

Air Force Looks at Innovative Acquisition Processes

AIR FORCE PUBLIC AFFAIRS AGENCY OPERATING LOCATION - PENTAGON (DEC. 9, 2014)

Air Force Staff Sgt. Torri Ingalsbe

WASHINGTON—With new technologies rapidly coming to the forefront of the global stage, remaining the world's greatest air force comes at an escalating cost, making responsible spending and cost-cutting initiatives high priorities for Air Force leadership.

The Air Force Office of Acquisition is partnering with industry to realize some of these initiatives and help propel the Air Force into the future by "Bending the Cost Curve" with leaner, more innovative spending practices.

"Bending the Cost Curve is a broad initiative that consists of a lot of individual projects that are designed toward containing cost growth and escalation within the Air Force over time," said Dr. Camron Gorguinpour, Air Force Office of Acquisition, director of the Air Force Transformational Innovation Office. "Over time, the value we get back for the amount of money we spend diminishes, so we're trying to bend that back to the point where we're actually getting more value for every dollar spent."

There are 11 projects and initiatives launching this year and they all center on finding more efficient ways of spending money, and harnessing the best capabilities for the lowest costs. Some of the programs include conducting experiments to evaluate time and price outcomes of variations in the Truth in Negotiations Act requirements; identifying and capitalizing on acquisition successes with the Matchmaker project; cost-capabilities analysis; and launching small business engagements.

"This [BTCC] is an open forum for good ideas," Gorguinpour said. "Any good idea that we can really get our teeth into, we will go out and do."

Working with industry, as well as ideas from airmen, the Air Force hopes to find some best practice models that incorporate data analysis with basic common sense. One of the programs to implement these discussions is the cost-capability analysis.

"In a large organization sometimes you miss the obvious," he explained. "Without having the discussion, you don't know. If you get your acquisition process functioning correctly, you can start acquiring products at the pace of innovation. You can actually see the point at which an incremental improvement in capability has a dramatic increase in cost, and the idea is that you set your requirement just short of that—you

find the sweet spots where you get the most value for what you're doing."

Gorguinpour said learning from past successes is key to innovative spending.

"With the Matchmaker program, we look at huge successes we've already had," he said. "When we see a success, let's acknowledge that it happened, and think through the elements that allowed that success to occur—not just on our own but working with the company that helped us achieve those savings. By conveying what went well, you're able to transfer some of those successes. You create an enterprise-wide awareness you otherwise wouldn't achieve."

Bending the Cost Curve is about figuring out the right way to get airmen what they need, when they need it, Gorguinpour said. The bottom line is improving wherever possible.

With the implementation of the new programs, and the nature of BTCC, the processes will continue to adapt and grow as new challenges emerge.

"Things are inherently going to change," Gorguinpour said. "It's a work in progress. We'll tweak some of these processes when we see the need for it. We're not afraid to change course if someone has better ways of doing something."

Army Opens its Doors to Research Collaboration

U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND PUBLIC AFFAIRS (DEC. 15, 2014)

ADELPHI, Md.—The Army opened its doors to a new era of collaboration between its scientists and their peers in industry, academia, and other government agencies, which officials said will keep the nation's joint warfighting team on the cutting edge of technology.

A capacity crowd of about 600 researchers, industry representatives, and government officials attended a two-day open house on the Open Campus initiative Dec. 9-10 by the Army Research Laboratory (ARL), an element of the U.S. Army Research, Development and Engineering Command (RDECOM). Hundreds more attended via live video streaming.

The ARL Open Campus is bringing together academia, industry, small businesses, and government for research and development collaboration inside the Army's top R&D facilities. Scientists and engineers will pursue seven areas of interest fundamental to meeting the Army's goals for Force 2025 and beyond: computational sciences, material sciences, information sciences, human sciences, sciences for



Maj. Gen. John F. Wharton, commanding general of the U.S. Army Research, Development and Engineering Command, speaks at the ARL Open Campus Open House at Adelphi, Maryland, Dec. 9, 2014.

U.S. Army photo

maneuver, sciences for lethality and protection, and assessment and analysis.

This new paradigm is needed to meet the challenges faced by the Army and Department of Defense, said Maj. Gen. John F. Wharton, RDECOM commanding general.

“Open Campus takes the best of our scientists and researchers and the best from industry, academia, small business, and government working with us to ensure we are at the cutting of technology,” Wharton said. “That’s necessary because our nation must stay ahead of the increasingly sophisticated security threats we face around the world. The science that is key to maintaining our technological leadership is done at ARL.”

ARL Director Dr. Thomas Russell explained that the initiative means more than letting outside researchers into parts of the Army’s formerly closed labs.

“Only by providing a dynamic and nourishing environment for industry, academia, and our international partners to engage with Army scientists here at ARL can we more effectively identify research efforts that may solve some of these deeper challenges,” Russell said.

“In the past, effective collaboration with industry and academia has proved to be enormously beneficial to the DoD. This open campus model is an opportunity to follow these prior examples and to truly develop next-generation technologies.”

Open Campus will accommodate both U.S. citizens and foreign national researchers who come to ARL to collaborate in research areas of mutual interest. ARL will introduce restricted, unescorted access of foreign national collaborators in designated areas using a phased approach, expanding as the initiative grows.

ARL recently became the first federal partner to join the Maryland Department of Business and Economic Development’s Invest Maryland Challenge program to support startup companies by awarding local businesses Integrata and Graftworx a year’s incubator laboratory space. In addition to collaborative engagement in existing ARL facilities, future phases of ARL’s Open Campus will include opportunities for partners to establish new on-site facilities.

Army technologies developed by past collaboration have been passed to industry and formed the basis for many products enjoyed by Americans today. The Open Campus holds that promise as well, Wharton said.

“My job is to make sure we maintain the decisive advantage for our Army and the Department of Defense into the future. But it’s not only the Department of Defense that benefits,” Wharton said. “We supply the nation those enabling technologies. I’m expecting a lot of good things to come out of this Open Campus initiative and how we and our partners will contribute to the joint force, and also to the nation.”

Others praising the concept during the opening ceremony were keynote speakers U.S. Sen. Ben Cardin of Maryland; Dr. Patricia Falcone, associate director for National Security and International Affairs at the White House Office of Science and Technology Policy; and Gabe Camarillo, the principal deputy to Assistant Secretary of the Army for Acquisition, Logistics and Technology.

The Army Research Laboratory is part of the U.S. Army Research, Development and Engineering Command, which has the mission to develop technology and engineering solutions for America’s soldiers.

Defense Logistics Agency Launches DNA Marking Capability

DEFENSE LOGISTICS AGENCY PUBLIC AFFAIRS (DEC. 16, 2014)

The Defense Logistics Agency (DLA) is in-sourcing its efforts to make it easier to detect and prevent counterfeit microcircuits from entering into its supply chain.

The agency started performing an in-house microcircuit anti-counterfeit initiative, dubbed DNA marking, Dec. 15. The capability is designed to validate the authenticity of purchased microcircuits while increasing their reliability throughout the supply chain. The new quality control measures will be conducted at DLA’s Electronics Product Test Center at DLA Land and Maritime.

“Microcircuits are integrated in many of the weapon systems operated by our military services, so securing dependable suppliers is crucial to sustaining our elite mission-ready forces,” said DLA Land and Maritime Commander Navy



The Defense Logistics Agency is in-sourcing its efforts to make it easier to detect and prevent counterfeit microcircuits from entering into its supply chain.

U.S. Army image

Rear Adm. John King. “Adopting this DNA marking capability will enable DLA to intensify its fight against counterfeit parts entering and negatively impacting our supply chain, and ultimately our customers.”

Prior to in-sourcing this capability, the agency relied on industry partners to carry out the DNA marking process, said Keith Robinette, director of the DLA Product Test Center. This was effective in deterring counterfeiters, but added more time to the delivery of microcircuits to customers and additional costs to DLA.

“By establishing an organic or in-house DNA marking capability, DLA will improve delivery time and reduce costs, strengthen supply chain controls, enhance quality assurance, and establish the capability to expand DNA marking to other parts deemed a high risk of counterfeiting,” Robinette said. “Placing DNA marking at the Electronics Product Test Center is a perfect fit. The center performs a variety of tests to ensure that electronic items procured by DLA meet warfighter demands and quality requirements. DNA marking will augment this capability.”

The test center will mark all microcircuits purchased by DLA in Federal Supply Class 5962, electronic microcircuits, with an anti-counterfeit technology, which is derived from botani-

cal DNA. It is anticipated that about 85,000 microcircuits will be marked per year, Robinette said.

DNA marking consists of applying a botanical DNA identifier to the surface of a microcircuit to authenticate originality, Robinette said. A unique code or finger print, which deters counterfeiters, is incorporated into the ink of the DNA mark. This code can't be replicated, reengineered, or digitally copied. The DNA mark can be detected by a hand-held scanner for easy identification within the supply chain. The DNA mark can also be swabbed for forensic testing, which provides detailed information about the microcircuit, such as supplier, cage code, and part and lot number. Additional information like contract data, award date, number, national stock number, quantity, and time the microcircuit entered into DLA's supply chain can also be retrieved.

The DNA mark carries this authentication information throughout the life of the microcircuit and has the capability to trace and audit the movement of the microcircuit from receipt into DLA's supply chain to the end user. This traceability benefit is crucial during quality and fraud investigations, Robinette said. During past investigations, it was often difficult to obtain supplier information once the microcircuit was taken out of its packaging and installed on a weapon system or placed into bins at military repair facilities.

Army Scientists Improve Early Bio-Threat Detection

U.S. ARMY EDGEWOOD CHEMICAL BIOLOGICAL CENTER PUBLIC AFFAIRS (JAN. 12, 2015)

ABERDEEN PROVING GROUND, Md.—Army researchers are looking at novel ways to test the latest technologies, including a systems approach to sensor installation and compatibility.

Advanced sensor technology is making its way into the hands of soldiers through the Distance Detection Devices, or D3 program. Army scientists and engineers from the Edgewood Chemical Biological Center (ECBC), part of the U.S. Army Research, Development and Engineering Command at Aberdeen Proving Ground, Maryland, work with soldiers and other end-users and provide the most effective handheld biological detectors needed for a given mission.

"Handheld biological detection is critical for warfighters today and in the future," said Janet Betters, ECBC's D3 lead. "These users are out in the field, and away from the laboratories. They need to be able to tell if they are in danger or not, and quickly."

The D3 program is part of the broader Joint U.S. Forces Korea Portal (USFK) and Integrated Threat Reduction Ad-

vanced Technology Demonstration program, known as JUPITR ATD. The multi-year program provides the Republic of Korea and others in the Asia-Pacific region with improved biosurveillance capabilities.

Army researchers traveled to Korea with a suite of equipment, including nine commercial detector systems. Some of the systems are cell phone-adaptable detectors that soldiers will be able to hold and operate. Testers provide real-time feedback during the scenarios.

End-users such as the U.S. Navy disaster preparedness operations and training specialists, U.S. Air Force bioenvironmental engineers and U.S. Army chemical, biological, radiological, and nuclear defense specialists evaluate the systems in concert with other chem-bio research projects.

Feedback regarding overall effectiveness and ease of use will help ECBC scientists determine the limitations of each device and recommend the necessary changes that will help keep warfighters safe. The team will also evaluate security considerations for these systems. For example, smart phone technology requires a secure network to ensure the safe transfer of information.

"Biosurveillance is about recognizing situations early on so the commander can use accurate data to make informed decisions about force protection," said Dr. Peter Emanuel, ECBC BioSciences Division chief and JUPITR ATD lead. "When the ATD is over, we'll leave behind a capability that leaves the USFK better prepared to deal with a chemical or biological attack. We recognize that an outbreak of a disease is an important threat to national security."

JUPITR, a program led by the Joint Program Executive Office for Chemical and Biological Defense, or JPEO-CBD, and supported by ECBC, provides unique biological detection capabilities to address the demand for stronger biosurveillance capabilities on the Korean Peninsula.

JUPITR combines advanced communications with cutting-edge sensor capabilities that results in rapid and efficient biosurveillance. The program uses an information portal similar to a health surveillance web management tool. The portal houses a library of identified biological substances in a cloud library that authorized personnel can access.

ECBC researchers travel to Korea to work alongside USFK representatives to improve laboratory capabilities.

The program tests a number of biological detectors, and sends the best one to Korea. Finally the Integrated Base De-

fense is a large multifunctional, all-seeing sensor that can rapidly design a defensive perimeter.

JUPITR forms a dynamic, multifaceted program to advance biological detection capabilities of the Korean Peninsula.

The D3 component is part of a multi-year effort designed to introduce warfighters to new chemical and biological detection technologies that are relatively inexpensive, produce rapid results, and are easy to operate. It also integrates equipment to form a complete system of systems that can automate and correlate data for improved detection insights.

Taking a systems-approach to problem solving not only allows researchers to improve the functionality of detectors through integrated means, but also cuts down on individual costs during the design. For example, ECBC scientists have saved production time for the TAC-BIO II, a next generation tactical biological detector that now costs 80 percent less, weighs three times less than its predecessor, and uses an energy efficient power source.

“The entire creation of this detector is a paradigm shift for the Army,” said David Sickenberger, a former supervisory chemist at ECBC. Since the original TAC-BIO was introduced in 2010, the technology has been named on the Maneuver Support Center of Excellence Top 10 List. Four years later, it was redesigned to meet new performance goals that could improve aerosolized bio-threat detection in austere conditions using advanced algorithms to reduce false alarms.

TAC-BIO II exploits a scientific principle that biological aerosols will fluoresce and scatter light when exposed to ultraviolet light. These signals can be used to detect the existence of a threat by using a light-emitting diode developed under the Defense Advanced Research Projects Agency that replaces the larger and more costly UV lasers previously used.

“With the cost per detector cheaper in bulk, it helps the Army and others be able to perform a rapid detection where they can set out multiple detectors in a space,” said Aime Goad, acting branch chief of ECBC’s Sensors, Signatures, and Aerosol Technologies Branch. “More detectors means less false positives with biological detection, ensuring that users can make accurate and fast decisions based on the detector results.”

ECBC transitioned the TAC-BIO II to private industry through a patent licensing agreement and a cooperative research and development agreement for large-scale distribution and fielding. TAC-BIO has already won ECBC the 2012 Federal Laboratory Consortium Award for Outstanding Technology

Transfer. To date, the TAC-BIO and TAC-BIO II have earned two patents.

ECBC said they continue to design products that are to simpler, more durable in all weather conditions, and more capable within a suite of detector systems.

“Researchers and engineers at the Center continue to pursue novel applications that improve detection accuracy and keep the warfighter safe,” Betters said.

James: New Acquisition Initiative Aims to Cut Costs

DOD NEWS, DEFENSE MEDIA ACTIVITY (JAN. 15, 2015)

Jim Garamone

WASHINGTON—Secretary of the Air Force Deborah Lee James announced a new initiative designed to help the Air Force partner with industry, encourage innovation, and drive down the cost of systems.

James announced the Bending the Cost Curve program at the Atlantic Council here Jan. 14. She called it a targeted initiative that can be accomplished within current Air Force budget programs.

The initiative aims to improve dialogue with industry, “so we can better understand how processes, procedures, and some of the choices we make can inadvertently contribute to rising costs, the stifling of innovation, and slow processes,” she said.

Different Than Past

It is different than past initiatives in that the Air Force is looking at very specific, albeit large, programs, James said. Bending the Cost Curve is about specifics and not generalities, she said.

The initiative has three focus areas—enhance, expand and improve, James said.

Enhance looks for the Air Force to better interact with industry throughout the acquisition life cycle, she said. Expand, James added, seeks to increase competition among traditional and non-traditional industry partners to drive down costs and to increase innovation.

“Improve means we need to carefully examine our own internal processes and develop mechanisms to drive down costs and to speed up our acquisition,” she said.

Cost Capability Analysis

The Air Force is launching a Cost Capability Analysis program, James said.

“Here’s our thinking: We think that by gathering data from a range of sources, it should be possible to identify instances where small changes in capability have large impact on cost,” James said. “This, in turn, should mean that the Air Force can develop much more affordable weapon systems.”

For example, she said, if the Air Force has a requirement for a jet to fly 500 mph, but can achieve significant cost savings by amending this to 450 mph, officials may use the information to make tradeoffs in how it develops the request for proposals and evaluation factors. The Service may choose to modify requirements.

The Air Force looked at this before, but there was no way to incorporate industry, James said. Now there is, and the Service is aiming this effort at four programs. They are the T-X jet trainer, the long-range stand-off weapon, the Multi-Adaptive Podded System, and the Space-Based Infrared System follow-on. The Air Force selected these programs “because they represent a range of use cases and segments of industry,” James said.

“We’re two years away from the T-X request for proposal, and our new process will allow us to directly engage industry as we develop an understanding of how to best evaluate our objective and threshold requirements,” the secretary said.

The other programs are at different acquisition stages and this will give the Air Force “a powerful comparative for learning the nuances of how to best engage industry around requirements,” she said.

Expanding Competition

Expanding competition is focused on PlugFest Plus, James said. A PlugFest is a specialized industry event where companies collaborate and demonstrate their existing capabilities in live demonstrations for government customers. However, there is no contracting aspect to a PlugFest.

“Under our new PlugFest Plus approach, we will put in place a mechanism whereby a vendor could walk away with a contract just a few weeks after an event,” James said. “We accomplish this by combining these industry events with an Army acquisition model, which minimizes barriers for companies to participate.”

The first PlugFest Plus is set for Jan. 20, at George Mason University in Fairfax, Virginia. “We’ve decided to demonstrate this strategy with the Air Force Distributed Common Ground System—a system that produces intelligence information from data collected by a variety of sensors,” she said.

“If this event proves successful, we will take steps to evolve the process to other Air Force applications.”

Improving Internal Processes

The Air Force needs to improve internal processes, James said. In conversations with industry about Bending the Cost Curve, “the number-one recommendation from corporate CIOs was that the Air Force should establish a business analytics capability,” she said. “The Air Force needs to get an enterprise view of our information technology spending so that we can understand tradeoffs and make wise future investment decisions.”

This is not the case today, and James announced the Air Force is standing up an Information Technology Business Analytics Office.

With this capability, if the Air Force wants a new database to do something “we will have a business case, empirical data, and metrics to back that decision up,” she said. “What we really after here is a data-driven approach to spending.”

Similar efforts in the private sector have yielded 25 percent cost savings or more, James said.

Bending the Cost Curve will require the Air Force to be strategically agile, she said.

“All of this will be hard—but it’s worth the effort because we are the best Air Force on the planet and we must keep it that way,” James said.

Air Force Brings Ideas to Defense Innovation Initiative

DOD NEWS, DEFENSE MEDIA ACTIVITY (JAN. 16, 2015)

Amaani Lyle

WASHINGTON—In dual remarks during the State of the Air Force press briefing here Jan. 15, Air Force Secretary Deborah Lee James and the Air Force chief of staff announced plans to bring the Service’s research, science, and technology ideas to the Defense Innovation Initiative, led by Deputy Secretary of Defense Bob Work.

Gen. Mark Welsh III, the chief of staff, said the overall vision realized will help the Air Force and each of the Services reduce costs, maintain a technological edge, and enhance the procurement process.

“Under the secretary’s guidance, we’re now putting together a new strategic master plan that includes an annex that is purely science and technology, prioritization, ideas for the future [and] technology we can use to change the way we do business,” Welsh said.

Some of the standard ideas, Welsh noted, include hypersonic technology, directed energy, and quantum computing.

“The new advanced engine technology demonstrator is a great example of a place where we could not only get better performance, but save maybe as much as 25 percent of fuel costs,” Welsh said. “If we can prove that, we need to get that fuel on as many airplanes as we can afford over a reasonable timeline because that’s a game-changer in cost with the number of hours that we fly airplanes around the world.”

The general said the Air Force should also build on successful efforts in other Services such as the Navy.

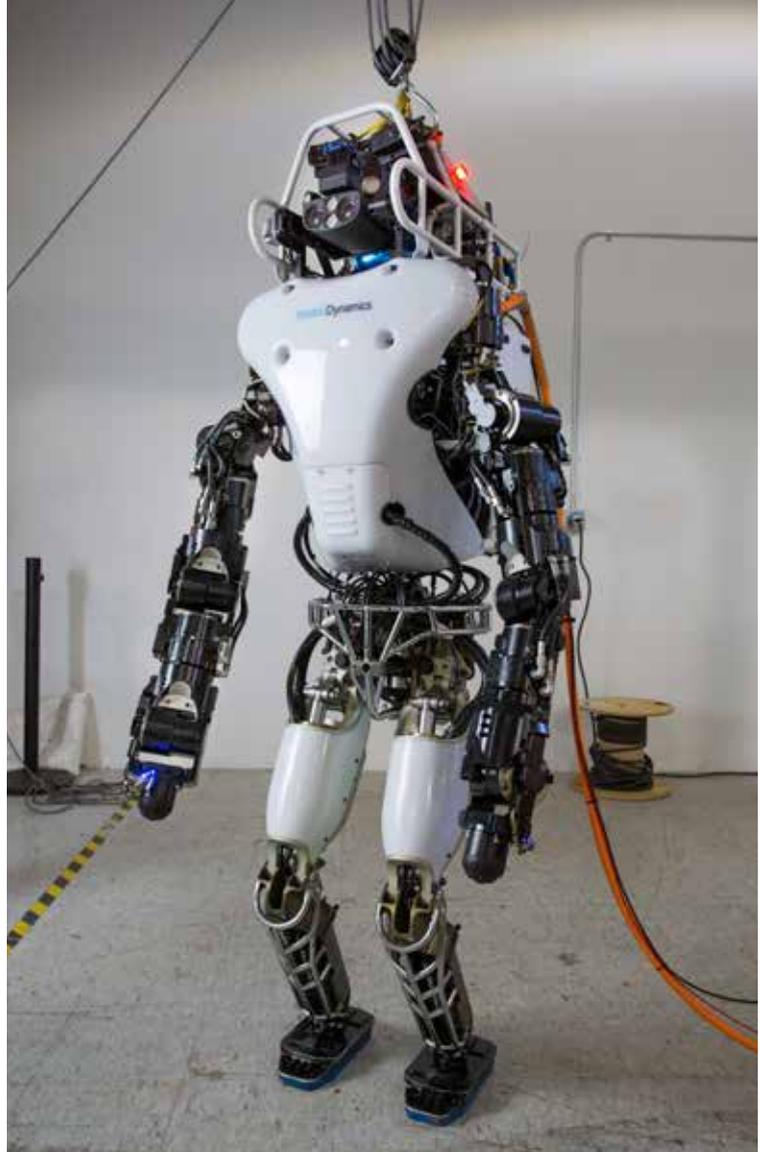
“We should be looking at laser defense against air-to-air or surface-to-air missiles, we should be exploiting laser communications,” Welsh said. “There are a number of ways that we should be moving forward ... this is a great opportunity in my mind [and] the possibilities here are just endless.”

Upgraded Atlas Robot to Go Wireless as the Stakes Are Raised for the DARPA Robotics Challenge Finals

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY
(JAN. 20, 2015)

A total of \$3.5 million in prizes will now be awarded to the top three finishers in the DARPA Robotics Challenge (DRC), the final event of which will be held June 5–6, 2015, at Fairplex in Pomona, Calif. The new prize structure was created in recognition of both the significant progress already demonstrated by teams toward development of human-supervised robot technology for disaster response and the increased number of teams planning to compete in the finals, including those funded by the European Union and the governments of Japan and South Korea. Aside from the previously announced \$2 million grand prize, DARPA plans to award \$1 million to the runner-up and \$500,000 to the third-place team. DARPA expects at least 20 teams to compete in the DRC Finals.

“During periodic reviews with the DRC, we’re already seeing them perform at a much higher level than they were last year. We’re excited to see how much further they can push the technology,” said Gill Pratt, program manager for the DRC. “As any team will tell you, we’re not making it easy. DARPA has been consulting with our international partners to decide on what steps we need to take to speed the de-



The DARPA Robotics Challenge teams using the Atlas robot met in Waltham, Mass., on Jan.12, 2015, to learn about upgrades to the robot. DARPA image courtesy Worcester Polytechnic Institute

velopment of disaster-response robots, and the DRC Finals will reflect those realities.”

The competing teams have been operating under extreme pressure since the 2013 DRC Trials, working to upgrade their robots and software for the more demanding DRC Finals. In June 2014, DARPA announced a series of additional hurdles that teams will face in the Finals:

- Robots will have to operate completely without wires—they may not be connected to power cords, fall arrestors, or wired communications tethers. Teams will have to communicate with their robots over a secure wireless network.

- Teams are not allowed any physical intervention with their robot after it begins a run. If a robot falls or gets stuck, it will have to recover and continue with the tasks without any hands-on assistance. If a robot cannot sustain and recover from a fall, its run will end.
- DARPA will intentionally degrade communications between the robots and human operators working at a distance. The idea is to replicate the conditions these robots would face going into a disaster zone. Spotty communication will force the robots to make some progress on their own during communications blackouts.
- Re-sized actuators in the hip, knee, and back give the robot greater strength.
- A wireless emergency stop allows for safe operation.
- As a result of the new pump, Atlas is much, much quieter than before!

The teams using the DARPA-developed Atlas robot got their first look at the newly upgraded system during a technical shakeout the week of January 12th in Waltham, Mass. The upgraded Atlas is 75 percent new—only the lower legs and feet were carried over from the original design. Lighter materials allowed for inclusion of a battery and a new pump system with only a modest increase in overall weight; the upgraded robot is 6-foot-2 (1.88 meters) and weighs 345 pounds (156.5 kilograms).

The most significant changes are to the robot's power supply and pump. Atlas will now carry an onboard 3.7-kilowatt-hour lithium-ion battery pack, with the potential for one hour of "mixed mission" operation that includes walking, standing, use of tools, and other movements. This will drive a new variable-pressure pump that allows for more efficient operation.

"The introduction of a battery and variable-pressure pump into Atlas poses a strategic challenge for teams," said Pratt. "The operator will be able to run the robot on a mid-pressure setting for most operations to save power, and then apply bursts of maximum pressure when additional force is needed. The teams are going to have to game out the right balance of force and battery life to complete the course."

Other major upgrades to Atlas focused on increasing efficiency, dexterity, and resilience, and include:

- Repositioned shoulders and arms allow for increased workspace in front of the robot and let the robot view its hands in motion, thus providing additional sensor feedback to the operator.
- New electrically actuated lower arms will increase strength and dexterity, and improve force sensing.
- The addition of an extra degree of freedom in the wrist means the robot will be able to turn a door handle simply by rotating its wrist as opposed to moving its entire arm.
- Three onboard perception computers are used for perception and task planning, and a wireless router in the head enables untethered communication.

The seven DRC teams using Atlas are scheduled to receive their upgraded robots by the end of January. The robots will be delivered with a "battery emulator," a training tool temporarily mounted in the robot that simulates how the real battery will perform. This will allow them to switch modes between constant voltage for routine practice and metered voltage to simulate actual battery life.

Given their identical hardware, the Atlas teams will have to differentiate themselves through software, control interfaces, and competition strategy. Teams will have a few options on the selection of tasks they choose to attempt and the order they do them—and must manage time and battery life during their runs—but DARPA expects that the top-placing teams will complete all of the tasks.

Teams are likely to keep their robots connected to fall arrestors during much of the remaining months of training as a safeguard against premature damage to the robot. DARPA demonstrated the new Atlas with a fall arrestor in place.

"Risk mitigation is part of the game," Pratt said. "It's up to the teams to decide what chances they're willing to take during training and risk falls and damage, but come the DRC Finals, the cords are cut."

New teams interested in competing in the DRC have until Feb. 2, 2015, to register and submit qualification materials. DARPA will announce the roster of qualified teams in early March.

For more information on the DRC Finals and competing teams and robots, visit <http://www.theroboticschallenge.org>.

DoD Seeks 10-year Extension of Small Business Mentoring Program

DOD NEWS, DEFENSE MEDIA ACTIVITY (JAN. 22, 2015)

Claudette Roulo

WASHINGTON—The Defense Department intends to request a 10-year extension of a program that improves the ability of socioeconomically disadvantaged small businesses to compete for defense contracts, the program manager said yesterday.

The Small Business Mentor-Protegé Program began in 1991 as a way to foster small businesses and improve technology transfer between the Defense Department and industry, Robert Stewart said in a *DoD News* interview.

Despite having been in existence for nearly 25 years, the program is still categorized as a pilot and must be reauthorized in a National Defense Authorization Act every few years, he said.

Stewart said that through regular outreach with industry representatives, his office has learned that the periodic re-authorizations give the impression that the program isn't permanent. This has a chilling effect on participation—particularly as the reauthorization period approaches, he said.

“Whenever we're about a year, year and a half out from an authorization—since it's a pilot program and it's still crafted in language as a pilot program—industry does what's called a chilling-off,” Stewart said. From the perspective of a business owner, he said, “If I'm not sure something's going to be reauthorized, I'm going to be less apt to put business development dollars into helping facilitate small business.”

Extending the program's authorization period would provide stability, reassure industry, and save the department money, he said.

How to Participate

Small businesses seeking to become prime contractors with the department first choose a mentor from one of the more than 50 larger companies participating in the program, he explained. Part of that selection process is ensuring that the strategic goals of the two companies align, Stewart noted.

“We try to put them in a position to be as successful as possible,” he said.

The larger company provides training and mentorship, and in exchange, receives credit toward their small business contracting goals, Stewart said. If the training is provided through a procurement technical assistance center, a small business development center, minority institution, or a historically black college or university, they can claim up to four times the amount spent for credit toward their actual small business participation levels.

The agreements may not last longer than three years, and once an agreement is fulfilled, the small business graduates from the program and is able to serve as a prime contractor for DoD contracts.

“Now you have a small business who's a prime contractor [and] whose overhead is significantly lower than your traditional government contractors,” Stewart said. “They can do the exact same work, sometimes faster, sometimes cheaper, oftentimes better than larger, more cumbersome agencies or entities.”

This is a win-win situation for industry and the Defense Department, Stewart said. Larger businesses now have a pool of capable, responsive partners with which to team up and seek defense contracts, while small businesses gain better-trained employees and, by piggybacking on the capabilities of their larger partner, they can compete for contracts that they otherwise wouldn't have been able to support.

“It works out in a lot of areas,” he said. “We're helping grow the manufacturing-industrial base by ensuring that we're going through our [procurement technical assistance centers], small business development centers, minority institutions, and [Historically Black Colleges and Universities], but also identifying tech transfer companies that allow the United States government to be able to fight the threat that the Googles, the Amazons, the Microsofts, the Oracles face every day.”

The Way Ahead

“One of the things that we're looking for going forward ... [is that] we want to focus on the evaluation and criteria and factors to drive contracting commands across the DoD enterprise to utilize Mentor-Protegé as a way to meet those subcontracting small business participation goals,” Stewart said.

To accomplish this, he said, the Office of Small Business Programs plans to develop a defense acquisition regulation that would give participants in the Mentor-Protegé Program greater weight during the bid solicitation process.

“You're going to get credit toward being already involved in DoD—you know DoD's business, you've already got an established working relationship with the DoD,” Stewart said.