

NTSA's Training Industry *news*

IN THIS ISSUE

- 1 Current News
- 2 President's Notes
- 3 The Global Marketplace
- 3 Contracts
- 5 Major Program Report
- 6 Who's Where
- 7 Training & Simulation Report
- 12 NTSA Corporate Members

Current *news*

Canada to Bolster Military in Afghanistan

Reprinted from *Defense News*

With the Afghanistan mission now the centerpiece of Canada's defense and international policy, the military is pulling out all the stops to bolster its operations in Kandahar. It is sending more special forces as well as tracked armored personnel carriers to the South Asia country, while the Canadian government at the same time tries to shore up weak domestic support for the mission.

Defense Minister Gordon O'Connor kicked off a cross-country speaking tour in Vancouver, British Columbia, November 14, 2006, which he says will better inform Canadians about the Kandahar mission. The Afghanistan commitment has faced less-than-solid support among the public, with recent opinion polls showing a majority of Canadians want troops to be withdrawn before their planned pullout date of 2009.

But O'Connor said the conservative government will stay the course in Afghanistan, and Canadian soldiers are making a difference in pushing back the Taliban in the Kandahar region.

Post-War Probes Target Israeli Failures

Reprinted from *Defense News*

As pressure mounts on Israeli leaders to account for failings in the summer 2006 Lebanon War, experts here are asking: Does technology help or hinder the ability to command and control fighting forces? Postwar probes into Israel's wartime performance against Hezbollah have uncovered recurring failings in the ability to translate essentially sound doctrine and warfighting plans into facts on the ground.

At the core of these so-called gaps between the conceptual and the concrete is leadership, which may have suffered from a misplaced reliance on the potential—rather than practical—benefits of technology.

A key casualty of this war, experts here claim, is the warfighting ethos of Follow Me!, that age-old principle of hands-on, take-charge command adapted in 1919 by the U.S. Army Infantry School in Fort Benning, Georgia. In Israel—as at Fort Benning,

where a three-ton bronze image of the commander in front continues to inspire future wartime leaders—Follow Me! has become synonymous with decisive, accountable and effective leadership.

But in Lebanon, Israel's first digitized ground war, after-action probes found egregious cases where commanders relied on situational awareness provided by the sensor-fused data streaming into command centers instead of moving forward to assess critical points in the evolving battle.

Half of USAF Aviation Fuel to Be Synthetic

Reprinted from *Defense Daily*

The Air Force, already leading the nation's drive toward alternative energy sources, has set the goal of deriving half of its aviation fuel from synthetic sources by 2016, according to a senior service official. The service is currently in the midst of certifying a synthetic fuel blend derived from natural gas and traditional JP-8 aviation fuel for its B-52H Stratofortress bomber aircraft, and sees this as a stepping stone to using these types of alternative fuels in its mainstream operations, said Michael Aimone, assistant deputy chief of staff for Logistics, Installation and Mission Support on the Air Staff.

"This is a big deal," he said at the Air Force-sponsored industry day in Washington, D.C. "This is where we are putting a lot of our effort." Aimone said the Air Force currently consumes about 3 billion gallons of aviation fuel annually. Accordingly, achieving the 2016 goal would amount to billions of gallons of synthetic fuel.

Global Hawks Fly Missions Over U.S.

Reprinted from *Jane's Defense Weekly*

RQ-4 Global Hawk unmanned aerial vehicles, once confined to flying surveillance missions in the skies of Afghanistan and Iraq, will soon be flying homeland defense and counter-drug missions over the U.S. The U.S. Air Combat Command tasked a Global Hawk to fly on an official mission for the first time in mid-November. The unmanned aerial

Current News cont. on page 4



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President's *notes*

Rear Adm. Fred Lewis, USN (Ret.)

For NTSA Members:

The 2006 Interservice/Industry Training, Simulation and Education Conference reinforced the tradition of success established by this event, by far the world's most important simulation training conference and exhibition. The fact that participation from exhibitors and attendees continues its robust growth testifies to the steadily increasing importance of modeling and simulation to all aspects of national (and international) security. As has also become a tradition, I/ITSEC 2007 was virtually flawless in its execution, even though we continue to add new elements as the evolution of the technology and other circumstances warrant. Without the effort of many talented and dedicated volunteers, as well as that of the staff of the National Training and Simulation Association and many others from the Armed Forces, government, industry and academia, I/ITSEC could not succeed. Those whose lives are on the line and who benefit most from this marvelous technology are our reason for existing, and our pride in serving them shows through.

A number of highlights marked I/ITSEC 2007. Among them were the gracious attendance of former Florida Governor Jeb Bush at the Governor's Dinner, where he stressed the importance of our industry not only to our men and women in uniform, but also to the economic health of Florida and its citizens.

2006 saw the start of a new I/ITSEC initiative, the "Serious Games Showcase and Challenge". This event has been organized in response to the realization that much of the creative impetus for our industry comes from small developers, whose innovative approaches deserve to be given wide exposure within the larger M&S community.

The first Challenge was an unqualified success, starting the process of forging new links between the gaming and training communities which will benefit all concerned. I would like to thank the sponsors of this inaugural event: ALION, Autodesk, and SAIC, as well as the evaluators and participants who gave generously of their time and talent. This initial effort will provide a valuable springboard for an expanded Challenge at I/ITSEC 2007. The results of this year's first "Serious Games Showcase and Challenge" can be found in the current issue of the I/ITSEC Newsletter.

I/ITSEC 2006 also saw the return of the Congressional Modeling and Simulation Caucus, under the dedicated and enthusiastic leadership of Chairman Randy Forbes, who was accompanied by Caucus Members Bobby Scott, Tom Feeny and Ric Keller, all of whom took part in the second annual panel presentation. This event, at which members each made opening statements and then responded to audience questions, attracted an audience of over 400 representatives from government, the military, industry, and academia. Panel discussion touched on a range of topics, including how the U.S. can utilize modeling and simulation technology to respond to evolving challenges such as immigration. Participants also discussed "human element" technology development, the advancement of M&S as a career path, and the need to attract math and science students to the field.

We also witnessed the great interest that the "Warfighters' Corner" continues to enjoy at I/ITSEC. Held for the second time at I/ITSEC 2006, "Warfighters' Corner" featured increased Service participation

and audience attendance--testimony to the compelling messages of men and women who have employed simulation training lessons while in harm's way. Their stories are often dramatic and inspiring, and remind us all that we can make a difference at critical times for those who willingly put themselves at risk for the rest of us.

NOW FOR SOME EXCITING NEWS IN ANOTHER AREA. In a groundbreaking move, the National Training and Simulation Association will soon launch the world's first online television network dedicated exclusively to the modeling and simulation training industry and related technologies. Due to air by summer 2007, *SimTV* will provide a vehicle for all organizations—commercial, academic, government and military—involved in the world of simulation technology to interact in a live environment. As such, *SimTV* will be one of the world's first business-to-business television Internet sites.

As we are all aware, video on the Internet is transforming how organizations communicate and interact with their audiences. *SimTV* will enable all participants to view each other's technologies, discuss issues and concerns in real time, and establish business contacts in an organized, efficient and cost-effective interactive environment. *SimTV* will attract an audience which will make it the ultimate marketplace for your company, and its ideas, products and services.

We at NTSA are very enthusiastic about the prospects and possibilities of *SimTV*. Just as our industry is on technology's cutting edge, so it will be with how everyone in that industry exchanges information, forms business relationships and incubates and cross-fertilizes ideas. *SimTV* will be a 24/7 television window into our industry—one that will be accessible worldwide. We expect to have a demonstration site running shortly, where you can view how *SimTV* will eventually operate. In the meantime, if you wish more advance information, please contact Debbie Dyson at 703 247 9480 or ddyson@ndia.org.

Calendar of Upcoming *events*

Mark your calendars for these upcoming events focused on training and modeling & simulation:

FEBRUARY 26, 2007 • 2nd Annual M&S Leadership Summit
Chesapeake Conference Center • Chesapeake, VA

APRIL 24-26, 2007 • ITEC 2007 • Kölnmesse • Cologne, Germany

MAY 7-11, 2007 • DMSC (Defense M&S Conference) • Hampton Roads Convention Center • Hampton, VA

MAY 15, 2007 • USAF APBI • Dayton, OH

JUNE 4-7, 2007 • SimTecT 2007 • Brisbane Convention Centre • Brisbane, Australia

JUNE 12-14, 2007 • Training & Simulation Industry Symposium • Orlando, FL

Please visit www.trainingsystems.org/events
for complete details or contact Patrick Rowe at
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The Global marketplace

U.S. Firms Must Push Global Sourcing

Reprinted from *Aerospace Daily & Defense Report*

U.S. defense companies must help make the case to “Buy American” proponents in Congress that they should be allowed to source their products globally, according to Thomas Donohue, president of the U.S. Chamber of Commerce. The Chamber is vigorously lobbying against proposals to restrict the ability of U.S. firms to source globally, including people and logistics, Donohue said during a conference sponsored by the Hudson Institute in December 2006. “If we can’t source globally, we’re in serious, serious trouble,” he said.

The ability of defense contractors to draw on expertise and products from around the world improves the quality of their products for the U.S. military and “keeps more people in the

game on a geopolitical basis,” he said. “If you’re doing business with people, it’s much harder to get angry at them.”

Overseas sales of U.S. defense products support 3.6 million high-paying defense-related jobs in the United States, according to Donohue. “No industry, in my view, has a greater economic impact or plays a greater role in America’s competitiveness ... than the defense industry,” he said. “This wouldn’t be so if our private defense firms weren’t such major players in the global marketplace.”

Donohue said it doesn’t make sense for Congress or the State Department to ban defense exports that “anyone can buy on the street in France. We need to tell the Congress that if you can buy it in 400 places around the world, then we ought to be able to sell it.”

Contracts

Canada Picks C-130J Over A400M

Reprinted from *Defense News*

Lockheed Martin’s C-130J Hercules has been selected as the only aircraft that can meet the Canadian military’s tactical airlift needs, beating out the Airbus A400M for the multibillion-dollar contract. The procurement process will now go to the next stage, with Lockheed responding to a request for proposals and, from there, an eventual contract signing by summer 2007.

Canada plans to spend 3.2 billion Canadian dollars (\$2.8 billion) for 17 planes as well as the necessary infrastructure, training and other related project expenses. An additional 1.7 billion Canadian dollars will be set aside for a 20-year in-service support contract for the planes. As prime contractor, Lockheed Martin also would be responsible for the in-service support.

Battelle Gets Potential \$500M Award

Reprinted from *Defense Daily*

The Department of Homeland Security selected Battelle Memorial Institute as the management contractor for the National Biodefense Analysis

and Countermeasures Center (NBACC), awarding the non-profit science and technology group \$250 million initially with the potential value of the contract set at \$500 million.

Construction of a permanent 160,000 square-foot NBACC facility began in 2006 at the National Interagency Biodefense Campus in Fort Detrick, Maryland. The campus also includes laboratory facilities belonging to the Departments of Agriculture and Defense, and the National Institutes of Health. NBACC, which is a federally funded research and development center, offers secure bio-containment laboratory space for biological threat characterizations and bio-forensic analysis.

The contract award essentially signals the beginning of a “national lab” to oversee life sciences research in the area of biodefense for homeland security purposes, said Patrick Fitch, Battelle’s vice president for biodefense programs. Fitch joined Battelle about a year ago after spending more than 20 years leading national defense and other scientific research programs at Lawrence Livermore National Laboratory, which is part of the Department of Energy’s national lab structure.

Current News from page 1

vehicle landed at Beale AFB in northern California, where the U.S. Air Force plans to deploy seven Global Hawks by 2009.

Two of these have already been delivered to Beale AFB and will continue flying surveillance missions over Afghanistan and Iraq, while the other five will be used for training and may also be assigned to fulfill missions for the U.S. Northern Command and U.S. Southern Command. U.S. Northern Command, which is responsible for domestic military operations, will use the Global Hawks at Beale AFB to fly homeland defense-related missions on a regular basis. For example, the aircraft could be used in a border patrol support role once or twice a week or every day, according to Northrop Grumman spokeswoman Gemma Loochkartt.

U.S. Southern Command, based in Miami, Florida, will also be able to call on the unmanned aerial vehicles based at Beale AFB to perform counter-drug missions, according to Ed Walby, the Global Hawk business development manager at Northrop Grumman.

While mid-November marked the first time that Air Combat Command tasked the Global Hawk with a mission, officials at Northrop Grumman and Edwards AFB in California have been flying Global Hawks over the continental U.S. since the late 1990s for the purposes of training and testing.

Israel Pledges Training Boost

Reprinted from *Jane's Defense Weekly*

The Israel Defense Force will increase the training of its regular and reserve units by 30 to 40 percent in 2007 as a result of the July/August conflict with the armed wing of the Shi'ite Party of God (Hezbollah). Following dozens of debriefings conducted after the fighting, General Officer Commanding Army HQ (MAZI) Maj. Gen. Benny Ganz said, "We found problems in individual soldier skills, in the performance of the different formations, HQ and commanders."

A major training effort is already under way, with a special emphasis on conducting exercises in the Golan Heights, where Israel fears a potential clash with Syria. The Israel Defense Force's strategic assessment foresees a possible confrontation around the middle of 2007 and has begun sending units to exercise on the rough terrain of the Golan.

Continuous budget cuts combined with the last six years of low-intensity conflict with the Palestinians have gradually eroded the level of training of the Israel Defense Force ground units. The higher costs of calling reservists for duty drove the Force to rely mostly on its regular units for operational deployment, while considerably reducing their training. The traditional conscripts' service, which

Current News cont. on page 8

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Major Program *report*

F-35 Flight Kicks Off Six-Year Test Program

Reprinted from *Aerospace Daily*

The first production Lockheed Martin F-35A Lightning II flew December 15, 2006, initiating a six-year, 12,000-hour flight test program involving 15-20 airplanes. Company officials say the 32-minute flight, which originated and ended at Lockheed Martin facilities at Naval Air Station Joint Reserve Base Fort Worth, went as planned.

F-35 Chief Test Pilot Jon Beesley flew the single-engine, single-seat fighter to an altitude of 15,000 feet and performed a series of maneuvers to check handling qualities and throttle response of the Pratt & Whitney F135 engine. Two F-16s and one F/A-18 flew as chase aircraft.

In related news about the Joint Strike Fighter program, Deputy Defense Secretary Gordon England, the UK's Minister for Defense Lord Drayson, and Canadian Deputy Minister of National Defense Ward Elcock signed a memorandum of understanding to begin future cooperation in production, testing, training and sustainment as well as follow-on development of the F-35. The understanding expands cooperation beyond the current system development and demonstration phase.

The Netherlands signed in November, and five other countries were to sign the memorandum by the end of the year, according to the Defense Department. Italy was expected to sign in January, and Turkey plans to join the production and support phase of the program.

Rolling Out, Virtually

Reprinted from *Aviation Week & Space Technology*

With 90 percent of its detailed design elements completed, Boeing says it is finding the mid-size 787 has a two to three percent better economic performance than the 20 percent overall gain it originally predicted. The improvements are most prominent in predicted maintenance costs, although the airplane is "a bit better on fuel burn" as well, says 787 General Manager Mike Bair. Boeing has forecast that the 787 will have a 20 percent better fuel burn than the 767 it is replacing. The new improvements have become evident as the 787's detailed design progresses.

As the company celebrated the completion of a "virtual roll-out", Bair said the exercise, which has taken several months and involved a simultaneous computer simulation of the assembly process at 787 factories worldwide, has validated the company's ambitious schedule for the commercial industry's first aircraft with a composite fuselage and wing.

Dutch First to Sign Joint Strike Fighter MOU

Reprinted from *Aviation Weekly*

The Netherlands became the first Joint Strike Fighter partner nation to sign the memorandum of understanding that covers future coop-

eration in the production, sustainment and follow-on development phase (a 45-year period) of the Joint Strike Fighter program.

The memorandum was signed in Washington on November 14, 2006, by Netherlands State Secretary for Defense Procurement Cees van der Knaap and U.S. Deputy Secretary of Defense Gordon England.

The first signature came at a time when the U.S. Defense Department announced that the first flight F-35 Joint Strike Fighter test was expected in December; a delay of several weeks compared to an announcement by Lockheed Martin Joint Strike Fighter Executive Vice President Tom Burbage in October, which said that the first flight would take place by the second half of November.

Army May "Adjust" Future Combat Systems Program

Reprinted from *Defense Daily*

The Army is planning a potential "adjustment" to its largest acquisition program, according to industry, Army and government officials. Such a makeover could delay Future Combat Systems by five months and pull out or put off four of the 18 platforms included in the program, officials said.

Currently, Future Combat Systems is projected to cost \$160 billion over the next 20 years, and the price might prove too much for an army strained by continued wars in Iraq and Afghanistan along with its effort to modernize. Boeing and SAIC serve as the program's lead systems integrators.

Though Army leaders still consider the program a top priority for the service, strains facing the budget between fiscal years 2008 and 2013 and cuts handed down by Congress in the last two years, have caused the service to rethink its options, according to service and industry officials. Looking at how the program has evolved and all of the factors facing the Army, it was unlikely the program could proceed without some changes, according to a service official, who pointed to comments made in October by the Army's top civilian acquisition official.

FCS Team Completes Software Test, Delivery

Reprinted from *Defense Daily*

Boeing's Future Combat Systems team achieved a major software test milestone on schedule December 15, 2006. Completion of the System of Systems Common Operating Environment (SOSCOE) Build 1.0.8.0 qualification test and subsequent software release helps ensure the program is on track to support upcoming Future Combat Systems exercises.

Boeing and SAIC manage Future Combat Systems for the Army, which considers the 18 programs and the software that links them into a network with soldiers as its major modernization plan. "This marks completion of the first major Future Combat Systems

Major Programs cont. on page 6

Major Programs from page 5

build that will feed into Spin Out 1 as well as future Army experiments,” said Dennis Muilenburg, Combat Systems vice president and general manager. “The One Team did an outstanding job to make this happen and is already working on a follow-up release and the next SOSCOE software build (2.0.0.0)”

SOSCOE software build 2.0.0.0 is slated for release in December 2007. SOSCOE 1.0.8.0 will be used to support initial testing for Spin Out 1 (limited user test) and 2.0.0.0 will be used to support final testing—the classified verification test, a company spokesman said. SOSCOE is the common software “middleware toolkit” that will enable all Future Combat Systems platforms to talk and interact with each other.

Coast Guard's Deepwater Effort Poised to Move Forward

Reprinted from *Defense Daily*

While the Coast Guard's Deepwater effort has been the subject of scrutiny regarding platforms, program costs, and program management, industry officials contend that issues such as cost growth reflect the re-baselining of the effort and that the government and the contractor team are working together every step of the way.

Deepwater is a recapitalization of the Coast Guard's legacy fleet of ships and aircraft. The \$25 billion, 20-year effort calls for approximately 200 new vessels and a combination of about 200 new and modernized aviation platforms. The effort includes eight new national security cutters, 25 new offshore patrol cutters and 58 new fast response cutters, 36 new HC-235 medium range search aircraft, 42 modernized HH-60J helicopters and 95 re-engineered and modernized HH-65C helicopters along with unmanned aerial systems.

“To me, what was not out there is the realization that this program, which has been touted as the future of the Coast Guard, is very much about the present day Coast Guard, and about getting the tools, systems, to enable the Coast Guard of today to perform its mission better,” said Leo Mackay, president, Integrated Coast Guard Systems.

Mini Bomb and Datalink Listed as Near-Term Upgrades

Reprinted from *Defense Daily*

On the verge of dispatching its new F-22 Raptor stealth fighter aircraft on their first overseas deployment, the Air Force is also working to integrate the multirole aircraft with its latest mini bomb by early next decade and incorporate an advanced datalink on the platform around then. “The next thing I want on the Raptor is the small diameter bomb,” Gen. Ronald Keys, commander of Air Combat Command told reporters during a meeting in January.

The Boeing-built 250-pound-class small diameter bomb was cleared for operations on the F-15E multirole fighter aircraft last year and made its combat debut in Iraq last October. The GPS-guidance-aided munition can be delivered with great accuracy in all weather and spreads comparatively less shrapnel than larger bombs, allowing it to be used in tighter confines with less risk of causing unintended structural damage or injury, the Air Force says.

Who's where

■ **Linda Hudson** has become president of BAE Systems Land & Armaments, succeeding **Tom Rabaut**, who retired at the end of 2006. Rabaut joined BAE in 2005 when it acquired United Defense. Hudson was president of General Dynamics' Armament and Technical Products.

■ **George Tenet** has been appointed an independent non-executive director of Qinetiq, London. Tenet, who directed the Central Intelligence Agency from 1997 to 2004, is a professor at Washington's Georgetown University and a board director at Guidance Software and L-1 Identity Solutions.

■ The U.S. Air Force tapped **Maj. Gen. Jeffrey Reimer** to be the program executive officer for the F-22 stealth fighter in the Office of the Assistant Secretary of the Air Force for Acquisition at the Pentagon. Reimer had been serving as head of the Air Armament Center, Eglin AFB, Florida, and as the service's program executive officer for weapons. Filling those jobs will be **Brig. Gen. David Eidsaune**, who commanded the Air Force Security Assistance Center, Wright-Patterson AFB, Ohio. **Maj. Gen. Johnny Weida** will succeed Eidsaune at the top of the Air Force Security Assistance Center. Weida will move over from his post as director of intelligence and requirements in Air Force Materiel Command headquarters at Wright-Patterson.

■ **David H. Barakat** has been appointed vice president, programs and technology, for the Los Angeles-based Northrop Grumman Corporation. He was president of programs of the company's Mission Systems sector.

■ **Garnett Stowe** has been appointed Washington-based vice president, national intelligence programs, for the Raytheon Company's business development organization. He was principal consultant in Booz Allen Hamilton's National Security business segment and had been chief of staff for the National Reconnaissance Office.

■ **Rear Adm. Scott H. Swift**, USN, has been named deputy commander of U.S. Naval Forces under U.S. Central Command in Bahrain. He had been deputy executive officer for naval aviation and tactical air systems in the Office of the Secretary of Defense at the Pentagon. **Rear Adm. Michael P. Tillotson**, USN, has become deputy commander of the Navy Expeditionary Combat Command, Norfolk, Virginia. He was deputy director of Standing Joint Force Headquarters North, U.S. Northern Command, Peterson AFB, Colorado.

Training & Simulation *report*

AVCATT Award

Reprinted from *Aerospace Daily*

The U.S. Navy has awarded L-3 Communications' Link Simulation and Training unit a \$51.1 million contract modification for Lots 16, 17, 18, 19 and 20 of the aviation combined arms tactical trainer. The trainer is a group of fully-interactive, networked, reconfigurable aviation manned simulators. The system will permit Army aviation units to conduct collective task training on a real-time, computerized battlefield in a combined arms scenario, according to the Defense Department. The work will be performed in Arlington, Texas, and is expected to be completed in July 2008.

IAI Acquires Stake in Visualization Firm

Reprinted from *Defense Daily*

Israel Aircraft Industries (IAI) completed the purchase of 30 percent of the share capital of the military simulation and visualization firm Tiltan, a Matrix subsidiary of Israel, for \$6 million. "Tiltan is a developing company that was rising rapidly, and IAI saw its potential," a spokesperson for Matrix told *Defense Daily*. He added that the collaboration was a win for both sides, with IAI getting access to Tiltan's technologies and people, and Tiltan's advanced products poised to get a boost from IAI's worldwide sales and marketing connections.

The agreement was originally announced in March 2006, and completed in November 2006 following the approvals of IAI's and Matrix's boards of directors and Israel's anti-trust office. IAI and Tiltan will collaborate on joint projects to develop solutions that the two organizations can market to customers both in Israel and overseas, the companies said in a joint statement.

USN's Mock Ship Advances Damage-Control Training

Reprinted from *Defense News*

It's not the same as serving on a real destroyer, but it's the next best thing. At the Great Lakes Naval Recruiting Center, near Chicago, the U.S. Navy has built a destroyer-sized simulator that will give recruits a taste of disaster. Battlestations 21 is a 500-foot-long damage-control simulator that isn't much smaller than the *Arleigh Burke*-class guided-missile destroyer that it's supposed to simulate. The mock ship, dubbed the *USS Trayer*, is designed to replicate various catastrophes that sailors might face at sea.

"When you walk up to it, you'd think you were walking up to a ship right out of Norfolk," said Capt. Annie Andrews, commander of Recruit Training Command.

All recruits at Great Lakes, as their culminating event, will spend a 12-hour session aboard the \$82 million facility, which is scheduled to open in February. The Navy has pulled out all the stops to create a realistic atmosphere, from the smell and mist of the ocean to mannequin "casualties" equipped with infrared trig-

gers and MP3 players for gasps and groans.

Recruits will face 17 scenarios, each about 40 minutes long. They are based on real-life situations such as the terrorist bombing of the destroyer *Cole*, the massive fire on the aircraft carrier *Forrestal*, the Iraqi missile strike on the guided-missile frigate *Stark*, mine damage on the amphibious assault ship *Tripoli* during the Gulf War and a hazardous chemical spill on the submarine tender *Holland*.

Army Makes EW a Core Competency

Reprinted from *Aerospace Daily and Defense Report*

The U.S. Army is making electronic warfare a core competency that every soldier must have a basic understanding of, said Col. Laurie Buckhout, Army electronic warfare division chief. While the service's interest started about two years ago with its attempts to thwart electronic ignition of improvised explosive devices in Iraq, the Army's foray is spreading in scope and depth, Buckhout said at the 43rd Annual Association of Old Crows Symposium and Convention in Washington.

"It's not just the improvised explosive devices fight," she said. "It's much more than that." Electronic warfare is now considered a part of the Army's operational arsenal, Buckhout said, a type of non-kinetic artillery. Developing electronic proficiency is now a major concern for the service and has support at the highest levels, Buckhout said, adding that she's getting the resources she needs, even at the expense of other programs. "I'm getting the money," she said.

U.K. Training Win Opens Export Doors for Lockheed, VT

Reprinted from *Defense News*

Fresh from winning a 25-year, 6 billion pound (\$11.7 billion) contract to help the British government train air crews, Lockheed Martin and the VT Group are vowing to use the deal as a model to compete for similar programs elsewhere.

VT Chief Executive Paul Lester said the firms' Ascent consortium planned to "offer the same training systems model to a number of other governments around the world, which could generate substantial revenues in the future." Lester said the two companies had agreed in March 2005 to jointly pursue such export contracts.

On November 30, 2006, British officials picked Ascent to be the preferred contractor for the military flying training system program, which will provide training over 25 years for fixed-wing and helicopter pilots and aircrew in a number of other disciplines.

Europe is another likely target for the two companies as the multination advanced European jet pilot training scheme fragments. The military flying training system will further boost the

Training & Simulation cont. on page 9

Current News from page 4

until 2000 was divided into an annual split of six months' training and six months of operational deployment, evolved into 10 months of deployment with only two months' training per year.

As such, Israel Defense Force personnel experienced exercises mostly during their first year of service, in basic training and professional courses, but scarcely at all later in their service. Debriefings found that none of the Israel Defense Forces regular infantry and armor brigades, nor most Israel Defense Force battalions, have conducted a full brigade exercise in the last six years. The result was that most Israel Defense Force battalion and brigade commanders conducted full unit operations for the first time only when deployed in combat in Lebanon.

New Year, New Markets

Reprinted from *Defense News*

Major aerospace and defense companies in 2007 and beyond likely will look for growth outside the traditional military spending that has buoyed their bottom lines since September 11, 2001. Though military-oriented firms have sought opportunities from non-defense markets for at least a decade, recent contracts, acquisitions and industry leaders' comments indicate a new push. This comes as many analysts and observers expect the U.S. defense budget—by far the largest in the world—to cease its rapid growth of the past half-decade.

Close to 40 percent of sales at Lockheed Martin comes from non-defense business, Chris Kubasik, the chief financial officer of the world's largest defense company, reminded investors and analysts December 5, 2006, at the Aviation Week-Credit Suisse Aerospace Defense conference. Lockheed has enough opportunities to grow as non-defense U.S. government agencies focus on their budget and programs, Kubasik said, emphasizing the company's "adjacent market" strategy, which aims to expand the company's entry into businesses related to its Pentagon work.

Among Lockheed's major non-defense programs are the U.S. Federal Aviation Authority's air traffic-control program and the New York Metropolitan Transportation Authority's contract to improve electronic security systems. In September, Lockheed bought Los Angeles-based Pacific Architects and Engineers, whose major clients include the U.S. State Department. With that acquisition, Lockheed is poised to provide nation-building and democracy-promotion services to the U.S. government.

Lockheed is not alone. In September, Boeing sought and won a \$67 million contract for the first phase of the Secure Border Initiative from the U.S. Department of Homeland Security. The program to build a virtual fence—including cameras, sensors and unmanned surveillance planes to monitor the border between the United States and Mexico—could be worth \$2 billion when all work is complete.

Some equity analysts even speculate that cash-rich defense contractors may buy multi-product conglomerates to beat the cyclical

pattern of military spending. One analyst said he would not rule out the possibility of General Dynamics buying Textron, whose products include the V-22 Osprey tiltrotor and Cessna aircraft.

While some of the major U.S. defense companies are looking outside the industry for growth, opportunities in niches could mean the return of firms that quit the industry during the last downturn in the early 1990s, said Mark Ronald, the outgoing chief executive of BAE Systems.

U.S. Army to Deploy Land Warrior

Reprinted from *Defense Daily*

When they head to Iraq, the 4th Battalion, 9th Infantry Regiment, 4th Stryker Brigade Combat Team, 2nd Infantry Division, will take Land Warrior systems that, for the first time, link dismounted soldiers to each other and their Stryker vehicles. "It changed the way we fight," said Maj. Keith Markham, battalion executive officer, just back from a field training exercise, in a December 12, 2006, video teleconference from Fort Lewis, Washington.

Developed by the Army's Program Executive Office Soldier, and General Dynamics, Land Warrior's integrated modular system is comprised of an advanced computer, digital voice and data communications, GPS navigation, and a multifunctional laser system. The Army expects to improve situational awareness and resolve some of the most common battlefield uncertainties: where am I, where are my friends, and where and who is the enemy.

Since May, the 4/9 (Manchu) soldiers have been assessing and testing 440 Land Warrior systems and 147 mounted warrior systems, all supported by General Dynamics.

DHS, DoE Launch Container Security Initiative

Reprinted from *Defense Daily*

The Departments of Homeland Security and Energy launched the first phase of the Secure Freight Initiative, an initial \$60 million effort to equip select international shipping ports with radiation detection devices, X-Ray inspection equipment and communications technology to scan United States-bound cargo containers for nuclear, radiological and other threats. Another key feature of the initiative is that information on the U.S. bound cargo will be transmitted real-time to the Department of Homeland Security national targeting system for risk assessment.

"This initiative advances a comprehensive strategy to secure the global supply chain and cut off any possibility of exploitation by terrorists," said Department of Homeland Security Secretary Michael Chertoff. "I appreciate the commitment of our international allies in sharing more information and harmonizing our risk reduction efforts."

In the first phase of Secure Freight, radiation portal monitors, X-Ray equipment and communications equipment will be deployed at Port Qasim in Pakistan, Puerto Cortes in Honduras, Southampton in the United Kingdom, Port Salalah in Oman, Port of Singapore,

Current News cont. on page 10

Training & Simulation from page 7

training credentials of Lockheed Martin and VT, both of who are carving out niches in the sector. Lockheed Martin says it already provides training for more than 20,000 aircrew annually, mainly in the United States. In the United Kingdom, it also runs the Army's combined arms tactical trainer, which is said to be the largest networked operation of its kind.

VT trains pilots and other military specialists across all three armed services in the United Kingdom, as well as running a growing business in the civil sector.

Israel's Postwar Priority: More Live Training

Reprinted from *Defense News*

Israeli developers of ground and combined warfare training systems could suffer in the wake of the summer 2006 Lebanon War, which pointed to a need for more live training. At least in the short term, Israeli Army officials say they will direct every available shekel into improving combat readiness of ground fighting forces, which proved deficient in the recent war against Hezbollah.

Internal and external postwar probes unanimously recommended a return to basic soldiering, where tank crews physically spend hours in tanks, artillery teams hone firing skills and infantry forces are exposed to real fog-of-war combat.

How to Avoid Ground Fire

Reprinted from *Defense News*

They wait and they watch and they note the flight paths of airlifters like hunters noting the routes of wild birds. Enemy combatants "are out there watching us and they want to kill us," said Maj. John Coy, chief of combat programs at Scott AFB, Illinois. "They would like nothing better than to take an aircraft—fat, full of fuel, full of American bodies—and shoot that airplane out of the skies."

Air Mobility Command aircraft are second only to helicopters when it comes to taking enemy fire in Afghanistan and Iraq, according to the Air Force. That has tactical officers like Coy, as well as battle lab researchers and industry, looking for better ways to thwart the enemy on the ground and protect the airmen and planes in the sky.

One of the best investments the Air Mobility Command has made to counter ground fire, Coy said, is the visual threat recognition and avoidance trainer (VTRAT). This is high-tech classroom training to help pilots recognize threats before they ever get into theater.

"Anything I can teach a crew on ground, before an aircraft is moving, is something they don't have to think about when the aircraft is moving at 300 knots, it's 120 degrees, they're wearing survival equipment, wearing a bucket, wearing [night vision goggles], it's nighttime [or] they're getting shot at," he said, "anything I can talk to a crew about, I make that crew that much better to deploy against our adversaries."

That's what the visual threat recognition and avoidance trainer lets trainers do. Pilots train in front of a screen that displays what

they are likely to see as they fly in and out of locations where anti-aircraft weapons are a real threat, according to the Air Force Research Lab at Wright-Patterson AFB, Ohio, where the trainer was developed.

"We train crews on an annual basis. Some do it just before going out the door [to deploy], like just-in-time training," Coy said. "I have a crew member who went out to the field, he was shot at with a man-portable air defense system, and he came back and said, 'John, the training system works. The threat I saw that was launched at the aircraft was identical to the threat I saw on VTRAT.'"

The various counterthreat systems have so far been successful, he said. "How many [AMC aircraft] have been shot down in theater?" Coy asked. "Zero."

Full-Flight Simulator Qualified by FAA

Reprinted from *Aviation Week & Space Technology*

Piaggio America says a full-flight simulator for the P180 Avanti turboprop business aircraft has been qualified by the Federal Aviation Administration as a Level D device. The simulator was built by FlightSafety International and has been installed at the company's Learning Center in West Palm Beach, Florida. FlightSafety is responsible for Piaggio Aero pilot training. Plans call for a second Level D unit for the Avanti II to be built, with the location determined by customer demand.

Sim Synergy

Reprinted from *Aviation Week & Space Technology*

Montreal-based simulator-maker Mechtronix Systems Inc. and Minnesota-based flight simulation software specialist Aerosim Technologies will produce the full-flight trainer used by Boeing subsidiary Alteon Training for its multicrew pilot license program, set to enter beta testing in Brisbane, Australia. The Aerosim-Mechtronix full-flight trainer resembles the Boeing 737-800 that Alteon's pilot license course is built on.

War Games

Reprinted from *Aviation Week & Space Technology*

The U.S. Navy has chosen L-3 Communications' Link Simulation and Training division to build as many as nine forward deployed trainers for the P-3C Orion. The forward deployed trainers will allow crews deployed overseas to maintain proficiency in tracking targets over complex operating environments. The device will support training for crewmembers manning three acoustic and non-acoustic consoles, and is modular in design to allow for flexible arrangements in confined spaces. A PC-based instructor station controls the training exercises. The first forward deployed trainer is scheduled to be deployed at Naval Air Station Jacksonville, Florida, and is to be approved for crew training in March 2008.

Training & Simulation cont. on page 11

Current News cont. from page 8

and the Gamman Terminal at Port Busan in South Korea.

“Beginning in early 2007, containers from these ports will be scanned for radiation and information risk factors before they are allowed to depart for the United States,” a spokesman for the Department of Homeland Security said.

U.S. Budget Cuts Unlikely

Reprinted from *Defense News*

Prognosticators expect the Democratic takeover of Congress to affect few major military acquisition programs in 2007. “I don’t think the new Congress will be very inclined to do any serious cutting of the defense budget,” said one veteran Capitol Hill source. “No one’s very eager to talk about cutting the defense budget in the middle of a long-term war.”

Democrats “don’t want to cut jobs programs,” a congressional source agreed. “They don’t want to go into the ‘08 campaign being criticized for being weak on defense, and there’s not so much in the budget that’s ripe for the picking.”

Key procurement issues expected to remain in the forefront of discussion include reset funding to rebuild Army and Marine Corps equipment damaged and worn out by combat in Iraq and Afghanistan. Analysts said the debate will largely be concerned with how the reset money is funded, not the total bill.

“When you get in the situation where you’re recapitalizing on existing equipment, you’re in sort of a safe zone,” the Capitol Hill source said. “Everyone knows what it costs and it tends not to be an issue.”

MONDAY, FEBRUARY 26, 2007

Second Annual Modeling & Simulation Leadership Summit

**CHESAPEAKE CONFERENCE CENTER
CHESAPEAKE, VA**

Leaders from government, industry and academia will convene to discuss issues facing the M&S industry and to make recommendations to the Congressional Modeling & Simulation Caucus. Several congressional members of the caucus are expected to attend. Don’t miss this invaluable opportunity to shape the future of the M&S industry! For complete details and registration, please visit www.trainingsystems.org.

ONR Heavy Lift Effort Looking at Moving Containers

Reprinted from *Defense Daily*

For the past two years, the Office of Naval Research has been examining the capabilities needed to move 20-foot cargo containers between two ships at sea, all the way up to sea state four, Paul Hess, program officer at the Office of Naval Research, said in a recent interview. “How do you use existing container ships to best utilize this? Not all the kinks are ironed out, such as what do you do with the container once you move it,” he said.

Most ship cranes don’t operate in any sort of high-wave environment, Hess noted. That’s because loads start swinging around pretty quickly, he added. “One of the points of the program was to quickly and safely move a container, given that the ship the crane is mounted on and the ship you are trying to get the container to, are moving around,” Hess explained. “One of the goals of the program was not just to lift something heavy at sea, but to do it in a controlled fashion.”

In active payload control one effort being looked at is the crane itself maintaining the container in space in a very stable way, even though the base of the crane is moving around. But while the crane is maintaining the container in a stable manner, the neighboring ship is moving differently than the container ship. To make this work, Hess said one idea is to use sensors on the crane and at the junction of the crane and container, to sense the behavior of the ship that the container will go on, and try to match those portions. “So, effectively, the container thinks the other ship is standing still.”

While it might seem an impossible task, there is a 20th scale prototype currently demonstrating the system, Hess said. Houston, Texas-based Oceaneering International Inc., has a model in Hanover, Maryland, that demonstrates this very effectively, Hess said. “It really becomes a control systems issue and architecture of the crane. Our goal is to actually have a quarter scale in ‘07. We are testing components of the system,” he said. “We are trying to mitigate the risks and demonstrate that this works, and the time frame for that is fall ‘08 for the full-scale prototype system. Some of the container sensor work is ongoing.” Until then, testing will continue using the 20th scale model. “It’s expensive to do a full-scale of the complete system.”

Germany Releases White Paper

Reprinted from *Jane’s Defense Weekly*

The German cabinet published its long-awaited Defense White Paper on October 25, 2006. “The White Paper 2006 on German Security Policy and the Future of the Bundeswehr” outlines the threats to German security in an increasingly globalized world and how its armed forces should face them.

The White Paper sees international terrorism as a “fundamental challenge and threat to freedom and security” and the proliferation of weapons of mass destruction and their means of delivery as “a potential threat.” The central task of the armed forces (Bundeswehr) is to be national and collective defense. The White Paper, however, concludes that the protection of the population and infrastructure has increased in importance due to the growing terrorist threat to Germany.

USAF Pursues Private Training for Iraqi Pilots

Reprinted from *Jane's Defense Weekly*

The U.S. Air Force has launched a search for private companies that can help rebuild the Iraqi Air Force by providing basic flight training to Iraqi Air Force candidate pilots. The Air Force Security Assistance Training squadron at Randolph AFB, Texas, is creating a list of companies that can provide a "military-style, disciplined training program" on location in Iraq, according to a U.S. Air Force notice issued on October 13, 2006.

U.S. Air Force spokesman David Smith said that hiring private contractors for Iraqi Air Force training is "one possible option considered as the initial training of the Iraqi military transitions to indigenous sustained operations." The October notice stated U.S. Air Force officials are looking for companies that can train about 100 Iraqi pilots—split evenly between training on fixed-wing and rotary-wing aircraft—each year for the next three to five years. The Iraqi Air Force currently consists of seven squadrons.

The companies must be able to instruct Iraqi Air Force candi-

dates in their native Arabic language and must offer the candidates academic instruction, simulator training and actual flying time, according to the contract notice. The Iraqi government or U.S. Air Force will provide training aircraft, simulators and facilities.

Blackwater, HK Lift Veil on Joint Training Project

Reprinted from *Jane's Defense Weekly*

Small arms manufacturer Heckler and Koch and private security firm Blackwater have unveiled a joint training program, Blackwater HK International Training Services (BHKITS). Both companies see BHKITS as a "cross-branding" strategy that will give them greater reach in the military and law-enforcement training market. The deal will also give HK a base at the Blackwater Training Center, the largest private firearms training facility in the U.S.

BHKITS combines the training approaches of both companies: the European-style close-quarter shooting skills of HK instructors and the doctrine and training techniques of Blackwater, strongly influenced by U.S. Navy commandos.

The Second Annual I/ITSEC Serious Games Showcase & Challenge Call for Entries

Interservice/Industry Training, Simulation and Education Conference I/ITSEC 2007 <http://www.iitsec.org/>; <http://www.sgschallenge.com>
November 26-29, 2007, Orlando, Florida, USA

Abstract deadline	May 31, 2007
Submission deadline	August 31, 2007

Serious Game developers are invited to submit their original serious game to the Second 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. Expanded eligibility means an expanded base of competitors. Previous contestants and winners can be reviewed at www.sgschallenge.com.

Finalists in the Serious Games Showcase & Challenge 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 2007, where over 16,000 attendees will view and vote on each of the finalists. Awards will be presented to the top finishers in each category.

The Challenge is open to a wide range of contestants. Potential categories include student, individual/small business, and businesses larger than 500 employees. PC game entries (or compiled for PC execution) will be accepted from virtually any application areas including "mods", mobile, virtual worlds and original development and gaming content can be focused on any genre, such as business, education, government. So, whether game development is your pastime, your intended field, or your current business, if you can "mod" a game into a training solution, or program one from scratch, consider how you would use

your skills to develop a serious game solution to enhance training. It could put your work in front of some of the best gaming and simulation industry companies in the world.

All entries will be judged by representatives in leading gaming, academic and industry companies in three primary areas: Solution to a Stated Problem; Technical Quality; and Playability/Usability. It is important to clearly define the problem or need that is being addressed, as well as the gaming or game technology solution involved. It is equally important that your entry be not only technologically sound in its development, delivery and user interface, but also engaging, enjoyable, and easy to use; providing a challenging and rewarding experience to the user.

Further, innovative approaches to any of the entered solutions are specifically encouraged and, as such, rewarded in the scoring. For the purpose of the Challenge, entries will be considered a game if they involve an assigned challenge and employ some form of positive and/or negative reward system. Entries will be considered a serious game if they use the gaming attributes described above to overcome a designated problem or deficiency, and provide appropriate feedback to the user about their efforts. Entered games must target users at the high school level, at a minimum.

IMPORTANT DATES:

Abstracts	Feb 15 – May 31, 2007
Submission of serious game entries	August 31, 2007
Announcement of Finalists	September 30, 2007
I/ITSEC Conference	November 26-29, 2007

Check www.sgschallenge.com
for additional details as they develop.

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

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