

Transcom Seeks New Efficiencies, Cost Savings

AMERICAN FORCES PRESS SERVICE (NOV. 26, 2012)

Donna Miles

SCOTT AIR FORCE BASE, Ill.—When mailing a letter, you can pay a premium for next-day service, or simply use a single stamp for standard delivery.

U.S. Transportation Command wants to give military decision makers the same kinds of choices—particularly as the United States draws down operations in Afghanistan and the Defense Department faces the tightest budget squeeze in more than a decade.

Through 11 years of sustained conflict, the Transcom staff has prided itself on the ability to quickly deploy forces and equipment into the combat theater and to sustain them through redeployment, said Bruce Busler, director of the command's Joint Distribution Process Analysis Center.

"We are very good at being effective. Transcom has never let one of our customers down," he said. "We are brute-force effective, when necessary, and we will always deliver. That is one of our mantras here."

The problem, he said, is that the resources needed to maintain that level of service may not be available in the future—at least not across the board. "The department has made it very clear that we need to be more efficient in how we do our operations," said Busler.

A team of analysts and engineers in Transcom's Joint Distribution Process Analysis Center is committed to identifying ways to improve the command's efficiency as well as effectiveness without sacrificing the quality of service it provides, he said.

That begins with managing overhead—currently about 9 percent, but on a trajectory to reach as high as 14 percent by fiscal 2016 as demand for services drops unless new approaches are adopted, he said. Air Force Gen. William M. Fraser III, the Transcom commander, has challenged his command to bring that figure closer to 10 percent.

With these marching orders, the Joint Distribution Process Analysis Center team is conducting a top-to-bottom review. Their goal is to identify concrete data to support financial decisions and improve the bottom line as part of the command's overall strategic plan released in October, Busler said.

The team is focused heavily on areas where Transcom spends the most money—primarily in its operational areas, in the fuel, information technology, and personnel ac-

counts—and looking for cost-saving measures. Although a lot of work is going into these areas, Busler said, reducing the actual cost of transportation is where the biggest opportunities and payoffs will be found.

"If you can't see and manage where your money goes, the ability to actually control that outcome is probably going to be pretty poor," he said. "So we are trying to instill a disciplined process and provide this ability in the right context and based on [the command's] priorities to make decisions on how we allocate command resources."

The teams' analyses are shedding light on the entire transportation and distribution enterprise.

They are providing insights, for example, on big, long-term issues such as how cargo planes, ships, and aerial refuelers will support future transportation and logistics demands. A mobility capabilities assessment for 2018, in progress now and due to the Pentagon in January, will help to shape recommendations for the department's strategic review, Busler said.

The team also is appraising existing seaport, airport, railway, and highway infrastructure as well as global access to determine if it can support future Transcom needs.

Meanwhile, the staff has an immediate operational role as the military transitions from the nonstop, high-tempo operations of the past decade—and the big budgets that supported them—to a more austere, post-conflict era.

They're reviewing the command's day-to-day operations, crunching the associated numbers, and challenging conventional ways of doing business to come up with new alternatives, Busler said. In the process, they're studying the best practices commercial airlines and shipping companies use to turn a profit.

For example, the Transcom team, working with its air component, Air Mobility Command, came up with a fuel matrix for buying fuel where it's less expensive—even if it might mean carrying extra fuel to the next destination. Recognizing the expense and logistical demands of refueling cargo planes in landlocked Afghanistan, for example, they identified circumstances when it might make sense to gas up in Kuwait at about half the cost.

The fuel-buy matrix is now being used to guide these decisions, and already is saving the department \$10 million to \$15 million a month, Busler reported.



Airmen and soldiers load a mine-resistant, ambush-protected vehicle onto a C-17 Globemaster III aircraft to expedite delivery of the life-saving vehicles to deployed forces, Aug. 25, 2009. Looking to the future, U.S. Transportation Command officials hope to provide decision makers options in how they transport cargo, along with the associated costs.

U.S. Navy photo by Petty Officer 2nd Class Kim Harris

Working with AMC, Transcom also is analyzing the way cargo is packaged and configured for shipment to reduce the cost-per-pound of delivery.

Busler recalled a visit to a major East Coast aerial port, where operators were working at a frenetic pace to build pallets and load them onto cargo planes headed to Southwest Asia. "We found that the aerial port was very concerned about velocity, as they should be," he said. "They were building pallets that were fairly light, but they were very quickly moving them through the system."

Questioning the operators, Busler realized that their efforts to provide the fastest possible deliveries to warfighters were backfiring. Loading light pallets moved them quickly, but also meant less was being loaded onto each aircraft. And because forward operating bases typically have limited "slot times" to accept inbound aircraft, sending in aircraft not loaded to capacity actually slowed the ultimate delivery time.

"We actually found out that if we could fly airplanes denser, that the cost-per-pound went down and the velocity at the far end of the pipeline was not hurt at all. In some cases, we actually improved it," Busler said. "So by looking at this as an enterprise outcome, we improved our ability to deliver

to the warfighter while actually reducing the cost of that service to the taxpayer."

Busler called this model "a perfect example of what Transcom should be doing to drive enterprise solutions." The challenge coming out of a decade of high-volume transportation operations, he said, is shifting Transcom's business focus to readiness while still maintaining cost-effective solutions for its customers.

In seeking out those solutions, analysts are assessing issues such as when it makes sense to fly equipment when sending it by surface ship costs about one-tenth that amount. They're also gauging how using multimodal transit—possibly through an alternate location—can save money without interfering with the mission.

"What we are offering up is a way to provide people the insight they need to see the problem in a different way and confront their conventional thinking and make a different decision," Busler said.

Transcom's customers ultimately make the call about the transportation and distribution services they purchase, he recognized. To help them, the Joint Distribution Process

Analysis Center is now providing decision makers options—and letting them know the associated costs. Until now, the commands had less precise measures for identifying how their decisions boiled down to dollars and cents.

The new “cost-based decision support” approach allows decision makers to evaluate “Option A” to ship cargo, knowing that it would take a specified number of days and cost a certain amount. But that same decision maker also would understand that the alternative “Option B” might take a specified number of days longer, but may cost less.

The hope, Busler said, is to give decision makers the relevant information to make those choices.

“We are not forcing anybody into the cheapest approach,” he emphasized. “What we want is for our leadership and customers to be able to at least evaluate the options and put a monetary value on them—the cost of a movement or cost per pound for a delivery.”

Busler compared the process to keeping a household budget in check. When money gets tight, it’s time to prioritize what expenses to bear and which ones to eliminate.

“The reality is that we are going to have to operate with fewer resources,” he said. “At the same time, we are very cognizant of our mission and, together with our partners, we deliver for the nation and the Department of Defense when they call us to do that. And that’s a commitment we won’t break. We want to make sure we are able to always deliver.”

AF Receives Space Award

SPACE AND MISSILE SYSTEMS CENTER PUBLIC AFFAIRS (DEC. 4, 2012)

Carla Rose-Pryor

LOS ANGELES AIR FORCE BASE, Calif.—Space and Missile Systems Center Commander Lt. Gen. Ellen Pawlikowski accepted the donation of the Dr. Robert H. Goddard Memorial Trophy from Dr. Bradford Parkinson on behalf of SMC and the GPS Directorate at a special ceremony held at Los Angeles Air Force Base on Nov. 30.

Dr. Parkinson and the “GPS Originators” were awarded the prestigious Goddard Trophy in March 2012. The award recognizes the team’s “significant contributions to the development of the GPS, one of the most innovative space inventions of all time and recently recognized as one of the greatest space contributions to humanity,” according to the National Space Club, which sponsors the award.

The GPS originators decided to give their trophy to Air Force Space Command’s SMC, the home of GPS.

In 1973, the NAVSTAR-Global Positioning System Joint Program Office, headed then by Col. Bradford Parkinson, developed the GPS architecture. Since its inception, GPS has evolved from an idea, to a prototype, to a reality that is a vital part of modern travel and commerce, in addition to its original duty of serving the needs of the warfighter. GPS also contributes vital capabilities to emergency response, agriculture, aviation, maritime operations, roads and highways, surveying and mapping, environmental issues, and the nation’s telecommunications infrastructure.

The history of the GPS program provides a source of “lessons learned” and a sound foundation that continues to make today’s GPS satellites, control systems, and user equipment more reliable and effective, while ensuring the applications that acquire them are more efficient. Today, several GPS pioneers are still involved with the program, providing expert advice through frequent interaction or as members of independent program review teams.

GPS continues to partner with industry and other countries to develop newer and better ways to utilize GPS signals. As such, GPS continues to be the gold standard to which all other Global Navigation Satellite Systems are compared.

The Dr. Robert H. Goddard Memorial Trophy, named for the man considered to be the father of modern rocketry, is sponsored by the National Space Club. This premier aerospace award is presented annually to the individual or group who has had the greatest impact on space activities.

Past winners include Presidents Johnson and Reagan, the Apollo 11 astronauts, Werner von Braun, John Glenn (twice), and many other space pioneers.

The National Space Club, founded in 1957, is a non-profit organization whose members come from industry, government, and educational institutions, as well as private individuals who collectively seek to promote leadership in rocketry, astronautics, and related technologies.

The GPS Originators team is comprised of space professionals who have made significant contributions to the development of GPS: Dr. Bradford Parkinson, Dr. Jim Spilker, Roger Easton, Hideyoshi Nakamura, Dr. Charlie Cahn, Robert Kern, Pete Wilhelm, Dr. AJ VanDierendonck, Dr. Fran Natali, Dr. Robert Gold, Tom Stansell, Dr. William Guier, Dr. George Weiffenbach, Frank McClure, Dr. Dick Kershner, Dr. Ivan Getting, James Woodford, Ernst Jechardt, Gerhard Huebner,



Air Force Lt. Gen. Ellen Pawlikowski, Commander of the Space and Missile Systems Center (SMC) accepts the Dr. Robert H. Goddard Memorial Trophy on behalf of the Global Positioning Systems Directorate from Dr. Bradford W. Parkinson, Chief Architect for the Global Positioning System (GPS), in a ceremony attended by members of the GPS Originators' team. The ceremony was held at Los Angeles Air Force Base in El Segundo, Calif. on Nov. 30, 2012. U.S. Air Force photo by Sarah Corrice

Gaylord Green, Dick Schwartz, Dr. Mal Currie, Walt Melton, Navy Cmdr Bill Huston, Dr. Brock Strom, Bob Rennard, Hugo Fruehoff, Bill Feess, Ed Lassiter, Steve Gilbert, Mel Birnbaum, Vito Calbi, Sherm Fransico, and Don Henderson.

Team Stryker Receives 2012 Secretary of the Army Excellence in Contracting Award

Bill Good

The Stryker Life Cycle Requirements Contracting Team has received the 2012 Secretary of the Army Excellence in Contracting Award for outstanding Systems, Research and Development, and Logistics Support (Sustainment) Contracting as a result of its work on a complicated follow-on contract that included more than a dozen scopes of work.

"There were numerous submittals in this category, all of which exemplified contracting excellence in a teaming environment," said Harry Hallock, Executive Director of the Army Contracting Command, in an e-mail congratulating Team Stryker on its award. "Team Stryker's selection as the 'best of the best' is a tribute to your professionalism and drive to accomplish the mission, as teammates and colleagues with individual and unique talents that are enhanced by working together for a common goal in support of your customer, every day."

The Stryker team was nominated for the exemplary performance it demonstrated during the acquisition planning and pre-solicitation phase associated with the fiscal year 2013-2015 Stryker Life Cycle follow-on requirements contract. The contract will enable the Stryker Team to cost-effectively continue its mission over the next three years and includes key services such as new equipment training, fielding, logistics and engineering support, and possibly, production.

"Our most important mission is to provide soldiers with ground combat systems that are adaptable, versatile, and affordable, all while ensuring we provide the taxpayer with the kind of value they deserve."

The entire program's complement of life cycle mission requirements are contained under one base contract, with performance enacted by the issuance of delivery orders that are linked to 13 distinct scopes of work.

"This means that Stryker has one contract with 13 different sections, each of which supports continued real-time execution of the Stryker mission," said David Dopp, project manager for the Army's Stryker Brigade Combat Team. "The planning and pre-solicitation effort associated with this contract required careful orchestration across the organization."



The Stryker Life Cycle Requirements Contracting Team received the 2012 Secretary of the Army Excellence in Contracting Team Award for outstanding Systems, Research and Development, and Logistics Support (Sustainment) Contracting. Here, Slovenian soldiers from the 74th Motorized Infantry Battalion and U.S. Soldiers from the 1st Squadron, 2nd Cavalry Regiment conduct a Stryker convoy during Saber Junction 2012, a decisive action training environment exercise conducted at the Joint Multinational Readiness Center in Hohenfels, Germany, in October 2012.

Photo by Army Sgt. Ian Schell, Viper Combat Camera, U.S. Army Europe

The team developed several key elements needed to execute the project from start to finish, including an integrated master schedule and defined project organizational resource charts. Team Stryker created a specific working group for each scope of work—13 different working groups each responsible for their own scope of work and deliverables, and for developing, evaluating, and negotiating all elements of the proposed contract. “To say it’s a huge task would be an understatement,” said Dopp.

“This project was successful because of Team Stryker’s ability to define and communicate the details of a highly complex and integrated project,” said Scott Davis, the Army’s Program Executive Officer for Ground Combat Systems. “To increase efficiency and reduce cost, the team defined and obtained approval to implement a staggered proposal submission and award schedule for each of the 13 distinct scopes of work, allowing the project to be managed within existing resources.”

Davis added, “What is truly significant about this award is that it demonstrates the incredible attention to detail and adherence to best business practices that the Stryker team goes through every day. Our most important mission is to

provide soldiers with ground combat systems that are adaptable, versatile, and affordable, all while ensuring we provide the taxpayer with the kind of value they deserve.”

Good is with the U.S. Army Program Executive Office Ground Combat Systems Public Affairs.

Officials Praise Nunn-Lugar Threat Reduction Program

AMERICAN FORCES PRESS SERVICE (DEC. 4, 2012)

Cheryl Pellerin

WASHINGTON—Defense Department officials yesterday honored two men who in 1991 established a program that has become a critical part of the U.S. approach to reducing the worldwide proliferation of weapons of mass destruction.

Defense Secretary Leon E. Panetta made a surprise appearance at the DoD-hosted Nunn-Lugar Cooperative Threat Reduction Symposium, held at National Defense University here.

He joined Deputy Defense Secretary Ashton B. Carter, Madelyn R. Creedon, assistant secretary of defense for global strategic affairs, and Air Force Gen. C. Robert Kehler, com-

mander of U.S. Strategic Command—all speakers at the symposium.

"I wanted to take the opportunity to come here specifically to honor and pay tribute to [former Georgia Sen.] Sam Nunn and [Indiana Sen.] Dick Lugar, two very dear friends and two of the finest public servants in the history of this country," Panetta told the packed room.

"The program that bears their name has had a dramatic and enduring impact on global security," the secretary added, later awarding each man the Distinguished Public Service Award, the department's highest civilian honor.

Also during the symposium, Andrew C. Weber, assistant secretary of defense for nuclear, chemical and biological defense programs, announced on behalf of the department the establishment of a Nunn-Lugar fellowship in partnership with the Center for Nonproliferation Studies at the Monterey Institute of International Studies.

The first Nunn-Lugar Fellow, he said, is Anya Erokhina, a graduate in nonproliferation and terrorism from Monterey. Erokhina now works in the Office of Nuclear, Chemical, and Biological Defense Programs.

In introductory remarks to the symposium, Creedon and Kehler spoke of the impact the Cooperative Threat Reduction Program has made during its 20 years of operations.

"While there have been many successes of the CTR program; one of the most remarkable is the support it provided to three of the states of the former Soviet Union, to enable them to be nonnuclear states and parties to the [Treaty on the Non-Proliferation of Nuclear Weapons]," Creedon said.

The program helped the countries remove or destroy all the nuclear weapons and delivery systems they had inherited from the former Soviet Union, she added, noting several other achievements:

- Facilitating the blend-down of Russia's weapons-grade enriched uranium so that it could be used in commercial nuclear-power reactors to produce electricity rather than weapons;
- Identifying alternative employment opportunities for nuclear weapons scientists and former chemical and biological weapons scientists, engineers, and technicians; and
- Ensuring the security of nuclear weapons at facilities and during transport, destroying hundreds of nuclear delivery systems and thousands of chemical munitions.

The world and its security challenges continue to change, Creedon said.

"Four years ago, Senator Lugar recognized this change and worked to expand the CTR program's authority beyond the states of the former Soviet Union," she noted. The cooperative threat reduction partnerships have since expanded from 13 to more than 80 countries, she added, and the nature of the program's work has evolved.

"In addition to securing [weapons of mass destruction], the program today works to build partnership capacity in support of treaty and other international obligations and promotes global nonproliferation norms in support of U.N. Security Council Resolution 1540, the Global Partnership and the Proliferation Security Initiative," the assistant secretary said.

"DoD is also taking a more global and integrated approach to reducing WMD threats," Creedon added.

Working closely with the departments of State and Energy and its new regional partners, the Defense Department is putting great emphasis on sustainability and stewardship and refocusing the program to take on a wider range of biological threats, she noted, adding that international support also is growing.

"Recognizing the need to reduce the threat of WMD proliferation around the world, 24 countries from the Global Partnership have pledged \$10 million over the next 10 years to support CTR's efforts," Creedon said.

Because many countries keep dangerous pathogens for peaceful, legitimate research purposes, the Cooperative Threat Reduction Program works with its new partners to ensure that safety and security steps are implemented, she said.

"CTR is drawing from the lessons learned in the states of the former Soviet Union to address biological risks around the world, particularly Africa, South Asia and Southeast Asia," Creedon told the audience.

Speaking on behalf of the men and women of the U.S. Strategic Command, Kehler said Nunn, Lugar, and their program have made Stratcom's job easier and Americans safer.

"The era of one-size-fits-all deterrence passed with the end of the Cold War," he said. "Today, we are applying a wider range of tools, not just nuclear forces, to our deterrence challenges."



U.S. Sen. Dick Lugar of Indiana, and Defense Secretary Leon E. Panetta pictured outside the Nunn-Lugar Cooperative Threat Reduction Symposium at National Defense University in Washington, D.C., Dec. 3, 2012. DoD photo by Erin Kirk-Cuomo

Kehler said Stratcom’s most difficult challenge may be its responsibility to synchronize planning for DoD’s efforts to combat weapons of mass destruction.

“This challenge is every bit as daunting as our strategic deterrence challenge, and it is here we need significant help,” he said. “Fortunately, CTR is effective in helping us with both our deterrence and our combating WMD problems.”

Stratcom, Kehler added, reaps the benefits of a remarkable program that secures and then eliminates the world’s most dangerous weapons.

“The need to find, identify, and track potential threats is a never-ending task for Strategic Command; therefore, the elimination of 7,000-plus warheads, 902 ICBMs ... more than 150 bombers, close to 700 submarine-launched ballistic missiles, 33 submarines—along with some 2,700 metric tons of chemical weapons—greatly eased our intelligence demands,” the general said.

In September alone, he added, the CTR supported the disposal of four more ballistic-missile submarines and another 161-plus metric tons of chemical nerve agents.

“I can therefore devote a portion of our intelligence resources to some of the many other threats that confront us today,” Kehler said, adding that the Nunn-Lugar Cooperative Threat Reduction Program has been and will continue to be a powerful tool in the national effort to reduce the threat from weapons of mass destruction.

Pilot Calls F-35 ‘Big Leap’ in Fighter Capability

AMERICAN FORCES PRESS SERVICE (DEC. 10, 2012)

Terri Moon Cronk

WASHINGTON—The F-35 Lightning II joint strike fighter jet will be a strategic deterrent for the nation because of its “huge leap in capability,” a Marine Corps pilot said.

Lt. Col. Jeffrey Scott, commander of the 3rd Marine Aircraft Wing’s Marine Fighter Attack Squadron 121 at Marine Corps Air Station Yuma, Ariz., recently told the Pentagon Channel the F-35 will allow Marines to perform missions in high-threat areas, unlike existing aircraft.

The F-35 will be able to do every mission now performed by the AV-8 Harrier, but will be able to do it in more situations, said Scott, who is involved with flying and testing the new aircraft. The new fighter will provide access to more areas,

he explained, and will allow more time for rolling back enemy defenses.

The Defense Department and Lockheed Martin reached an agreement in principle last week to manufacture 32 F-35s in the Pentagon's largest weapons program. Lockheed Martin will produce 22 F-35A conventional takeoff and landing variants for the Air Force, three F-35B short takeoff and vertical landing variants for the Marine Corps, and seven F-35C carrier variants for the Navy.

Scott said flying the F-35 is an easy transition from the Harrier, and that it did exceptionally well, during a recent trial at sea.

"The sensors and systems are the big leap deploying the aircraft in terms of tactics," he said.

"The Lightning will fulfill a lot of the functions of Marine Corps aviation—such as [our] air support role, antiair, targeting enemy ground locations and supporting the troops on the ground—as Harriers and [F/A-18] Hornets do now," he added. "But it brings more in one aircraft in its ability to protect itself from the enemy."

Scott said the F-35 will give the military "a huge leap in capability, probably five or six steps beyond what we now have."

"We're going to have this aircraft for a long time," he said. "As we get more and more of these aircraft in all of the Services, we're going to see a lot of the benefits that the aircraft has in terms of commonality. As we start operating tactically, some of the communications [and] capabilities will become more and more valuable to the Services, ... and it will be in demand to combatant commanders around the world."

Acting Under Secretary Presents AF Small Business Achievement Awards

AIR FORCE MATERIEL COMMAND (DEC. 19, 2012)

Brian Brackens

WRIGHT-PATTERSON AIR FORCE BASE, Ohio—In a Dec. 17 ceremony held on the 109th anniversary of Wilbur and Orville Wright's first powered flight, the Air Force honored 15 Air Force employees and organizations for significant contributions to the Air Force Small Business Program.

Acting Under Secretary of the Air Force Dr. Jamie Morin was the keynote speaker for the event.

"Today is a great day because I have the opportunity to recognize extraordinary performers," said Morin. "The Air Force relies more than ever on innovative airmen such as the folks

that are doing exemplary work in support of the Air Force's Small Business Program."

Joseph McDade, director of the Air Force Office of Small Business Programs, said he is proud of the hard work and dedication of the many professionals in the Air Force and Small Business community that helped the Service meet its goals for Small Business.

"No one is working harder for our Air Force each and every day than those of you being honored today," he said. "It makes me proud that we rose to a level of performance that exceeded expectations."

Among the recipients was Air Force Materiel Command, who received the top major command award for developing new initiatives to increase small business participation in the face of declining budgets. During fiscal year 2012, the command awarded \$3.9 billion in contracts to small businesses.

During his visit, Morin also spoke with senior leaders about the importance of strengthening and improving the Small Business Program in the future.

"The pace of change is one of the fundamental challenges facing our Air Force today," Morin said. "We have technological, geopolitical and economic changes, which create uncertainty. Despite these challenges, the Air Force remains committed to improving our Small Business Program. When we talk about being more innovative, more rapidly responsive, and finding more efficient ways to provide capabilities to our troops, what comes to mind are our small business partners."

Morin also thanked local small business owners and acknowledged that the Air Force benefits when it utilizes the talent and skill of small business contractors.

"As a vital segment of our nation's economic strength and recovery, the entrepreneurial spirit of small businesses injects agility, innovation, and essential competition into the marketplace," Morin said. "Promoting small business not only provides value to the taxpayer, but it helps us fulfill the Air Force mission."

Morin's visit to Wright-Patterson was part of a full day of activities aimed at recognizing superior support of the Air Force Small Business Program. Morin also visited Seymour Johnson Air Force Base, N.C., where he recognized an additional three award recipients and met with base and community leaders.



Acting Under Secretary of the Air Force Dr. Jamie Morin speaks at the Air Force Small Business awards ceremony at Wright-Patterson Air Force Base, Ohio., Dec. 17, 2012. Morin visited the base to recognize individual and unit efforts in support of the Air Force Small Business Program, and meet with senior leaders and industry partners to emphasize the Air Force's commitment to small business initiatives. Photo by Michelle Gigante

Seymour Johnson received the top installation award, leading the Air Force with an unprecedented 96 percent contracting rate with small business, far exceeding the Congressional standard of 23 percent.

The Air Force Small Business Program is tasked with promoting small businesses nationwide to obtain innovative and efficient solutions to Air Force needs. Often, these businesses are asked to develop technology that is used to give the Air Force a significant advantage in its warfighting capabilities.

Recipients of the 2012 Air Force Small Business Program awards include:

Director's Award for Senior Executive Service/General Officer Outstanding Leadership

- Maj. Gen. Wendy Masiello, Office of the Assistant Secretary of the Air Force for Acquisition, The Pentagon
- Randall Culpepper, Air Force Program Executive Office for Combat and Mission Support, The Pentagon
- Dr. Steven Butler, Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio

Small Business Specialist Award—Individual

- Connie Robben, Headquarters Air Mobility Command, Scott Air Force Base, Ill.
- Kyle Donah, 4th Contracting Squadron, Seymour Johnson AFB, N.C., Air Combat Command

Special Achievement—Small Business Unit Award—Unit

- 7th Contracting Squadron, Dyess Air Force Base, Texas, Air Combat Command

Special Achievement—Small Business Award—Individual

- Gabriel McKenna-Groves, Luke Air Force Base, Ariz., Air Education and Training Command

Major Command Small Business Director's Award—Individual

- Becky Carpenter, Headquarters Air Combat Command, Langley Air Force, Va.

Market Research Award—Team

- Eric Halter, Sue Tormey, Annette Dunbar, Lynne Imhoff, Michael Eidsaune, Kendra Kershner, Lisa Thibeault, Denise Trapp, Gregory Koesters, Gregory Turner, Jason Cadek,

Lance Pritchard, and Lou Knapp, Headquarters Air Force Materiel Command, Wright-Patterson AFB, Ohio

Denise Stice Memorial Award—Demonstration of Creativity and Persistence

- Mary Urey, Enterprise Sourcing Group, Lackland Air Force Base, Texas, Air Force Materiel Command

Tandy Weaver Memorial Award—Community Outreach and Involvement

- Renee Gifford, 82nd Contracting Squadron, Sheppard Air Force Base, Texas, Air Education and Training Command

Small Business Director's "Beyond Goals" Award—Professional Achievement, Initiative and Innovation

- Barbara Liptak, Enterprise Sourcing Group, Wright-Patterson Air Force Base, Ohio Air Force Materiel Command

Small Business Top Installation Award

- Seymour Johnson Air Force Base, Air Combat Command

Top MAJCOM Award

- Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio

Iowa Army Ammunition Plant Professionals Earn Lean Six Sigma Belts

ARMY NEWS SERVICE (DEC. 27, 2012)

Annette Parchert

MIDDLETOWN, Iowa—Staff members with the Iowa Army Ammunition Plant recently completed a Lean Six Sigma black belt project designed to decrease excessive transportation costs to ship ammunition with no, or a long, lead-time required-delivery date to storage facilities.

Previously, the process relied on a single mode of transportation, which may not have been the most-efficient mode of transportation. The project title was "IAAAP Improves Transportation Mode Efficiencies."

In early 2011, former commander, Lt. Col. Tommie Hewitt, asked for cost-cutting ideas from IAAAP staff. Ideas were gathered from a focus group and IAAAP Installation Transportation Officer Robert Brewster presented an idea that was selected as a Lean Six Sigma project.

Debbie Wirt, who is a contract price/cost analyst and an LSS green belt at IAAAP, led the LSS project in an effort to earn an LSS black belt. Brewster participated as a subject matter expert on the team in an effort to earn an LSS yellow belt.

In addition to working on the project, both were required to complete additional training on LSS concepts.

The goal of the project was to improve the efficiencies and reduce cost for transportation of munitions out of IAAAP, bound for any of four ammunition depots. Additionally, the goal to reduce annual cost per short ton by five percent was a major focus.

The project used the Electronic Transportation Acquisition® system to pull historical transportation data from previous years for analysis. Some of the changes that were implemented included the use of integrated applications such as Defense Connect Online®.

The nine-member team assembled to carry out the project along with black belt coach, William "Tad" Holburn, from Joint Munitions Command headquarters, was made up of personnel from JMC headquarters, IAAAP, American Ordnance, and Surface Deployment and Distribution Command.

American Ordnance is the operating contractor at IAAAP. Improvements made included regular scheduling of meetings via DCO and establishing a rail-car pool. Communication and time management was essential in this project. The pilot lasted six months, allowing the test team to conduct analysis of historical data to new data gained during this test.

"These improvements did not come without challenges," said Wirt. "All of our weekly communication was done via telephone or e-mail. This additional element was very difficult. My only regret is that I never got to meet Coach Holburn in person. He passed away October 21, before I had a chance to thank him."

The project, when finished, was a great success because the original goal of five percent cost reduction was exceeded. The pilot resulted in a reduction in cost per short ton by 13.4 percent and a cost avoidance of \$176,514.59 over six months.

JMC's continuous process improvement office awarded an LSS yellow belt certificate to Brewster, Oct. 23, 2012. The award citation states, "In recognition of Mr. Brewster's contribution and participation as a core Team Member on the Black Belt Project: Iowa Army Ammunition Plant Improves Transportation Mode Efficiencies." Brewster's knowledge as the subject matter expert had a significant impact on the success of this project.

Wirt was awarded a black belt and is the only black belt in a government-owned, contractor-operated installation. Her

guidance as a facilitator kept the 17-months-long process on track.

“She takes great pride and ownership of the improvement process and focuses on recognition of team members. She used her own resources to travel to Scott Air Force Base, near St. Louis, to recognize a team member with a certificate and a commander’s coin. She went that extra mile for her team,” said Julie Solinski, chief of contract management.

IAAAP is a subordinate organization of JMC, and responsible for producing tank practice rounds, artillery rounds and 40 mm grenades, and for pressing missile warheads.

From its headquarters in Rock Island, Ill., JMC operates a nationwide network of conventional ammunition manufacturing plants and storage depots, and provides on-site ammunition experts to U.S. combat units wherever they are stationed or deployed. JMC’s customers are U.S. forces of all military services, other U.S. Government agencies, and allied nations.

DoD, Duke University Partner in Research Projects

AMERICAN FORCES PRESS SERVICE (JAN. 4, 2013)

Amaani Lyle

WASHINGTON—The Defense Department sponsors Duke University researchers to conduct projects in mathematics, engineering, and biology that advance military capabilities and strengthen national security, a university official said in a recent phone interview.

Duke University researchers actively participate in DoD programs and awards, and projects are designed to help the warfighter enhance intelligence gathering, avoid battlefield hazards, and maintain medical readiness, said Dr. Jim Siedow, the university’s vice provost for research.

“There’s always been an interest in Duke scientists for projects that might be defense-related,” Siedow said. “It’s an important element of research for us, given that a lot of what the military does today involves gathering intelligence—so



Transportation via railroad was seen as vital in decreasing excessive transportation costs to ship ammunition with no, or a long, lead-time-required delivery date to storage facilities.

Photo by Annette Parchert

the better you’re able to do that, the safer the world is likely to be.”

Although the research projects typically do not bear fruit for decades, Siedow described relatively short-term success stories from past and current projects.

“[An electrical engineer professor] developed algorithms applied to the function of cochlear implants that allow people to hear, so there’s a computer technology associated with [it],” he said.

The U.S. Army, Siedow said, now uses the same algorithms, or step-by-step calculations, transforming them into hand-held and ground standoff mine detection systems able to detect explosive objects.

“That came out of military-funded work on cochlear implants, which then evolved into helping to detect explosives and landmines in Afghanistan,” he explained.

Another project, pre-symptomatic detection and diagnostics, improves the detection of illnesses caused by pathogens before they become severe, Siedow said.

“In the military, you’ve got a lot of people, often crammed into close quarters, who may be headed out to battle,” Sie-

dow said. "If one of them is coming down with something contagious, whether naturally or from enemy actions, you want to know that before you send 99 [troops] and one infected person into the field. This could ultimately lead to more than 50 of them becoming infected."

Siedow said the challenge is to detect when someone has been exposed to or is carrying a disease.

"You can understand the importance of that, but you can also understand the complexity of that," Siedow said of the Defense Advanced Research Projects Agency-funded venture.

Perhaps one of the more futuristic and science fiction-inspired projects is research in an engineering area known as metamaterials, dubbed the "invisibility cloak," Siedow said. And Duke University is one of the world's leaders in metamaterials research, he said.

Siedow explained that researchers can modify an object's electromagnetic properties to actually change the nature of the material and its capability of being perceived.

"Think about the old television series 'Star Trek,'" he said. "The Klingons could 'cloak' their spacecraft so they couldn't be seen ... and with metamaterials we can do the same thing."

Siedow knows of a variety of military uses for such technology.

"It's one thing to have a stealth fighter that's hard to see," he said. "It's another thing to have an aircraft that literally can't be seen—by radar or the naked eye, depending on how you align it—even though it's there."

The magic behind the science is simple in theory.

"You and I envision something not because we see it, but because light gets refracted off of it," he said. "You can set up these mechanisms where nothing gets reflected so there isn't any way of seeing it."

Siedow believes the metamaterials project is on the verge of bringing about widespread change in how the military operates.

"Within the decade, metamaterials will become an inherent part of our standard military operations," he said. "We're very well positioned to take advantage of that and we'll continue to see DoD funding any number of things."

The university gets research funding from a variety of DoD agencies, and many projects have heavily integrated the National Institutes of Health and the National Science Foundation.

But as funding for NIH and NSF has stabilized or at times even declined, researchers and engineers have also been able to rely on DoD, where science, health, and technology projects abound, Siedow said.

DoD partnerships with Duke University as well as the University of North Carolina at Chapel Hill and North Carolina State University have, in many instances, led to grants and contracts from the Army Research Office, Siedow said.

DoD-sponsored research expenditures at Duke University increased from \$17.7 million in fiscal year 2008 to more than \$30 million by 2011, according to the university's financial reports.

"Many of these projects funded by DoD are interdisciplinary, so they're being done not only in conjunction with Duke scientists, but scientists elsewhere," Siedow said.

He said even basic research makes the funding and partnerships worthy ventures.

"In the early stages, you've got a lot of primary physics and engineering principles that need to be well understood to turn that into a working product," Siedow said. "Universities have historically been positioned at the early, not latter, stages of that research continuum."

With hundreds of collaborative research projects in the works over the last several decades, Siedow asserts that scholarly and military research endeavors can coexist and complement each other.

"Most nuclear engineers in this country who work in nuclear power plants got their start on a submarine—that's the big training ground," Siedow said. "Service to your country and practicing as a scientist are not incompatible."

LEAP Award Winners Lauded at Pentagon Ceremony

ARMY NEWS SERVICE (JAN. 10, 2013)

C. Todd Lopez

WASHINGTON—For the fifth year now, practitioners of Lean Six Sigma were recognized, Jan. 10, for streamlining Army business processes that help save the Army money.

During a ceremony at the Pentagon to recognize winners in the 2012 Army Lean Six Sigma Excellence Awards Program,

or LEAP, Under Secretary of the Army Joseph W. Westphal explained just how valuable practitioners of the manufacturing and business process improvement programs are to the Army.

“Their leadership is important in ensuring our business systems continue to improve, but also in driving efficiency and eliminating redundancy,” Westphal said. “And in these days, as you know, we are all about looking at eliminating redundancy and creating greater efficiency.”

Lean Six Sigma, or LSS, is a method for improving business processes in a way that can help the Army save money and meet budget challenges—something that has become increasingly important for the Army, Westphal said.

“Our trained LSS professionals, like our distinguished award recipients here today, I think are a critical asset to the Army,” Westphal said. “This is particularly true as we negotiate through these very challenging fiscal times, where efficiency really does count.”

During the award period, some 894 LSS projects were completed. Of those, 40 were considered “highly competitive” as part of LEAP awards submissions.

Lee Rivas, part of the Army’s Office of Business Transformation, said that last year overall, the Army avoided about \$2.4 billion in costs due to Lean Six Sigma efforts. Such efforts, he said, can be applied almost anywhere.

“We have proven that anything can be leaned out from both an operational side as well as the institutional side,” he said. LSS efforts have been used to avoid costs and create efficiency both inside the United States and overseas.

This year, Tobyhanna Army Depot, Pa., earned the “Non-Enterprise Level (Green Belt) Project Team Award.” Their efforts in transforming the purchase request process resulted in a cost avoidance of \$5.1 million through fiscal year 2017.

“They charged us with this project to reduce the number of redundant purchase requests in a one-month period that go over to our contracting area, to consolidate as much as we could,” said Jeff Wood, of Tobyhanna Army Depot.

Wood said that at the depot, where Army Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance, known as C4ISR, equipment is refurbished and maintained, it is a common occurrence that parts could be ordered one day for a particular project, and the

very next day more of the exact same parts could be ordered again for a different project.

“Yesterday we needed ten; today we need ten more,” he said. “But they wrote a contract yesterday for ten. So how do we consolidate the ten we need today into the ones we’ve already written a contract for?”

Processing two purchase requests is expensive, he said, because there is substantial manpower that goes into processing each one through completion.

“We implemented quick wins right off the bat, and we implemented some efficiencies to those inefficiencies,” he said. “And then we started looking at the data. What is it that we repetitively are buying? Maybe we could use an inventory provider—someone who is right there who has the [parts] in their truck, right there. Park them right here on our depot. Or buy a bulk shipment of this particular item that we can pull out of inventory and utilize.”

Col. Gerhard Schröter, Tobyhanna Army Depot commander, said he sees Lean Six Sigma as being increasingly important for the Army in the face of looming budget reductions.

“For the lean process, what that allows you to do is help you see and identify waste and give you a process to go ahead and analyze that, break it down to its components, and then reduce that waste and inefficiencies,” he said. “I think that’s extremely important as we get into the next three or four years.”

Before Westphal presented plaques to award recipients, he said it is important that those who are involved in Lean Six Sigma spread the word about the effectiveness of process improvement in an effort to help the Army become more efficient in its business processes.

“Only trained experts can bring additional personnel on board,” Westphal said. “And I challenge you to be evangelists for this program across the force, and create a legacy of persistent and healthy change and evolution across our Army.”

The Army does its own training for Lean Six Sigma, and practitioners of LSS are classified according to their skill level. Today, the Army has trained about 7,500 “green belt,” 4,000 “black belt,” and 225 “master black belt” LSS practitioners.

“I heartily congratulate today’s awards recipients and their achievements,” Westphal said. “We’re proud of you and we will continue to call on you and your talents in the future.”

The 2012 award winners represent “outstanding organizational and project team efforts that have used Continuous Process Improvement/Lean Six Sigma methodologies to transform their business processes,” wrote Lt. Gen. William T. Grisoli, the director of the Army’s Office of Business Transformation in a memo to LSS deployment directors across the Army.

The winners of the 2012 LEAP Awards include:

- Enterprise Level Project Sponsor Award: U.S. Army Central
- HQDA Level Organizational Deployment Award: Assistant Secretary of the Army for Manpower and Reserve Affairs/G-1
- AR 10-87 Level Organizational Deployment Award: U.S. Army Test and Evaluation Command
- Subordinate Level Organizational Deployment Award: 21st Theater Sustainment Command
- Enterprise Level Project Team Awards: U.S. Army Central
- Non-Enterprise Level (Black Belt) Project Team Award: Assistant Secretary of the Army for Financial Management and Comptroller
- Non-Enterprise Level (Black Belt) Project Team Award: U.S. Army Test and Evaluation Command
- Non-Enterprise Level (Green Belt) Project Team Award: 21st Theater Sustainment Command
- Non-Enterprise Level (Green Belt) Project Team Award: Tobyhanna Army Depot, U.S. Army CECOM Life Cycle Management Command, Army Materiel Command
- Non-Gated Project Team Award: Military Surface Deployment and Distribution Command
- Non-Gated Project Team Award: U.S. Army TACOM Life Cycle Management Command

Airman Awarded National Defense Space Award

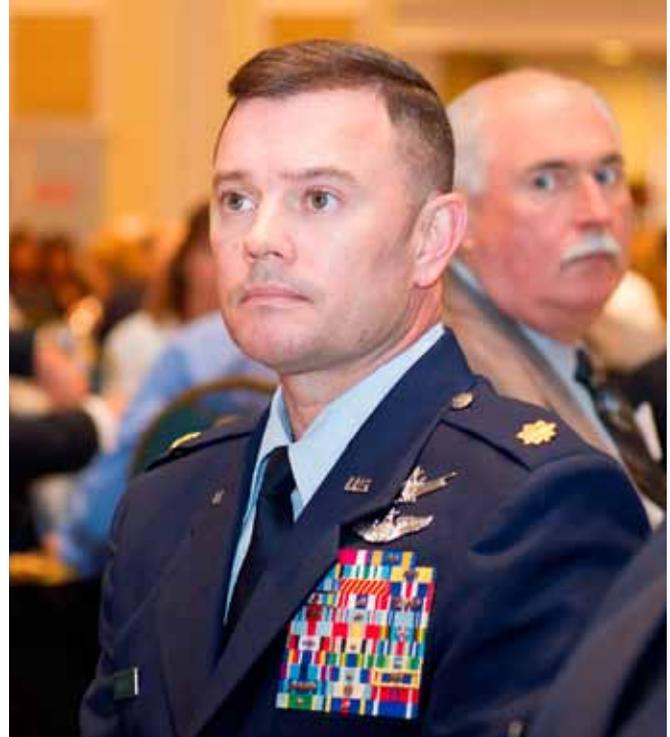
45th Space Wing Public Affairs (JAN. 11, 2013)

2nd Lt. Alicia Wallace

CAPE CANAVERAL, Fla.—The first Forrest S. McCartney National Defense Space Award was presented to Maj. Kenneth Holmes, the Air Force Special Operations Command chief of space training, at the National Space Club luncheon here Jan. 8.

The award recognizes significant contributions of Department of Defense personnel on duty in Florida and is newly named for a retired Air Force lieutenant general and former director of NASA’s Kennedy Space Center, Fla.

Holmes was selected for the award based on his ability to provide and integrate space capabilities to support in-garri-



The first annual Forrest S. McCartney National Defense Space Award was presented to Maj. Kenneth Holmes, Air Force Special Operations Command, chief of space training, at the National Space Club luncheon Jan. 8, 2013.

U.S. Air Force photo by Cory Long

son and deployed special operations forces worldwide. His contribution during his more than 140-day deployment to Bagram Air Base, Afghanistan, as the special tactics officer chief and space officer in charge for a joint task force, earned him praise as a leader and a technical expert.

Under his leadership, the JTF supported more than 19,400 task force personnel during 384 direct-action missions. He was able to significantly disrupt thousands of hours of enemy lines of communication, which resulted in 1,471 enemies captured or killed, including 166 high-value individuals. Holmes’ technical expertise made possible near real-time updates for task forces that enhanced planning and execution of missions and resulted in the capture of targets and significantly restricting enemy movement.

“It is humbling to receive this award,” Holmes said. “I’m honored to be able to support those on the ground who risk their lives every day.”