specially prepared video of Navy life at sea. With the assistance of Navy Lt. Bruce Rivers, the youngest sailor assigned to DLA, Rear Adm. Archer also observed the traditional cake-cutting ceremony.



Air Force Capt. Marshall C. Perry received the Air Force Commendation medal in ceremonies at the Defense Energy Support Center on October 13, 1999. DESC Deputy Director Col. Joseph Thomas presented the medal, which Perry earned for distinguished service as Commander, Combat Operations Support Flight, 374th Supply Squadron, 374th Logistics Group, 374th Airlift Wing at Yokota Air Base, Japan. Perry served at Yokota from June 1996 to July 1999, where he was cited for exceptional leadership. The award states that his superior management skills directly contributed to the 374th Airlift Wing winning the Presidential Quality Improvement Award. Captain Perry currently serves in DESC's Command Control Center.

PROFILE . . .

The Navy Petroleum Office

Source: Navy Petroleum Office

Just what is the Navy Petroleum Office and why is it located with the Defense Energy Support Center in the Defense Logistics Agency Headquarters Complex?

As the management of bulk fuel within the Department of the Navy evolved from Naval to DLA ownership, the Navy Petroleum Office (NAVPETOFF) took on new and differing roles as the Navy's technical agent and Service Control Point for fuel related issues. While DLA owns the joint-use commodity ("purple" bulk fuel), the product is still stored in facilities that are Navy owned, operated and maintained. As a result, NAVPETOFF must now work ever more closely with DLA, DESC and the other Services to ensure that proper levels of technical support are provided to the Fleet and that Naval shore fuel infrastructure facilities remain healthy to meet the continued demands for storage, distribution and regulatory compliance.

NAVPETOFF serves as an interface between the Navy and DESC concerning fuel requirements and issues, in effect acting as a broker between the Navy and its fuel supplier. Cmdr. David Higgins, NAVPETOFF's executive officer, describes his office as serving the retail end of the fuel supply chain, while DESC covers the wholesale end. While fuel quality may be on-specification when the product leaves the refinery, it's the fuel's quality once it reaches the end-use customer that most concerns Cmdr. Higgins.

"We put all the pieces together," he says, describing how

NAVPETOFF works directly with Navy Fleets, better enabling DESC to answer the needs of its customers. He also adds that, "In the transshipment of DLA-owned bulk fuel, the Navy takes a large role in serving as an intermediate distribution point that further redistributes joint-use product to all Services, especially the Marine Corps and Air Force."

NAVPETOFF's co-location with DESC in the DLA Headquarters Complex at Ft. Belvoir, Virginia, is by no means coincidence. It allows NAVPETOFF to conveniently stay on top of fuel-related developments

NAVPETOFF serves as an interface between the Navy and DESC concerning fuel requirements and issues, in effect acting as a broker between the Navy and its fuel supplier.

at DESC and the Office of the Secretary of Defense (OSD). "We're here by design. An awful lot of business is conducted by chance meetings in the hall," observes Cmdr. Higgins. "We're oftentimes like a lobbyist on Capitol Hill."

NAVPETOFF routinely works myriad ashore and afloat fuel requirements and issues including facility maintenance, new construction, fuel reclamation, environmental compliance, information technology, automation, operational requirements, POL officer trainee programs, inventory management, reserve unit training

programs, and quality surveillance. However, some issues, particularly emergent problems, demand more coordination and perseverance than others.

An excellent example of where NAVPETOFF played a Service Control Point intermediary role between the Navy and DESC recently involved serious aircraft engine maintenance problems at Marine Corps Air Station Cherry Point. During the summer of 1997, the local Naval Aviation Depot discovered that the engine guide vanes on numerous AV-8B Harrier aircraft with -406B engines were experiencing abnormal burn wear. Through extensive engine testing, it was eventually determined that this \$25 million problem was caused by an incompatibility between this particular engine type and fuel procured at a specific refinery, even though that fuel met all required performance specifications.

This unique problem impacted many players: NAVSEA, the technical authority for Naval aircraft; 2nd Marine Corps Air Wing, the warfighter that operated the impacted aircraft; DESC, who procured and distributed the product in question; Naval Research Labs, who conducted extensive laboratory research; and the commercial refinery that produced the problematic product. NAVPETOFF worked closely with each of these independent activities to facilitate identification of the root cause of the problem, development of bench testing methods, modification of the fuel production process, provision of alternative logistics support for the

warfighter, and the purging of incompatible product throughout the worldwide DoD fuel storage and distribution system.

Another example of NAVPETOFF's advocacy role involves the ongoing determination of the feasibility to implement a new thermal stability additive for jet fuel within the Navy. Air Force testing of this additive, known as "plus 100," has proven favorable for certain types of aircraft, resulting in significant Air Force maintenance cost savings. While the Air Force has widely implemented this program throughout their bases, the additive has proven more problematic for the Navy, Marine Corps and Army.

Research has shown that the additive has a tendency to disarm filter-coalescer systems and create particulate quality problems in bulk fuel systems, so the additive must be injected into fuel at the skin of the aircraft. Current shipboard construction is not conducive to this requirement and would require tens of millions of dollars in shipboard modifications. NAVPETOFF is committed to the process of working closely with NAVSEA, DESC, and a tri-Service Integrated Product Team to quantify actual Navy maintenance savings and long-term benefits, identify all technical and logistics problems, and facilitate development of possible solutions to these problems.

Discussion about downsizing, budget reduction, and future cost-effectiveness leads directly to the issues of infrastructure reduction, regionalization, outsourcing and privatization—all major initiatives taking place throughout the Navy. As installation commanders face ever increasing reductions in their operating budgets, they frequently come to NAVPETOFF for

assistance in conducting OMB Circular A-76 studies or reducing fuel infrastructure. In addition, NAVPETOFF is currently working an OSD initiative to evaluate privatization of select DoD fuel facilities in an effort to reduce the fuel MILCON backlog. Recapitalization of these facilities is particularly important, says Cmdr. Higgins. "While most DoN facilities are in compliance with current environmental regulations, many of these 50 to 70-year-old facilities will need replacement, not just repair, over the next 20 years." And while he delivers high praise for DESC's Maintenance, Repair and Environmental program, he predicts that MRE funds will become overburdened if new construction needs are not addressed before reaching a critical state.

"Five or six years ago," he notes, "the majority of DLA POL Military Construction funds went to Navy locations. But now the priority has shifted to strategic en route locations, primarily the Air Force, in support of DoD guidance." This shift in DoD priority has not deterred NAVPETOFF. "We've been extremely successful in identifying alternatives and workarounds and now have six critical DoN MILCON projects totaling \$65 million programmed for FY01," adds Cmdr. Higgins.

Although capitalization changed the ownership of fuel from Navy blue to DLA purple, NAVPETOFF's mission has not changed – "Provide the best technical support to Fleet customers, ensuring that fuel quality and quantity, maintenance, repair and environmental requirements are satisfied to meet the needs of operating forces."

The Navy Petroleum Office staff consists of 18 civilians and five military personnel. Their Web site may be accessed at: www.navpetoff.navy.mil.★

NAVPETOFF's Other Points of Interest

The Navy Petroleum Office serves as liaison for many joint petroleum programs, coordinating special projects with Navy counterparts, DESC, other Services and commercial entities.

One excellent example of partnering is the DESC/Navy joint In-line Sampling effort. Due to both Navy and DESC concern over the quality of commercial bunker product, DESC contracted a third party to provide participating ships with in-line sampling devices that would take continuous drip samples during commercial bunker receipts. The samples would then be forwarded through the contractor's courier system and tested against the Navy spec requirements.

According to Larry Long, NAVPETOFF's director of Fuel Management, bunker fuel is particularly susceptible to hidden waste oil. "If suppliers know that their fuel may be tested at any time for program compliance, it helps to ensure a better quality of bunker fuel," says Mr. Long. While this program has already shown benefits for both DESC and the Navy, the Military Sealift Command and the Coast Guard are also major participants.

NAVPETOFF also plays an active role in the development of the Fuels Automated System (FAS) program. They provide Navy customer requirements, testing support for Beta versions of base level software, and assist in deployment and implementation issues. "The FAS base level system allows base operation processes, traditionally performed by manual

continued on page 18 ➤

When in Texas, Hit the Ground Running

Heat, Oil, Salt, Confined Space Safety and the Strategic Petroleum Reserve

By Claire McIntyre

Texas is hot, flat and proud. Open land stretches far and wide. Freeway clover leaves intricately intersect. The air is heavy, as solid and tangible as the land it hangs over. Trees bend in the direction of the wind. Even when the wind isn't blowing.

Houston's sleek, streamlined skyline is young—maybe 30 years old. Much of the area was swamp at one time, since carved out of the wet muck into concrete and steel. Many areas flood with a good rain, returning to their original fluid state. Large irrigation ditches and drainage pipes lie in the grass, waiting for assemblage.

“Refinery Row” runs parallel to the ship channel, where storage tanks and piping predominate the landscape. Public service announcements color some of the tanks. Others simply sport company names. Some refineries are marked by a single flame burning high from equipment silhouetted against the sky. A flame signifies less than optimum workings. In the process of refining crude oil, ideally all elements of the oil are utilized in some phase of the process. However, sometimes unused, leftover gas must be burned off—hence the flame. The size of the flame is significant—a large flame translates to large waste.

A tanker bound for Naval Station Roosevelt Roads prepares to load fuel at Defense Fuel Support Point



Tanker loading at Defense Fuel Support Point Houston.

Houston, a recently sold Hess fuel terminal, now owned by Williams Energy. Actually, the vessel is not technically a tanker, but an integrated tug and barge that will transport 250,000 barrels of F76 and JP5 fuel. The top of the barge sits high above the water; when the fuel is loaded, the barge will descend considerably. Until then, a gangplank, amounting to an exceedingly relaxed ladder, hangs over the side of the barge down to the pier, allowing passage between the two points. The barge's \$20,000-per-day price tag is considered cheap.

About 60 miles to the south of Houston in Freeport lies the Bryan Mound Strategic Petroleum Reserve. Here, more than 220 million barrels of crude oil are stored in underground salt caverns. Because the walls of salt caverns are impermeable, they make ideal natural storage tanks for oil, natural

gas and hazardous materials. The caverns can also accommodate a larger amount of oil than other containers. For example, whereas a regular storage tank may hold up to 200,000 barrels of oil and an oil tanker may hold 235,000 barrels, an average salt cavern can hold 12 to 13 million barrels of oil. The largest salt cavern at the Bryan Mound SPR holds 36 million barrels.

Created in 1977, the Strategic Petroleum Reserve consists of four sites located in Texas and Louisiana where stockpiles of crude oil are stored as a hedge, or insurance, against a disruption in Middle East oil imports. Threatened supplies and gas pump shortages stemming from the 1973-74 oil embargo spurred the federal government's formation of the Reserve to eliminate a similar scenario in the future. Locations along the Gulf Coast were selected because of the prevalence of salt

caverns, refineries, pipelines and fuel terminals. Only once, during the Gulf War, has a president ordered sale of the Reserve oil. In January 1991, President George Bush's order to begin drawdown resulted in the sale of 17 million barrels of crude oil to 13 oil companies.

Combined crude oil storage at the Strategic Petroleum Reserve sites equals about 560 million barrels. Bryan Mound, the largest facility, contains 20 salt caverns which must be leached every five to 10 years to remove salt. Brine storage tanks are emptied three miles away into the Gulf of Mexico via a "brineline."

Amid the day-to-day workings of refineries, fuel terminals and storage facilities, Defense Energy Support Center-Americas hosts a Quality Conference in Houston that brings together more than 20 quality surveillance representatives from local environs and a spattering of cities ranging from St. Louis to Grand Forks to Tampa to discuss issues related to fuel quality control. As part of the agenda, conferees attend a Maritime Confined Space Course to practice techniques to ensure safety when entering small, potentially dangerous spaces onboard vessels carrying fuel.

Facilitated by representatives from the National Fire Protection Association, conferees conduct tests on simulated tanks—plexiglass boxes that replicate varying air composition within a ship's confined areas. Armed with instrumentation that measures levels of toxic and combustible gas, quality surveillance representatives analyze invisible gases within the boxes to determine if entering such a space would be safe. The tests also measure if conditions are safe for performing "hot work," which includes welding or any heat-generating activity.

Toxic gases measured include benzene and nitrogen.

Conferees bring the room alive with audible meter readings and computations. They believe the course will have a huge effect on carrying out their daily job responsibilities, that the conference may well have life-saving repercussions.

If there are risks in working with flammable materials, what better place to hold the conference than Houston—a city of heat, oil and speculation. Drive southeast toward Galveston and find houses built with backends on stilts resting in the water.



DESC Quality Surveillance Representatives Dick Hoffman, Cushing, OK (left), and Charlie Jordan, Tampa, FL, measure toxic gas levels in simulated ship tanks as part of confined space course.

One small hurricane, not uncommon to the region, and . . .

But Texas seems to thrive on risks and extremes that rise from oil-rich earth, coastal towns, solid air, refinery flames and high winds. It may be a potent mix, but it's just another day in the great state of Texas. ★



Ocean Star oil rig/museum located in Galveston, a 32-mile-long island located off the Texas Coast about 50 miles southeast of Houston. The retired rig, built in 1969, provides onboard displays, including scale models of offshore drilling equipment and remotely operated vehicles that perform work once accomplished by divers. Helicopter pad allows workers to arrive for shifts by air.

DESC Turns to Electronic Fuel Transactions

By Jean Parry-Hill,
Direct Delivery Fuels

Electronic commerce gets a shot in the arm and a good bit of the Defense Energy Support Center's ear with the development of the Center's new Internet-based application, Paperless Ordering & Receipt Transaction Screens (PORTS). The new system will electronically process fuel orders and provide receipts and invoices for deliveries to Department of Defense (DoD) and other federal government customers. By combining existing DoD/DESC databases and financial systems with Internet technologies, PORTS replaces a labor intensive, mostly paper process that is highly susceptible to errors and processing delays.

A key element is the integration of existing stand-alone databases into a cohesive whole, accessible via user-friendly Web screens, to better serve the needs of both contractors and government customers. The process automatically pulls fuel information from requirements, bid evaluation, price escalation, and tax databases to minimize data entry and corrections. Invoices are electronically matched with orders and customer-verified receipts prior to payment, essentially eliminating the need for reconciliation and contractor commercial invoices. PORTS evolved from Demo No. 1 for reengineering natural gas and heating oil programs, one of three regional energy management demos under Defense Reform Initiative Directive #21.

As an integral component of the Fuels Automated System (FAS) and

the DLA Electronic Mall, PORTS will not only support DoD reform initiatives for maximizing use of paperless processes, but will also expand opportunities for DESC to conduct business electronically. "About half of all fuel transactions within DESC are generated by Posts, Camps and Stations customers—affecting approximately 4,400 Contract Line Item Numbers, valued at \$1.3 billion," says Kelly Morris, director of DESC's Direct Delivery Fuels commodity business unit. "PORTS will provide these customers with a low-cost Internet solution to move to a paperless ordering and receipt process and ultimately expand electronic capabilities to other business processes."

PORTS is eminently a "win-win" initiative, benefiting both contractors and the government by more closely reflecting commercial practice for these kinds of transactions. In order to maximize benefit to the government, DESC's initial implementation focuses on the Posts, Camps and Stations environment where contracts involving high-volume, relatively low-dollar transactions drive up government administrative costs. On 1 September 1999, the first orders via PORTS began to be successfully generated under recently awarded contracts in COG 3 (mid-Atlantic area).

"The good news is that PORTS, with appropriate modifications, can and will easily migrate to other DESC commodity business units," adds Col. Ray Rodon, DESC deputy director for operations. ★

PORTS Highlights

- Smart" contract line item database "feeds" fixed information to orders, receipts and invoices. Reduces errors; only variable data is entered.
- Posts adjusted prices in effect on day of delivery by integrating contract databases and prices-to-Web technology.
- Contractors initiate preparation of receipt/invoice documents via Web screen directly from customer-signed delivery tickets.
- Generates customer demand data.
- With less data entry overall, electronic matching of transactions improves efficiency, and areas of disagreement between the government and contractor on deliveries are identified early in the process.
- Draws federal/state/local tax information from databases at the Contract Line Item Number (CLIN) level.
- Eliminates paper processes and universal use of electronic fund transfers (EFT) for contractor payments.
- Orders and invoices released by access-controlled Personal Identification Numbers (PINs) assigned by DESC. Windows NT firewall around the Web server. User identification and password required for log on to PORTS.

Paperless Ordering & Receipt Transaction Screens

Customer creates an order:

Army Act Test 013 D28
020-13 | COMMERCE CITY, CO | DL2 | JSF0600-98-D4515 | IT

Requisition Serial Number: 0001
Requisition Number DODAAC: W51G2F
Order Number: B201
Quantity: 8500
Order Date: 04/27/1999
Signal Code: A
SUPAAC:
Fund Code: AB

Special Delivery Instructions
Be Sure To Fill In Delivery Dates
Delivery Date(s) By 4/29/99. Enter via gate #3.

Next Return To Activity Menu Help

Contractor prepares a DD Form 250/Invoice:

DD250 INVOICE INFORMATION

Contractors Bidder Code E178

Change Price Only If Price Is Different From The Escalated Price Shown.

Invoice Number: 12345
Price: 0.60226
Discount %: 1.0000 %
Discount Days: 10
Method of Quantity Determination: Non-Loading Rack Meter

Next Help

Customer verifies accuracy of DD Form 250:

Non-Loading Rack Meter Method of Quantity Determination

Review Delivery Tickets For Shipment PCS9117, Line Item, 020-13, Order, B201-00

Ticket	Tank Id	Quantity	App Quan	Link
01		8000.0	8000.0	
02		500.0	500.0	
		8500.0	8500.0	

OK

New Desk Officers Offer Regional Expertise

By Capt. Cliff Perry, USAF

We are all preparing for the next millennium, coming to grips with the unknown, new experiences and the dreaded Y2K bug. And while many organizations are undergoing changes to allow them just to operate in the 21st century, here at the Defense Energy Support Center we are looking for changes that will move us forward through the 21st century.

A prime example is a new staff designation within the Contingency Plans and Operations Division, formerly known as the Logistics Readiness Division of DESC. While the division retains all functions of its Command Control Center and Defense Logistics Agency Contingency Support Team, a new configuration of desk officers completes the division's three branches.

Under the old concept, DESC customers and subordinate offices did not have a single point of contact to call for information or help in resolving fuel-related problems or questions. The new concept of operations appoints a resident expert, or desk officer, for each geographic and/or functional Commander in Chief (CINC) who will handle all calls or questions for that area. Instead of making numerous phone calls within DESC to track down information, our customers may call the desk officer for a specific region who will do the legwork for them. The desk officer may not have all

the solutions, but they will be able to put callers in contact with those who do. Customers will no longer have to search the DESC directory or peer into a crystal ball to find the correct number at DESC to receive help.

Contingency Plans & Operations Division

- ✓ Desk Officers
- ✓ Command Control Center
- ✓ DLA Contingency Support Team

As chief of the Contingency Plans and Operations Division, Maj. Gerald David, USAF, oversees desk officer staff activities. The desk officer staff consists of Capt. Cliff Perry, USAF, who manages Southern Command (SOUTHCOM) and United States Joint Forces Command (JFCOM); Mr. Paul Dupoise, who manages Pacific Command (PACOM); and Mr. A. J. Lynch, who manages European Command (EUCOM). Each desk officer has a primary and alternate Area of Responsibility and also stands ready to support the functional CINCs.

Capt. Perry is a USAF supply officer with a background in Petroleum, Oil and Lubricants (POL) and logistics plans. He arrives from Yokota Air Base in Japan where he served in numerous base-level supply/fuels positions.

Capt. Perry can be reached at 703-767-8416 or DSN 427-8416.

Mr. Paul Dupoise, a retired USAF chief master sergeant, served on active duty in the fuels field for 26 years. He was assigned to most of the USAF major commands during his career and served as the HQ USAF functional manager at the Pentagon for six and a half years. He has been with the Defense Logistics Agency and DESC for the past 12 years as a contingency planner. Mr. Dupoise can be reached at 703-767-8413 or DSN 427-8413.

Mr. A.J. Lynch, a recently retired USAF senior master sergeant, served on active duty for 21 years. His vast fuels experience includes numerous base-level POL positions. He has served with numerous USAF commands, the Air Staff, and the Directorate of Aerospace Fuels (Det. 29). His final assignment was with DESC as the Into-Plane program contract manager and can be reached at 703-767-8137 or DSN 427-8137.

Capt. Mel Whittenburg, USA, who managed Central Command (CENTCOM) and served as the first desk officer, recently departed for Headquarters, Department of the Army. A civilian will be hired in the near future to fill the position. Mr. Dupoise, who toured the CENTCOM Area of Responsibility in March 1999, is the alternate

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When the Clock Strikes Midnight...

By Claire McIntyre

As 1999 closes in on its last few weeks, Y2K rests on the verge of going from a much discussed and often feared potential computer problem to a moment in time when technology will either flow easily into the next century, sputter around initially before getting acclimated, or cause dramatic interruptions to computer-operated systems.

By now, the Y2K controversy needs little explanation. When the calendar turns to January 1, 2000, computer systems, unless properly upgraded and programmed, may not be able to register the new year, instead turning to the year 1900. If the correct date does not roll over, many systems that run on computers could potentially shut down as a result of the date glitch. Any system that runs on computers—including trains, planes, subways, elevators and traffic lights, not to mention banking and power supplies—could malfunction.

So, as the new year fast approaches, how Y2K compliant are Defense Energy Support Center computers?

For more than a year, DESC's Information Systems division has been working to ensure that its systems are ready for the year 2000. DESC's 10 computer systems, seven mission critical and three non-mission critical, run about 3,580 individual computers. In July, remediation and testing of the Defense Fuel Automated Management System, a central database that tracks fuel inventory, transactions and financial

information, marked the completion of DESC's major compliance efforts.

Lt. Cmdr. William Wellman, SC, USN, serves as deputy chief of DESC's inventory and distribution



management division and leads the organization's Y2K compliance initiative. "While we certainly have contingency plans to cover the potential for any overlooked areas, we are far more concerned about our suppliers' capabilities and infrastructure readiness than we are concerned about our own systems," he notes.

Are DESC's overseas regions at major risk for disruptions?

Not according to Lt. Cmdr. Wellman. "Both American and overseas utilities have spent considerable resources in preparing for Y2K issues. Within the United States, almost every system is compliant, and the biggest disruptions will probably be the buying patterns of the few Americans who persist

in preparing for a worst-case Y2K scenario," says Lt. Cmdr. Wellman. "There's more opportunity for disruption overseas, but all of our CINCs [Commanders in Chief] have made excellent plans on responses for almost any situation that might arise. The bottom line is that the U.S. Department of Defense, as well as DESC, is ready."

"The bottom line is that the U.S. Department of Defense, as well as DESC, is ready."

Even if a system is Y2K ready, interfacing with a system that is not can cause problems. But Lt. Cmdr. Wellman does not foresee significant roadblocks under such a scenario. "I expect that any number of small glitches will make themselves apparent in the first weeks of the year 2000, but I expect the key systems for our business processes to continue to function. Any spot incidents will be within the capabilities of our world-class team to overcome."

The Defense Logistics Agency, which oversees DESC, has 86 computer systems, 34 mission critical and 52 non-mission, nearly all of which are now Y2K compliant. DoD has about 25,000 computer systems, 2,000 mission critical, running 1.5 million individual computers. DoD is expected to spend more than \$3 billion on Y2K compliance by March 2000.★

Oil Spill Response Training

By Kim Sager

Oil Spill. These two words have the power to invoke fear, worry and stress. Personnel at Defense Fuel Support Points do all they can to ensure oil spills do not occur. But what if the unthinkable happens? What do you do when gallons of jet fuel are spilling into the environment threatening humans, habitats and businesses? How do you prepare for such an event?

Enter Bowman Olds, a contractor for Science Applications International Corporation who conducts oil spill response training for Defense Fuel Supply Points. Trainees spend two days learning the ins and outs of oil spill response, from notifying authorities to containing the spill to dealing with the media.

The most recent training was held at DFSP-Grand Forks in North Dakota. Participants included all full and part time employees of the DFSP, members of the Grand Forks Fire Department, and representatives from Grand Forks Air Force Base and DESC-Ft. Belvoir.

The training is a legacy of past spills such as the 1989 Exxon Valdez oil spill in Prince William Sound, Alaska. In response to national and international outrage over the spill, Congress passed the Oil Pollution Act of 1990 (OPA 90). The law requires oil contingency and response plans, owner/operator financial responsibility requirements, as well as annual training and no-notice drills.

Training included the following worst case discharge scenario in which trainees went through all steps of emergency response:

It's a three-day holiday weekend, the terminal is closed and the

security guard has just finished making his rounds. Thunder, lightning and rain have filled the skies for the last six days. At about 2:00 a.m., lightning strikes the terminal, the power goes out and the largest tank fails. Thousands of gallons of jet fuel spill out of the tank and into the berm. The berm, which is saturated with water from the storms, also gives out and the fuel begins spilling into the environment, heading towards farmland and a major river. What do you do?

Trainees began by implementing the Incident Command System. Headed by an incident commander, the system consists of four major sections: Operations, Planning, Logistics and Finance. After dividing into the relevant four sections, trainees worked out their duties and responsibilities in the emergency and prepared a briefing. In the event of

an actual emergency, the DESC director and the state governor would be among those on the scene in need of briefings. Likewise, the news media would be on the scene demanding updates and information



DFSP-Grand Forks is equipped with three truck loading racks. The terminal ships and receives fuel via both truck and pipeline.

as well. Several of the trainees practiced giving a television interview to demonstrate how to handle a media interview.

The training culminated with a visit to the Grand Forks fuel terminal where trainees got a first-hand look at the materials used to contain and clean a spill. In addition, personnel from the Grand Forks Fire Department conducted a demonstration of their hazardous materials response equipment.

OPA 90 training provides personnel in the fuel business with valuable information and skills that hopefully will never have to be used. For more information on oil spill response training, contact Bowman Olds at 703-676-2048. ★



Quality Surveillance Representative Bill Pulley discusses safety equipment in the fire foam room at Defense Fuel Support Point Grand Forks.

PowerTrack System to Speed Payments to Carriers

DESC Begins Testing

As a means to pay contract carriers more expeditiously, the Department of Defense will adopt PowerTrack, a new automated, Web-based payment program from U.S. Bank that replaces paper transactions and bills of lading. The program allows contractors to be paid electronically within two or three days instead of waiting weeks. Shippers will be billed electronically as well.

DOD is estimated to save more than \$10 million each year under the new system due to reduced paperwork and personnel required to process payments. Annual payment transactions are expected to decrease from 1.25 million to about 108,000.

Each year, about 600 carriers deliver 12 million shipments worth \$1 billion for the Army, Air Force, National Guard, U.S. Transportation Command and the Defense Logistics Agency. Modes of delivery covered under the PowerTrack system are motor carrier, air freight, express parcel and intermodal container, which are expected to be operating fully under the new system by the end of 1999. Ocean carriers are scheduled to be operating by the end of 2000.

The Defense Energy Support Center began pilot testing of the PowerTrack system on October 12 with all truck carriers at Defense Fuel Support Points Houston, Texas, and Carteret, New Jersey. Pipeline and barge carriers will begin participating within 30 days. If the initial phase of the testing proves successful, the pilot program will expand to all DESC facilities in Houston and Ft. Dix, New Jersey, in January.

Jerry Stone, a distribution specialist for DESC-Americas who leads DESC's PowerTrack pilot program, believes the system will eliminate many problems associated with paying carriers in a timely manner. "It will also greatly reduce our administrative workload," he says. "Anything that eliminates GBLs [government bills of lading] has got to be a vast improvement."

DoD's adoption of the new system springs from Secretary of Defense William Cohen's Defense Reform Initiative, specifically, Management Reform Memorandum #15, to reform financial documentation and procedures relating to transportation. Testing began at various sites in April; the system is scheduled for DoD-wide phase-in over the next two years. ★

*Desk Officers. . .
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CENTCOM desk officer. The CENTCOM work station phone number is 703-767-8412 or DSN 427-8412.

Fax numbers for all desk officers are as follows:

Secure Fax: 703-767-8421
Non-Secure Fax: 703-767-8399

A number of ongoing efforts help to ensure that desk officers are prepared to serve as resident experts for their particular region. First, all desk officers actively research their areas of responsibility—they are keenly interested in the history of their region, current political and social situations, and most importantly, how DESC can better support its customers within that region. Second, not only do desk officers rely on past POL experience to do their job, but also they receive additional training from various Service-specific and joint schools. Third, they also visit regions to meet their counterparts and become more familiar with day-to-day operations, international agreements, and potential petroleum resupply choke points.

Our objectives: support the field, work the tough issues and assist the DESC customer. ★

In the next edition of *Fuel Line*—Contingency Plans and Operations' other two branches: the Command Control Center and the Defense Logistics Agency Contingency Support Team.

**Under the new system,
contractors will be paid
within two or three days
instead of waiting weeks.**

Supporting Missions Overseas With Foreign Military Sales

By Joyce Ziesler,
Facilities and Distribution

Although you may not have heard of the Foreign Military Sales (FMS) program, it represents one way the Defense Energy Support Center participates in U.S. military missions abroad.

Performed by the staff of DESC's Facilities and Distribution Commodity Business Unit, the FMS program came to the forefront during the Bosnia-Herzegovina peacekeeping effort. In the fall of 1995, after the U.S. made a commitment of forces to support the peace and control the conflict in that part of the world, NATO asked the United States to serve as the Role Specialist Nation (RSN) for bulk petroleum support to the Implementation Force—NATO peacekeeping forces.

Following the United States' costly involvement in the Gulf War, the Office of the Secretary of Defense (OSD) mandated that, if the U.S. accepted the RSN mission, funding would come from the FMS program. Under the program, foreign countries must deposit money in advance to the U.S. Treasury. The Defense Security Cooperative Agency, a defense element within the State Department that is managed by OSD, oversees the FMS program.

DESC accepted the mission on behalf of the United States and set up procedures for all involved military elements to follow, including accounting and record keeping database programs.

Under the FMS program, DESC also supplies the Government of Israel with annual contracts amounting to an estimated \$150 million. The contracts reflect specifications required by Israel and have been a great success for the last six years.

Another long-term mission for the FMS program has been providing fuel for the Colombian Navy's drug insurgency effort. A new contract was issued in August 1999 for continuing drug enforcement efforts.

A new mission on the horizon for the FMS program involves a test program, still in the planning stage, to supply bunker fuel to NATO ships worldwide.

As you can see, DESC's Foreign Military Sales requirements are varied. We are not only capable of supplying fuel to our troops "Around the Clock, Around the World," but we can also supply fuel directly to other nations around the world. ★

*Navy Petroleum Office. . .
continued from page 9*

processes, to now become fully automated," says Lynda Turner, director of NAVPETOFF's Petroleum Systems Division. The goal of the program is to implement a true DOD-wide accounting system, which accommodates all Service requirements. This goal is extremely challenging and requires a strong teaming effort between DESC and the Services.

The NAVSUP strategic vision of "One Touch Supply" also promotes integration of automated systems such as Automated Tank Gauging (ATG), Automated Fuel Service Stations (AFSS) and Automated Fuel Handling Equipment (AFHE) with the FAS base level system. "The premise behind this vision is to take full advantage of data collection at the source," says Ms. Turner. This is another area where NAVPETOFF personnel work closely with the DESC engineering staff to ensure all existing petroleum systems installed at Navy sites are able to pass timely and accurate information to base level software with the least amount of human intervention.

Addressing systemic long-term fuel quality problems is of major interest to the Navy. To tackle these types of issues, the Navy has formed an Integrated Product Team consisting of members of the Navy fuels and lubricants community. This group, often times in coordination with the DESC Quality Division, addresses issues that may affect the fuel acquisition, transportation, storage, handling, distribution, and last but not least, fuel performance in Navy equipment. Total integration with DESC and the Services is not just a luxury, but critical in these times of downsizing and budget cuts. ★

DESC supplies the Government of Israel with annual contracts amounting to an estimated \$150 million.

DESC and DOE Forge Partnership

The Defense Energy Support Center and the Department of Energy recently signed a Memorandum Of Understanding (MOU) that allows DESC to use DOE's Super Regional Energy Savings Performance Contracts (ESPCs) as well as their technology-specific ESPCs.

An ESPC contract allows the government to use creative financing for improvements and/or efficiency upgrades to the energy facilities of commercial or public buildings. The newly established partnership allows DESC to use various types of large-scale, highly technical ESPCs already created by DOE. DESC can therefore rapidly establish an ESPC



Sharon Murphy, director, DESC Energy Enterprise Office, (left) and Beth Shearer, DOE Federal Energy Management Program director, sign the Memorandum of Understanding that allows DESC to use DOE's Super ESPCs for its customers.

for a new customer without creating it from "scratch."

Under a DESC ESPC, a private company pays for renovations to military/government building facilities

(lighting, air conditioning, etc.), and maintains those facilities as well. The company profits from energy savings realized from those renovations, and the government—which does not pay for the renovations—saves thousands of taxpayer dollars. (See previous issue of *Fuel Line* for details on DESC's landmark ESPC for the Military District of Washington.)

Congress charged FEMP with a leadership role in federal energy management. This leadership includes implementation of ESPCs. FEMP provides many services to support federal agencies, including audits, design assistance, training, information and promotion. ★

Training Scheduling Streamlined

Now Defense Energy Support Center employees can plan and request training and complete Individual Development Plans (IDPs) through a desktop application. The Workforce Development Office recently implemented the DESC Automated Training System (DATS), a Microsoft Access 97-based server application that allows employees to plan their professional development and schedule classes by generating DD Form 1556s (Request, Authorization, Agreement, and

Certification of Training and Reimbursement).

The application also helps the Workforce Development Office to track course requirements, course schedules and certification status and provide workforce development statistics to the Defense Logistics Agency.

In addition, DATS contains Web links to educational areas of interest, including the Defense Acquisition University Catalog, DLA onsite training courses, and a variety of

higher education colleges and universities.

The Workforce Development Office is currently working with the Information Systems division to implement DATS in the DESC regional locations.

"We believe this innovative application will significantly enhance the ability of DESC employees and managers to streamline the training process," says Robert McClellan, chief, Manpower and Management Analysis Division, Directorate of Resource Management. ★

Utility Distribution Systems— DESC's Next Frontier

Source: *Energy Enterprise Office*

In the midst of a number of new initiatives in the energy sector, such as electricity deregulation and new energy conservation goals, there's a growing movement afoot in the Defense Energy Support Center to provide customers with contracting and technical/engineering support for the privatization of their four utility distribution systems—electricity, natural gas, water and waste water.

The Military Departments have been directed to divest themselves of ownership of these systems to private industry when proven economical and when national security is not impacted. The new owners of these systems will also be responsible for all associated maintenance and operation requirements. This program not only represents compliance with a Department of Defense directive to privatize utility distribution systems, but showcases DESC's further foray into the utility and energy areas. DESC's involvement runs from contracting support to total program management of the entire privatization effort.

Under DESC's utility privatization program, DESC can provide contracting and technical/engineering support to the installations, while a private contractor would eventually assume ownership, operation and maintenance of the utility distribution systems—functions formerly performed by the military installation utilizing their own personnel or contractor support. Because the

Military Departments in many cases do not have centralized contracting offices, DESC's program would provide a dedicated staff of contracting personnel to help streamline the overall privatization process. DESC personnel can help address many of the outstanding issues involved in the very complex utility privatization program by eliminating duplicative efforts and the need to "reinvent the wheel" for each of these issues.

"Although utility systems' privatization is being mandated by DoD, it clearly makes good business sense to let industry manage something that is not a core function of DoD. We are in the business of warfighter support – not owning and operating utility systems," says Mark Iden, deputy director of DESC's Energy Enterprise Office.

Mr. Iden points to the nearly 2,800 utility distribution systems that DoD has identified for privatization by September 30, 2003. He also points to the efficiencies available when installations join together instead of going through a separate process for each installation or utility system. DESC has been doing regional contracting for years and that experience will pay off in this new venture.



Mr. Iden points to several regional privatization efforts that are already underway. The Texas Regional Demonstration (TRD) currently includes 10 installations (eight Air Force, one Army and one Navy) involving 38 utility distribution systems. DESC is providing the contracting support for the TRD effort and is also serving as the business/program manager for the Army and Navy. Four Army bases in Georgia—Fort Stewart, Fort McPherson, Fort Gillem and Hunter Army Airfield—have joined forces in a combined solicitation that DESC issued at the end of June. The Georgia effort involves 14 utility distribution systems. Most recently,

a joint effort was identified in the Anchorage, Alaska area. Anchorage's side-by-side bases, Fort Richardson and Elmendorf AFB, along with several local Army and Air National Guard units, have formed a partnership with DESC in pursuing their utility privatization requirements.

"We've done a lot of marketing, when asked," says Mr. Iden. "We're trying to get interest geographically instead of approaching base by base." He notes that the Army, which has expressed interest in privatizing more than 110 of its systems, has been particularly receptive to DESC's services. Although DESC's role is laid out in a Defense Reform Initiative Directive (DRID) as "assist and facilitate" the Military Services with their utility system privatization efforts, the Army sought out DESC's support early on. The Army's Office of Assistant Chief of Staff for Installation Management and DESC have truly partnered in a big way to "get it done" at Army installations.

Besides the big component of competitive contracting, environmental, real estate, technical and legal issues come into play during infrastructure privatization, resulting in a complicated process that has required, in many instances, one and a half to two years of preparatory work. "We are learning every day as we go on, as we issue solicitations, as we get feedback," says Mr. Iden. "The DRID does not mandate that DESC do all privatization actions. The Military Departments realize we are a service available to support them. They can decide if they want to use DESC's 'soup to nuts' services," he adds. "However, the more we [DoD] partner and take advantage of regional economies of scale, the more likely DoD is to be successful as an entity in this important energy initiative."★

From Dyess Air Force Base. . .

Winner of the American Petroleum Institute Award

The American Petroleum Institute, a national group that promotes petroleum industry standards, sponsors an annual award designed to promote excellence in fuels management. Since West Texas is known as oil country, it is only fitting that the Dyess Air Force Base's Fuels Management Flight was named as the 32nd Annual American Petroleum Institute Award winners for 1998.

Dyess Air Force Base's Fuels Management Flight earned top honors as a result of dedication, hard work and a tremendous "make-it-happen" attitude. Team Dyess' motto, "Refined Excellence," is also an attitude that this team of professionals display in everything they do.

"We've led the way in fuels innovations for the entire Air Force," said Senior Airman Patricia Labranche. "We routinely have people visit Dyess from other bases to see how we do things."

Master Sgt. Tony Potts, operations superintendent, said his time at Dyess has highlighted his career. "After nearly 19 years of service I can honestly say that my last 17 months with Team Dyess



has been the most rewarding." Sgt. Potts was also quick to praise the outstanding support the flight received from various other units in preparation for the competition. "Awards such as this are not won by a single flight, squadron or group. The support provided by all members of Team Dyess was truly amazing and greatly appreciated. So congratulations goes out to Team Dyess, not just the fuels flight or supply squadron."

Thirty-two members of the fuels flight, accompanied by Col. Joseph Stein, 7th Bomb Wing commander, and Col. Carmen Mezzacappa, 7th Logistics Group commander, traveled to Washington D.C. on August 27 to accept the award presented by Maj. Gen. Scott Bergren, director of maintenance, deputy chief of staff for installations and logistics, at the Pentagon.★

Note: each year, API issues a fuels award to both the Air Force and the Navy. For information on the latter, see Fuel Line, Vol. 2, 1999.

DESC Employees of the Month...

August

James Cotton, a contract specialist in the overseas Bulk Fuels team, was instrumental in achieving mission objectives during a recent trip overseas. He encouraged both potential suppliers and past contractors to bid under the upcoming WESTPAC 99 solicitation. He successfully requested a contractor to convert from its current Jet A-1 contract to JP8 deliveries and resolved quality issues. Back at Fort Belvoir, while serving as lead negotiator for an offeror from a major oil company, he volunteered to serve as lead buyer for an emergency supplemental solicitation. He also volunteered to assist as lead buyer for a Foreign Military Sale, which is a new mission for the overseas Bulk Fuels team. To that end, he successfully negotiated a sole source contract with a Middle Eastern company to support the Military Services in Qatar.



James Cotton

September

Nadine Sellers, an energy manager in the Alternative Fuels Commodity Business Unit, provides exceptional customer service and support for seven customers in the Natural Gas program. In addition, she is always willing to assist other co-workers with her expertise. During the month of August, she was selected to fill a vacancy in the Natural Gas Division as a contract specialist. With three out of five experienced energy managers leaving to pursue other job opportunities, she volunteered to delay her move as a contract specialist to help train new multifunctional employees, easing their transition to a new division. Also, Ms. Sellers volunteered to take on responsibility for five additional customers, ensuring that they received high quality service.

October

Shyletha Williams serves as the Natural Gas division's traffic management specialist for more than 40 installations (operating forces of the Military Services, Department of Defense and Federal Civilian Agencies in the Northeast Region). She performed analysis for each of the installations, which included demonstrating potential savings, calculating monthly natural gas prices, and determining best and final price revisions at the time of contract awards. In late 1997, she became resident expert and lead analyst for the northeast region. In late 1998, she was reassigned to the south and west region as the energy manager for installations serviced by San Diego Gas & Electric and Pacific Gas & Electric. She provides assistance and training to her team and is often considered an unofficial team leader.

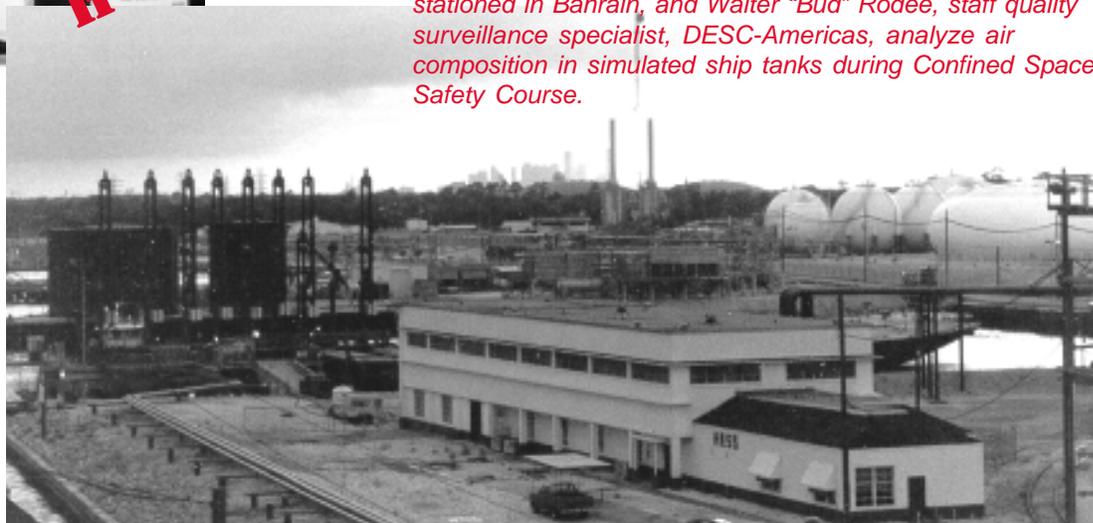


Shyletha Williams



HOUSTON

Left, Sam Herrera, quality surveillance representative for New Mexico at Defense Fuel Support Point Alamogordo and above, seated, left to right, Master Sgt. Lester Shiffler, USAF, DFSP Houston, Capt. Chuck Demery, USA, now stationed in Bahrain, and Walter "Bud" Rodee, staff quality surveillance specialist, DESC-Americas, analyze air composition in simulated ship tanks during Confined Space Safety Course.



View from a tanker, Defense Fuel Support Point Houston. Natural gas storage tanks appear in right background.



American Forces Press Service—Navy Lt. Ron Candiloro's F/A-18 Hornet creates a shock wave as he breaks the sound barrier. The shock wave is visible as a large cloud of condensation formed by the cooling of the air. A smaller shock wave can be seen forming on top of the canopy. It is possible for a skilled pilot to work the plane's throttle to move the shock wave forward or aft. U.S. Navy photo by Ensign John Gay.

DoD Studies Bees' Ability to Locate Land Mines

American Forces Press Service

WASHINGTON — The latest buzz from the Pentagon is a honey of a story: The military's trying to train bees to locate land mines.

And if a swarm of honeybees doesn't sound like your typical military unit, how about a battalion of beetles, a legion of lobsters and a gaggle of geckos? They've all been drafted into a DoD effort to explore, and possibly harness, the natural capabilities of the zoological kingdom.

DoD, through the Defense Advanced Research Projects Agency, is in the midst of a three-year study to determine whether honeybees, equipped with tiny radio frequency tags, can help detect land mines. But as Alan Rudolph quickly pointed out, the current research with honeybees is part of a larger research study of possible military-related uses for crustaceans, insects and reptiles.

The larger research project is known as the "Controlled Biological and Biomimetic Systems" program, said Rudolph, program manager in DARPA's Defense Sciences Office.

First, the honeybees.

Under a \$3 million program funded by DARPA, scientists and engineers at various research and development centers across the United States have been working with honeybees and developing technologies to turn the insects into information collectors wearing tracking devices that may help pinpoint mines within a designated area.

Later this year, engineers from the Pacific Northwest National

Laboratory and the University of Montana will fit 50 bees with the radio tags and release them into a minefield to see if the combination of insect and technology works. The tags, no larger than half a grain of rice, will be attached to the backs of the bees.

Scientists will track the bees using complex electronics, software and computers, some located in an engineered bee hive. Each time a bee leaves the hive, scientists will know its direction of flight, points where the bees landed and flight time. Inside the hive, special sensors will scan for chemicals brought back on the bees' bodies. Scientists believe the tracking information, combined with the chemical analysis, will help pinpoint the locations of mines.

Why honeybees?

Rudolph said the insects have been used for many years to collect environmental information, such as the presence of pollutants or trace materials on plants. He said the Environmental Protection Agency registered honeybees as valid data collectors — their mop-like bodies soak up any contaminants they contact. Additionally, Rudolph said social animals such as bees and dogs are highly trainable and respond well to positive reinforcement and rewards.

Testing on the honeybees' "mine sniffing" abilities and the radio frequency tags are proceeding smoothly, Rudolph said, but practical applications are likely years away.

In addition to testing the bees' effectiveness in a controlled minefield later this year and testing the technologies for receiving and

processing data from the RF tags, Rudolph said, researchers will also be looking closely at bee behavior. For example, how far will they travel to look for the food source? How efficiently do they locate the mines? And how long do they retain the information learned during training?

Tests will then shift from controlled to real-world situations. And showing effectiveness under lab conditions and actual field deployments are two different things, Rudolph said.

"We don't have visions of soldiers carrying bees into a fray," he said. "We'll be seeking out defense customers interested in helping us test some of these systems in real-world situations."

While the honeybees' mine detection training has received most of the news media's attention recently, Rudolph pointed out that's but one application being studied. Similar research is under way to determine if bees might be useful in detecting chemical and biological agents.

Nor are bees the only insects being studied for such applications. Testing is also ongoing to determine whether parasitic wasps can be trained to associate food with byproducts released by chemical or biological agents and to swarm where they might be stored. Similarly, giant sphinx moths are being studied to see if they, like wasps, can be trained to detect low levels of chemical compounds.

Man's best friend may indeed be a dog, but if DARPA's research projects prove successful, a soldier's best friend may be the creatures they now swat, stomp or shoo. ★