

NTSA's Training Industry *news*

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Current *news*

Design for Strife

Reprinted from *Jane's Defense Weekly*

In the not-too-distant future, a soldier walking in the desert will have access to a range of personal protection equipment unlike anything previously envisaged. The soldier will dress in an underlayer of garments that are lightweight, moisture wicking, UV protecting and odor resistant; next in a layer of armored protection against bullets, then a layer of bio-engineered medicine that administers medications to respond immediately to battlefield injury.

A helmet fitted with overpressure sensors to gather data on any potential head trauma follows, as well as polarized goggles that properly fit the face; a pair of 'smart' gloves embedded with sensors; and, finally, a wearable computer that enables GPS positioning, shooter detection and acoustic targeting.

Chinese Defense Paper Reveals Plans for Forces

Reprinted from *Jane's Defense Weekly*

China has sought to justify the rapid development of its armed forces in its latest defense white paper, which was released on January 20, while at the same time aiming to reassure the world that its military plans are "purely defensive in nature."

While the paper was short on detail in areas such as weapon programs, China analysts found much encouragement in what was its longest and most detailed defense white paper to date. Reacting to international concerns about its military ambitions, the paper, entitled "China's National Defense in 2008", argued that China still lags behind "developed countries in economy, science and technology, as well as military affairs" despite consistent double-digit defense budget increases over recent years.

China spent \$46.8 billion on defense in 2007, the report said, making no attempt to answer U.S. claims that China's true defense budget may have been up to three times that amount. As in previous years, the white paper outlined China's policy of "active defense" and gave an overview of the country's long-term plans to modernize and "informatize" its armed forces by 2020.

Military MRO Firms Face Challenges

Reprinted from *Aerospace Daily & Defense Report*

Good processes, good relationships with your prime contractor and good luck all seem the necessary ingredients for small businesses looking to make big plays in U.S. military maintenance, repair and overhaul (MRO), according to a panel on the issue at Aviation Week's MRO Military conference.

The panel, which included two generals-turned-executives now in the small business sphere, sees great opportunity in business terms as the military's weapons systems and platforms age more quickly than they are replaced. But the companies also stress that several roadblocks and headwinds remain for small companies and non-original equipment manufacturers chasing military MRO.

Lightening the Load

Reprinted from *Defense News*

The U.S. Army is planning a battlefield assessment of gear in Afghanistan to see how lighter equipment, weapons and body armor affect soldiers in combat, service leaders said. Equipment for the assessment, which will begin in the next month, has already been purchased. It will involve an Army unit in predeployment training, take place in the Afghan mountains, and include participation from the Army's Asymmetric Warfare Group and the Johns Hopkins Applied Physics Laboratory.

"We are looking at everything," said Gen. Peter Chiarelli, U.S. Army vice chief of staff. "We've got to improve the protection and at the same time lighten the load to try to get it down. Every ounce counts, and that is what we find ourselves doing. When you take a look at all the gear a soldier wears, what you are trying to do is to lighten all of it a little to get some savings."

The effort to bring lightweight gear to Afghanistan includes body armor, rifles, batteries, combat vehicles and unmanned aerial vehicles able to carry supplies to forward-positioned units. The assessment will look at many of these technologies in the next month. Afghanistan's mountainous terrain means

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A non-profit organization that serves the interest of the simulation, training services, training support, and computer-based training systems industries.

For NTSA Members:

Previously in this column, I have detailed the National Training and Simulation Association's ongoing initiatives in support of STEM—the nationwide effort to stimulate interest in science, technology, engineering and math among young people and to promote their enhanced instruction in our schools. I have set out the compelling reasons why this effort should be an urgent national priority, upon whose success depends, in great measure, whether we retain our pre-eminence in these fields or sink to secondary status, with all that would imply for the future of our country. I have described NTSA's efforts to capitalize on the natural interest of young people in using technology in their daily lives and our various programs—centered around the I/ITSEC Conference—to leverage that interest to stimulate enthusiasm for the sciences themselves and the exciting things that can be done with them.

These programs have been successful in raising awareness among young people and their instructors of the ever-increasing importance of modeling and simulation in our daily lives. They have, I believe, succeeded in making the connection between the excitement of immersive simulations and virtual worlds and the centrality of technology to their existence. They have shown students that they, too, can not only experience these worlds but also create them, using the tools of technology. But our efforts have lacked one critical element: continuity. Once I/ITSEC closes and the tours and discussions end, nothing much exists to capitalize on whatever enthusiasm we have generated. The students go back to their classrooms, as do their teachers, to continue with the business of science instruction as before.

We believe, therefore, that it is time to consider ways to reinforce science learning in the classroom. The important 2005 report "Rising Above the Gathering Storm" outlined a number of initiatives aimed at improving teacher quality as well as the numbers of instructors in the sciences. NTSA is beginning to examine means to compliment these initiatives through strengthening subject matter itself.

One means of accomplishing this might be by employing multi-user virtual environments (MUVES), which allow students to interact within virtual contexts to test hypotheses. MUVES, by facilitating inquiry-based science education, are excellent vehicles, I believe, for involving students in a potentially limitless variety of inquiry-based investigations. NTSA has held promising preliminary discussions with the National Science Foundation, which has already developed several MUVES, as well as a number of other

internet-based learning tools, including courseware.

Any attempt to use this vehicle, or any other, as a means of enhancing the classroom experience will need to resolve a number of issues. Primary among these is the extent to which educators and administrators embrace any new approach. For example, the use of cyber tools such as MUVES as the centerpiece of instruction implies, in many ways, a cultural shift away from more traditional approaches. It is quite possible however, that teachers are likely to quickly appreciate that enhanced student involvement and participation levels will make their work easier. Similarly, they would in all likelihood respond positively to the fact that the new methodology implies no additional testing burdens on top of those they already face—in fact, scores on standardized tests should rise as students gain knowledge through enhanced participation.

Another hurdle will be to make any program self-sustaining, after the initial phase, through commercialization. Producers of curriculum hardware and software, particularly those which already market to school districts, will need to perceive the potential of any new approach. Such appreciation will likely only follow upon general educator acceptance.

We are clearly in the initial stages of formulating a plan of action. However, we and the NSF are working together to convene a conference in the months ahead to examine how best to proceed. This event will be attended by teacher educators, researchers, industry leaders, state and local administrators and policy makers, and, not least, teachers themselves. Specific organizations involved should be the NSF, the Department of Education, and corporations already developing cyber learning and similar tools, as well as military representatives who have successfully applied these technologies to training.

We hope that this conference will produce an Action Plan pointing the way ahead. Such a plan should set out best practices for establishing technology-based learning tools in a manner that is both sustainable and acceptable to the educational community. Once the Action Plan is finalized, we hope that a grant proposal will follow, enabling us to move into the implementation phase.

We at NTSA are excited at the prospect of using aspects of modeling and simulation technology to help address the yawning gap now opening between the U.S. and many other countries in science and technology learning. While the steps I have outlined here will not be immediate, I am convinced that if we move forward and do our work well, we can make a significant contribution to the future security of our nation.



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The Global marketplace

Lockheed Martin Views Prospects in India

Reprinted from *Aerospace Daily & Defense Report*

Lockheed Martin is in talks with public and private sector companies about partnering on manufacturing in India. The company expects to announce a partnership “in the near future,” said an otherwise tight-lipped Richard Kirkland, Lockheed Martin Global’s president for South Asia. The project may be part of an offset commitment and the production would be “program specific,” Kirkland added. “As we develop cooperative projects with India, we shall find partners who bring value to align value proposition with the needs of the project.”

India signed a deal with the U.S. last January to buy six C-130Js worth about \$1 billion. The project has an offset commitment of 30 percent. India’s present offset program does not permit dual-use technology for civil and military products. The line has become blurred with similar products required for both national defense requirements and civil security needs, such as in schools, airports and public buildings. Many vendors are now saying the present security situation should make the government of India look at dual-use technologies in its offsets program.

French Exports

Reprinted from *Aerospace Daily & Defense Report*

French Defense Minister Herve Morin says France exported 6.3 billion euros worth of military hardware last year, up from 5.5 billion euros in 2007 and the most since 2000. Morin predicted the turnaround last autumn, attributing it to streamlined export procedures put in place in 2006 and reinforced last year, along with greater and more concerted high-level political support, but final figures were not yet in. He forecast a further increase this year and said he sees no reason why France cannot eventually catch the U.K., currently the leading European arms exporter. A breakthrough foreign arms sale for the Rafale fighter is among the near-term targets.

AgustaWestland Signs Deal for Chinooks

Reprinted from *Aerospace Daily & Defense Report*

AgustaWestland will deliver the first of 16 Boeing ICH-47F Chinook heavy-lift helicopters to the Italian Army in 2013 under an almost \$1.22

billion contract signed on May 13. The contract includes an initial five years of logistic support as well as an option for an additional four helicopters. The contract was expected to be signed in fall 2008, but was put off by a one-year delay in the first delivery. The new Chinooks will be assigned to Army Aviaiton’s 1st Regiment, based in Viterbo, near Rome. Purchase of the ICH-47Fs is an urgent requirement, as the helicopters are badly needed to support ongoing and increasing operations in Afghanistan.

BAE to Upgrade M113s

Reprinted from *Defense News*

BAE Systems will upgrade 300 M113A1 armored personnel carriers for Jordan’s Armed Forces under a \$43.3 million U.S. Army contract. The deal covers production of kits to convert the vehicles from the M113A1 to the M113A2 Mk1 configuration, BAE said. The kits will upgrade each M113’s engine and transmission, strengthen its cooling systems, improve its suspension and increase its electrical output. Two of the British company’s U.S. armored vehicle plants will produce the kits, and the U.S. government will deliver them.

Dassault Struggles to Stay in Fighter Race

Reprinted from *Defense News*

Dassault Aviation is launching a new bid for India’s \$10 billion medium range multiple role combat aircraft program, aided by French diplomats and defense officials. A team led by Jacques Lajugi, the director of the Department of International Affairs in France’s Ministry of Defense, met with senior Indian defense bureaucrats and planners.

In April, the Indian media widely reported that Dassault’s Rafale fighter jet had been rejected in the first stage of the medium range multiple role combat aircraft procurement process by India’s Technical Evaluation Committee. A senior Indian Defense Ministry official confirmed this, requesting anonymity. Dassault officials say they have received no official notification of such a decision.

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soldiers and Marines have to climb great distances, and helicopters, such as the CH-47 Chinook, often have to fly above 10,000 feet to deliver weapons and supplies.

Young Investigators

Reprinted from *Aerospace Daily & Defense Report*

The Office of Naval Research recently awarded 15 aspiring researchers a three-year grant valued at up to \$510,000 as part of the Navy's 2009 Young Investigator Program. Award recipients were selected from 193 proposals. The Young Investigator Program has been in place at the Office of Naval Research since 1985, and recognizes research achievements, potential for continued outstanding research efforts and strong support and commitment from participating universities and research institutions. The Young Investigators Program seeks to identify and support academic scientists and engineers who have received a doctorate or equivalent degree within the past five years and who demonstrate "exceptional promise" for doing cutting-edge research.

Chinese Continue Modernization Push

Reprinted from *Defense News*

The People's Liberation Army continues to expand its land warfare modernization efforts, but challenges remain in revamping equipment, training and doctrine for such a massive force. Arms production includes new tanks, armored personnel carriers and artillery. Much of the production of new arms was outlined in the recent 2009 Pentagon report on China's military modernization.

These include about 200 Type 98 and 99 third-generation main battle tanks deployed in the Beijing and Shenyang military region, new amphibious assault vehicles and multiple rocket launch systems capable of hitting Taiwan from China.

"China's reliance on foreign partners to fill gaps in critical technical capabilities could still limit actual surge output," said the report. However, China's primary land warfare arms manufacturer, China North Industries Corporation, has produced a variety of new arms without much difficulty.

Many of the systems are designed for rapid deployment and have sophisticated targeting features. For example, the road-mobile LD2000 is a seven-barrel, 30mm, 730B chain gun that can fire 4,200 rounds per minute, with advanced C-band search radar and Ku-band tracking radar.

Challenges Remain the Clearest Part of USAF Cyber Vision

Reprinted from *Aerospace Daily & Defense Report*

The U.S. Air Force faces key challenges in its drive to stay ahead in electronic systems, but the dangers of failing to outpace the enemy have been underlined by last summer's massive cyber attack on Georgia that preceded Russia's incursion into the breakaway South Ossetia region. This is the message of Lt. Gen. Ted Bowlds, commander of the U.S. Air Force electronic systems center, who

warns that cyber attack is "a prelude to the future. Small nations will start using cyber attacks as a prelude to something bigger." Referencing comments by Scott Borg, director of the U.S. Cyber Consequences Unit, Bowlds illustrated how the attacks on Georgia began several weeks before the incursion.

Georgian government servers fell under external control, the country's presidential website was defaced and servers of national television and news services disabled. "The cyber confrontation was all one way. Like dominoes, Georgia's infrastructure went silent, making its communications cripple," he said.

In its battle to stay ahead, Bowlds says the Center faces three main challenges: dependency on commercial off-the-shelf (COTS) systems, information assurance and what he describes as "the need for speed." By relying on COTS, Bowlds says "we're following like the rest of industry, though probably five to 10 percent of what we have is unique. This is good as it allows us to move rapidly, but it's also bad because our adversaires can get access to [the] same equipment."

Supermap

Reprinted from *Defense News*

The CIA is investing in technology that merges aerial images with maps and, in a matter of minutes, mines thousands of data sources for information about points of interest in the aerial images. Assembling such geospatial intelligence could help the spy agency track terrorists and identify targets for strikes by armed unmanned aerial vehicles.

The CIA's venture capital arm, In-Q-Tel, is paying an undisclosed sum to California-based Geosemble Technologies to develop an intelligence version of the "geospatial data integration and layering technology" that the company developed for use by urban planners, real estate investors and market analysts. The technology combines overhead imagery, maps and heavy-duty data mining to create a map-based intelligence capability reminiscent of the Pentagon's former total information awareness program.

When the project is done, and In-Q-Tel won't say how soon that might be, CIA agents will be able to merge aerial images and electronic maps on a computer screen. Then they will be able to click on the building or other item of interest and all manner of information will pop up: who the tenants are, phone numbers, company records, links to company and organization websites, news reports related to the tenants or incidents at the address, property records, tax data and more.

Robotic Refueling

Reprinted from *Defense News*

Researchers with the U.S. Air Force Research Laboratory's Materials and Manufacturing Directorate have begun development of a robotic aircraft refueling system for the F-35 Joint Strike Fighter. The automated aircraft ground refueling system will meet the goal

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Contracts

Engine Repair

Reprinted from *Aerospace Daily & Defense Report*

The U.S. Army has awarded Texas-based Chromalloy two contracts valued at up to \$1.9 million for engine component repairs on the AGT1500 engine that powers the M1 Abrams tank. The agreements cover component maintenance and repairs for the Army National Guard fleet of M1 Abrams tanks deployed worldwide. Starting in 2009, Chromalloy will support repairs on 150 engines per year. The original contracts awarded by the Army National Guard were three-year, performance-based agreements. The first add-on contract is for one year, with two one-year options valued at up to \$1.2 million, covering repairs to the AGT1500 power turbine housing. The second contract, a two-year agreement with three one-year options, is valued at up to \$712,000 and covers engine nozzle repairs.

DARPA Awards SAIC Contract to Develop Jet Fuel Alternative

Reprinted from *Jane's Defense Weekly*

The U.S. Defense Advanced Research Projects Agency has awarded Science Applications International Corporation a contract worth as much as \$25 million to develop a new alternative to JP-8 jet fuel that will be derived from algae, according to a January 26 company release.

The goal is to develop an affordable alternative with a cost target under \$3 a gallon. SAIC's work will be in two phases, which will result ultimately in planning, designing and operating a pilot production facility. The U.S. Air Force is in the early stages of developing its own biofuels program and companies such as Boeing are aggressively developing biofuel testing regimes to explore whether it may be a viable alternative to JP-8.

In the meantime, U.S. Air Force officials are more than halfway through a program to certify the entire fleet to fly on a synthetic fuel blend consisting of 50 percent JP-8 fuel and 50 percent synthetic. The synthetic is derived from the Fischer-Tropsh process, which converts feedstocks such as coal and natural gas to liquid.

Seaborne Lift Speeds Ahead

Reprinted from *Jane's Defense Weekly*

In November 2008, the U.S. Naval Sea Systems Command contracted with Alabama-based shipbuilder Austal USA for the detailed design and build of the first of a planned class of 10 joint high-speed vessel craft that promises to transform the way in which seaborne intra-theater logistics missions are performed in the U.S. military from 2011 onwards.

An aluminum catamaran powered by four high-speed marine diesels, the joint high-speed vessel's design owes much to the

commercial fast ferries that have profitably established themselves on numerous sea crossings worldwide over the past 20 years.

Indeed, its design and gestation are based on many attributes seized upon by commercial operators some time ago: high speeds and passenger comfort; rapid entry and exit from port (enabled by a maneuvering capability within harbor); quick offload and reload of cargo and passengers once in port; shallow draught, allowing access to ports with shallow water or tidal restrictions; and reduced operating costs (resulting from fuel economy and increased asset utilization).

U.S. Army Pushes Ahead with GSE Contract Awards

Reprinted from *Jane's Defense Weekly*

The U.S. Army has awarded three companies competitive technology development contracts for its emerging ground soldier ensemble (GSE) situational awareness system. General Dynamics C4 Systems, Raytheon and Rockwell Collins were each awarded contracts to build 10 prototypes for the GSE program's technology development phase.

The soldier-worn GSE is intended to fill a gap between mounted elements with 'blue force' tracking equipment and the dismounted soldier teams that depend only on voice communications to obtain battle command information. After the systems are delivered the contracts could each total about \$12 million and all three awards include an option to support a potential U.S. Marine Corps requirement of five "GSE refined systems."

The prototype phase of the competition will be followed in eight or nine months by a "refinement phase" before the army selects a winner. However, the government reserves the option to select two competing contractors, or even to choose a winning design and have two contractors build it.

Software Support

Reprinted from *Aerospace Daily & Defense Report*

The U.S. Army has awarded Northrop Grumman a contract potentially valued at \$71.2 million over three years to provide software engineering support to Headquarters, U.S. Army Europe and Seventh Army. Support will cover mission critical defense systems including command, control, communications, computers and intelligence systems serving the U.S. Army, coalitions and NATO operations. Northrop Grumman's Information Systems sector will provide post-production software support to various organizations across multiple sites and locations around the world including Germany, Italy, Greece, and Balkans, Bulgaria, Romania, Poland, Africa, Iraq and Afghanistan.

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of Air Force Smart Operations 21, to find innovative ways to use Air Force materiel and personnel more efficiently. The decreased number of personnel near aircraft during refueling will improve safety.

The researchers have begun developing a robot to meet this challenge. An operator will use the robotic system to initiate refueling with the push of a button on an operational control unit from several hundred feet away. The operational control unit will communicate with a computer that will govern the robot's actions.

QinetiQ Buys Cyber Firm

Reprinted from *Defense News*

QinetiQ Group, a U.K. research and technology firm, has signed an agreement to acquire Cyveillance, an Arlington, Virginia, maker of online monitoring technology. Cyveillance, with 75 employees, develops and operates systems to identify and track data on the Internet. It provides applications for identity theft management, intellectual property management, and open-source intelligence collection. In 2008, Cyveillance had revenues of \$10.4 million and reported an operating loss of \$1.6 million.

DoD Coders Get Collaborative Website

Reprinted from *Defense News*

The Pentagon's top generals are planning to use social networks, wikis, mapping and other Web 2.0 tools to bring the best minds in the Defense Department together to out think and pre-empt America's adversaries.

The idea is to tie together disparate data streams from across the department so leaders have all the information they need at one location to spot and react to threats, changes on the battlefield or other situations that might affect national security, said Jack Eller, chief of the Defense Information Systems Agency's advanced concepts office and the project manager.

The project, called the National Senior Leaders Decision Support System Joint Capability Technology Demonstration, will take at least three years to complete. But already, testing of an early version of the program is underway, thanks to a new Defense Information Systems Agency website called Forge.mil.

Forge.mil is a defense-only website that enables software developers throughout the department to collaborate in the development of software, similar to open-source software initiatives in the broader public.

Questions on Fighter Shortfall Linger

Reprinted from *Aerospace Daily & Defense Report*

The impending fighter shortfall in the U.S. Air Force may prompt the Pentagon to turn to the Navy to fulfill some air sovereignty missions—flying patrols in U.S. airspace—in the future, according to Defense Department officials. The Air Force is facing the retirement of up to 80 percent of the fleet dedicated to conducting

the air sovereignty mission in the United States without timely replacements expected, according to testimony offered at a House Armed Services readiness subcommittee hearing April 22. Of 16 Air National Guard units on alert status, 11 fly F-16s. The aircraft of eight of those units are expected to reach their service lives between FY15-17.

Upcoming events

Registration is open for these upcoming NTSA events.

JULY 15, 2009

M&S EXPO ON CAPITOL HILL
RAYBURN FOYER, RAYBURN HOUSE
OFFICE BUILDING
WASHINGTON, DC

AUGUST 18-20, 2009

JOINT ADL CO-LAB
IMPLEMENTATION FEST
ROSEN CENTRE HOTEL
ORLANDO, FLORIDA

NOVEMBER 30 - DECEMBER 3, 2009

I/ITSEC 2009
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(703) 247-9471 or prowe@ndia.org
for more information.

Training & Simulation *report*

USAF Needs SA-20 for Test Range

Reprinted from *Aerospace Daily & Defense Report*

The U.S. Air Force is hunting for a sophisticated Russian-made S-300PMU2 (SA-20) air defense missile system to beef up the simulated threat training environment in the Nevada test ranges, but cannot find a seller. The S-300PMU2 is a respected Russian-made surface-to-air missile system developed to counter aircraft as well as cruise missiles and ballistic missiles. Although provisional funding of between \$150 million and \$200 million has been approved for purchasing a system, “nobody will sell us one,” says John Manclark, Air Force director of test and evaluation.

Speaking at the American Institute of Aeronautics and Astronautics/U.S. Air Force test and evaluation meeting, Manclark said realistic and varied threat simulation will continue to be vital to successful operational test and evaluation. Today’s ranges are becoming too limited in this respect, he says. “The threats are always in the same place, there are limited background players, the threat capabilities are replicated, ‘play areas’ limited, and there are limited countermeasures.”

South Korea Seeks Indigenous Air Combat Model, Simulators

Reprinted from *Aerospace Daily & Defense Report*

South Korea will develop an air combat engagement model and reconfigurable flight simulator that can model and simulate the combat effectiveness of various different fighter types, including its F-15K, F-16C/D, and FA-50 by November 2011. The Agency for Defense Development, a government body responsible for all defense-related research and development, has issued a request for proposals for the indigenous engagement-level model and flight simulators, aiming at detailed analysis of air-to-air and air-to-ground combat.

The budget is 3.9 billion won (\$2.8 million) and the request calls for one set of four reconfigurable simulators that must be perfectly synchronized with the indigenous engagement model. The engagement model itself must be compatible with the agency’s existing imported models for a many-on-many simulation of air combat, up to 20 versus 20. TAC Brawler, one of the well-known engagement-level models of the U.S. Air Force, includes physics-based models of aircraft and missile dynamics, radar and electronic warfare models as well as a pilot behavior model.

The Dutch National Aerospace Laboratory (NLR) unveiled a similar reconfigurable research simulator comprising four cockpits in March 2008. The simulator, named Fighter 4-Ship, allows four F-16 pilots to fly combat missions simultaneously in a virtual environment. The NLR uses the simulator to research modeling of weapons and sensors. Fighter 4-Ship can also be converted to simulate the F-35 Joint Strike Fighter, the laboratory says.

Honeywell Uses Simulation Tool to Aid Orion Development

Reprinted from *Aerospace Daily & Defense Report*

With the help of simulation software, Honeywell expects to cut hardware iterations by 50 percent for the navigation, guidance and other subsystems it is developing for Lockheed Martin for NASA’s Orion crew launch system. Virtual development of the entire electronics system—software and processor cores—holds the promise of cutting 12 months out of the development cycle, with a corresponding cut in development costs, compared to proceeding directly to hardware and having to debug the development process.

To reach those goals, Honeywell is turning to a virtualized system development software called Simics from San Jose, California-based Virtutech. Honeywell first used Simics while developing navigation, flight control and maintenance/crew information systems for Boeing’s 787. But that was mainly on the “back end,” after hardware was built. Simics was helping in the debugging process.

This time, Simics is to be brought in on the “front end” as a simulation platform for the entire development process. The advantage for Honeywell of stepping into this virtual world early is that its engineers can design hardware, test it with software and then make changes without the time-consuming and expensive process of actually building the hardware first, said Virtutech Vice President Michel Genard. As a result, when hardware is actually built it should be far closer to flight-worthy, he said.

C-17 Trainer for Australia

Reprinted from *Defense News*

Boeing, Chicago, has delivered a C-17 aircrew training system to the Royal Australian Air Force, making Australia the first C-17 aircrew training system customer outside the United States, Boeing said.

The aircrew training system recently arrived at Royal Australian Air Force Base Amberley in two loads transported aboard Royal Australian Air Force C-17 Globemaster III transport planes. The system, provided through a U.S. Air Force Foreign Military Sales contract, will be used to train Royal Australian Air Force C-17 pilots and loadmasters when it goes into operation in January. It includes a weapon systems trainer, a load master station and a learning center.

Engineers from Boeing and simulator maker FlightSafety International will install the aerial training system in a facility at Amberley. Boeing Defense Australia will provide instructors once the aerial training system goes into operation.

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Joint PBL Unveiled for V-22 Support

Reprinted from *Aerospace Daily & Defense Report*

The Bell-Boeing Program Office will provide integrated logistics support to the U.S. Marine Corps and Air Force Special Operations Command through a \$518.4 million contract awarded by Naval Air Systems Command. The Defense Department announcement said the cost-plus-incentive fee, indefinite-delivery contract for joint performance-based logistics support covers the Marine Corps MV-22 and Air Force Special Forces Operations Command CV-22 aircraft during production and deployment of the V-22 program.

This five-year contract, which goes through November 2013, is the first of two phases. The first phase of the V-22 Osprey joint performance-based logistics contract covers program management, maintenance planning, supportability analysis, technical data, in-service engineering and logistics, training, support equipment and squadron support. Contract funds of \$84.8 million will not expire at the end of this fiscal year.

Bell-Boeing expects the second phase, covering V-22 supply chain management, to be announced in mid-2010. That would include purchasing, repairing, stocking and delivering spare parts.

Auto NAV

Reprinted from *Aerospace Daily & Defense Report*

General Dynamics Robotic Systems has selected Northrop Grumman to supply the navigation system for the Phase II global positioning system/inertial navigation system, a major component of the autonomous navigation system for the U.S. Army's Future Combat Systems program.

Under the \$10.7 million contract, Northrop's system will provide inputs for the autonomous navigation system. The company was awarded a system development and demonstration contract for nine LN-270 units, and it was also awarded a future, limited-rate initial production contract by General Dynamics. If orders for an additional 261 units are placed, the contract could reach \$36 million. The first LN-270 unit is expected to be delivered in the fourth quarter of 2009.

Arianespace Inks First Russian Award

Reprinted from *Aerospace Daily & Defense Report*

An Arianespace contract to launch two big new telecom satellites for Gazprom will further cement Russia's space ties to European industry. The award follows a contract a week earlier to Thales Alenia Space to build the two five-metric-ton class spacecraft, Yamal 401 and 402, for the giant Russian gas utility, which is seeking to overtake Russian Satellite Communications Company as Russia's leading satcom operator. Both deals were facilitated by loan guarantees from French export credit agency

Coface. Thales Alenia Space President/Chief Executive Officer Raynald Selznec says that with the ongoing global financial crisis export credits are becoming "an essential ingredient" in satellite construction and launch competitions.

Northrop Wins Contract to Prepare for Carrier Construction

Reprinted from *Aerospace Daily & Defense Report*

In the midst of arguments over the recent U.S. Navy selection of Naval Air Station Mayport as the home of the next nuclear-powered aircraft carrier, Northrop Grumman announced it has received a \$374 million contract for construction preparation for the carrier CVN 79. Over the next 16 months, work on the second ship in the *Gerald R. Ford* class will include design efforts, planning and procurement of long lead-time material such as propulsion machinery. Continued research and development efforts with key suppliers also are covered under the contract period. The full-scale construction contract for CVN 79 is anticipated in 2012. The new ship will include flight deck changes, improved weapons handling systems, a redesigned island, new nuclear power plant and increased electrical power generation capacity.

Video Display Corporation Chosen for USMC SAVT Program

From Company Press Release

Video Display Corporation announced that its VDC Display Systems division of Cape Canaveral, Florida, has been awarded a substantial multi-year contract for the supply of six visual systems under the U.S. Marine Corps supporting arms virtual training program. The systems are to be installed in trainers that will be used to advance the training capability, operational readiness, and tactical proficiency of joint terminal attack controllers, joint forward observers, and forward air controllers. The supply systems are being provided under the prime contract issued to TJ Drafting and Design, Christmas, Florida by the Marine Corps System Command, Orlando, Florida.

VDC DS will deliver and install six complete state-of-the-art visual display systems. Each system will include three ultra-high resolution Sony SXR® SRX-T105 4K projectors, a high-performance screen with a horizontal field-of-view of 260 degrees and a vertical field of view of 60 degrees, plus an advanced auto calibration system for image warping, color and edge blend. The display systems will be installed at multiple Marine Corps bases worldwide with initial installations beginning in the company's current fiscal year and an expected completion date of August 31, 2011.

Each display system will provide correct perspective, color, resolution, and luminance relative to the trainee's design eye-point for display of the day, dusk, night, and simulated night vision device visual scene provided by the supporting arms

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Major Program *report*

With FCS Cutback, BAE Reworks Vehicle Strategy

Reprinted from *Defense News*

BAE Systems is reorganizing its Land and Armaments operating group in the wake of recent acquisitions, a new structure that will be put to the test by the uncertainty surrounding the U.S. Army's armored vehicle plans.

BAE was to build five manned ground vehicle variants for the Future Combat Systems program, which was undercut by Defense Secretary Robert Gates' April 6 recommendation to cancel the vehicles. Officials with the British defense giant said they are enthusiastic about working with Army officials, who are drafting a replacement vehicle plan.

In February, BAE reorganized the operating group into four business units: U.S. Combat Systems, Global Tactical Systems, Security and Survivability and Global Combat Systems, company officials said.

BAE Systems acquired Armor Holding, Jacksonville, Florida, in 2007 and Australia's Tenix Defense last year. Company officials say these huge deals resulted in a near doubling in revenue for Land and Armaments, bringing the operating group's 2008 revenue to \$11.8 billion.

L-3 Confirms Joint Cargo Aircraft Order

Reprinted from *Defense News*

The Pentagon has ordered seven C-27J airlifters for \$203 million, bringing its order total to 13 aircraft, L-3 Communications reported. L-3 Communications, the prime contractor on the U.S. Army and Air Force joint cargo aircraft program, is teamed with Italy's Alenia Aeronautica.

Orders are ultimately expected to reach 78. The first two aircraft have been delivered to the Army, and a source close to the joint cargo aircraft team previously said that a third should fly from Alenia's Italian production line to the United States in August and be delivered to the Army in January 2010.

USAF Bomber Grounded by More Than Budget

Reprinted from *Aerospace Daily & Defense Report*

The now-delayed 2018 version of the next-generation bomber was derailed by more than the budget. In fact, Lt. Gen. Robert Elder, commander of the 8th Air Force with responsibility for nuclear deterrence and global strike, says it is not dead, just the victim of a postponement.

"What we were looking for in the 2018 bomber was something that would take the B-2 capabilities to a new level, like the F-22 improved on the F-117," Elder said. "It was stealthier and easier to maintain and from an operational standpoint that's what you're looking for."

In fact, there were two key, interrelated issues that created the bomber reassessment: adding a nuclear weapons carrying capability and renewed START arms control treaty negotiations with the Russians. The delay provides breathing space while "we understand the START negotiations and some of the other [new weapons] applications," Elder says. "With START, you don't want to lock yourself into an airplane [design] before you know what the accounting rules are." And the U.S. military may want to change its approach to standoff weaponry.

CRS Says Congress Will Reconsider Exporting F-22s to Japan

Reprinted from *Aerospace Daily & Defense Report*

Federal lawmakers will almost certainly have to again consider whether to export F-22s to Japan, a recent Congressional Research Service (CRS) report says. "The debate over the export of F-22s, though not new, has become more pointed as the end of procurement funding (FY09), and the closure of the assembly line, nears," the CRS said in its report. "Whether to continue production of the F-22 is an issue that will confront the 111th Congress early in its first session."

It's a tough issue, the CRS said. "The sale of F-22s to Japan raises both broad questions about the security environment in East Asia and questions that are specific to domestic interests. Factors that argue for a transfer include potential benefits to U.S. industry, contribution to the defense of allied countries, and promoting U.S. interoperability with those countries," the CRS said.

Factors that argue against a particular arms transfer include the likelihood of technology proliferation and the potential for undermining regional stability, the CRS said. Exporting F-22s to Japan is one way to keep the F-22 production line running after U.S. Air Force procurement ends. But that could raise some problems for another program, the CRS said, the F-35 Joint Strike Fighter.

"Although originally intended to be complementary aircraft, F-22 and Joint Strike Fighter capabilities, development, and production have converged," the CRS reported. "Implicitly if not explicitly, these aircraft are competing for scarce procurement funds."

Contracts from page 8
virtual training image generators.

Camber Corporation Selected to Modify the T-1A Aircraft

From Company Press Release

Camber Corporation has been selected by the Department of the Air Force, Air Force Materiel Command, Aeronautical Systems Center to modify the T-1A aircraft to include a combat systems officer training station. The modification contract will be conducted by Camber's Dallas based sensor systems division.

The modified T-1A aircraft with the combat systems officer training station is part of the U.S. Air Force's Air Education and Training Command redesign of the current navigation/electronic warfare officer training pipeline in order to produce aviator's skills in advanced navigation systems, electronic warfare and weapons deployment, enabling them to operate the complex systems critical to the Air Force mission.

SAIC to Support Marines

Reprinted from *Defense News*

Science Applications International Corporation recently won a prime contract from the U.S. Marine Corps to provide program support for responses to chemical, biological, radiological and nuclear incidents. The prime contract, effective May 1, has a one-year base period, four one-year options and a total value of \$96 million, SAIC said.

SAIC will provide services to the family of incident response systems section of Marine Corps Systems Command. The family of incident response systems team aids incident response and operating forces from U.S. federal agencies, including the Pentagon and the Federal Emergency Management Agency. Services from SAIC will include procurement of equipment, inventory management and training.

Alion Wins Grant to Study Astronaut Disorientation

Reprinted from *Space News*

The NASA-funded National Space Biomedical Research Institute awarded a \$1.73 million grant to McLean, Virginia-based Alion Science and Technology to study the spatial disorientation that can affect astronauts during spaceflight.

The study will build on work Alion has done for the U.S. Air Force on spatial disorientation experienced by pilots. Under the grant, Alion will use custom software to monitor the flight of the space vehicle and the actions of the pilot to determine causes of disorientation, according to a company press release. The work is meant to lead to tools astronauts can use to overcome spatial disorientation.

Who's where

■ **Kevin Cosgriff** and **William Balderson** have joined Alexandria, Virginia-based CNA as senior fellows, the research organization announced. Cosgriff, a retired U.S. Navy vice admiral, is a former commander of Naval Forces Central Command. Balderson is a former deputy assistant secretary of the Navy for air programs.

■ **Bodo Uebber** has been appointed chairman of the board of directors of EADS, Amsterdam, succeeding **Rüdiger Grube**, who resigned. Uebber, a member of the board since 2007, is a member of Daimler AG's board of management.

■ Northrop Grumman made two appointments: **Scott Lee** as vice president of space systems for the company's Electronic Systems sector and **John Jadik** as vice president of communications, intelligence and networking solutions for the company's Electronics Systems sector's Land Forces division. Lee was director of radar and special sensor programs in the Space & ISR Systems division. Jadik was director of communications, intelligence and networking solutions.

■ **David "Bob" Edmonds** has joined Syndetics, Fairfax, Virginia, as vice president for government operations and strategy, the defense contracting management consulting firm announced. The former White House fellow, U.S. Air Force Senate liaison and retired Air Force brigadier general was a senior member of the Heidrick & Struggles aerospace, defense and aviation executive search practice.

■ **Russell Honoré**, a retired U.S. Army lieutenant general, has been named chairman of Grand ISS. The St. Petersburg, Florida, company provides integrated services in security, risk management consulting, private intelligence and investigatory forensics to commercial, government and private clients.

Interservice/Industry Training, Simulation and Education Conference

30 Nov-3 Dec 2009 - Orlando Florida • <http://www.iitsec.org> • Train to Fight - Fight to Win.

Whether you plan on being an I/ITSEC attendee, an exhibitor, or a visitor, this page has information you will want to review in preparation for your trip. Several actions and milestones for presenters and committee members have already been met while others are coming up soon. Registration and Hotel Reservation is provided for “everyone”. And, don’t miss your chance to exhibit, sponsor, and/or advertise in the time leading up to, through, and beyond I/ITSEC 2009.

- **AUTHORS:** PAPERS are due by close of business on 29 June (<http://www.iitsec.org/stage2.cfm>). Contact your bird-dog or the I/ITSEC Program Chair, Dr. Mike Genetti, mggenett@rockwellcollins.com, with questions.
- **TUTORIALS:** Draft PRESENTATIONS are due on 29 June (<http://www.iitsec.org/stage2tutorial.cfm>). Contact your bird-dog or the I/ITSEC Tutorial Board Chair, Mr. Roy Scudder, roy.scrudder@osd.mil, with questions.

Individuals within both groups should work with their bird-dogs (mentors assigned upon acceptance of abstracts or proposals) to be sure the instructions are understood and the deadlines can be met.

Don’t delay your submissions to the last minute and risk getting caught in the “traffic jam” on the 29th! Also, keep in mind that the bulk of requests for extensions arise from the time needed for corporate or service leadership approval for material to be released. Be sure and work that process into your schedule!

IN OTHER I/ITSEC NEWS:

REGISTRATION and HOUSING are OPEN. Input your contact information for registration or hotel reservations, and you won’t have to re-enter the info for your hotel reservation. Fields will pre-populate. From the registration process, you will have the option to jump over and make your hotel reservation (and vice versa). Details are posted at <http://www.iitsec.org/lodging.cfm>.

SERIOUS GAMES SHOWCASE & CHALLENGE: Serious Game developers are invited to submit their original serious game to the

Fourth Annual I/ITSEC Serious Games Showcase & Challenge. The goal of the Serious Games Showcase & Challenge is to identify innovative game-based solutions to training problems that could affect personnel and systems today and in the future. Finalists will be selected by a panel of leaders in the gaming, industry and academic fields, and will be invited to showcase their serious game at I/ITSEC 2009.

<http://www.iitsec.org/>; <http://www.sgschallenge.com>

EXHIBITORS/SPONSORS: See dates and details about 2009 Exhibit Space Selection and Sponsorship Opportunities at <http://exhibits.iitsec.org>. Contact Debbie Dyson, NTSA Director of Exhibits at (703) 247-9480, ddyson@ndia.org. Remaining exhibits space is limited, but available.

NTSA MEMBERSHIP: Not sure about the level or status of your NTSA Corporate Membership? Contact Patrick Rowe, NTSA Director of Membership, (703) 247-9471 or prowe@ndia.org. (You’ll want to be sure this information is up to date when you select exhibit space or register for I/ITSEC.)

ADVERTISING: Information for Advertising Opportunities is being updated and will be available soon at <http://www.iitsec.org/advertising.cfm>, or contact Dino Pignotti at (703) 247-2541 or dpignotti@ndia.org.

SCHOLARSHIP: Congratulations to Ms. Sallie J. Weaver, Doctoral Candidate, Industrial/Organizational Psychology, University of Central Florida. See Ms. Weaver’s photo and details about the scholarships at <http://www.iitsec.org/scholarships.cfm>. Be sure to alert your Alma matters of this great opportunity. The application window for next year will be December 2009 through February 2010.

Be sure to visit www.iitsec.org regularly for updated information throughout the year.

NTSA would like to recognize the following company members for their support throughout the year.

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For membership information, see page 4 of this newsletter, visit <http://www.trainingsystems.org>, or call (703) 247-9471.
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