

NTSA's Training Industry *news*

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Current *news*

U.S. Army Details Ground Vehicle Plans

Reprinted from *Defense News*

The U.S. Army's vice chief of staff said September 10 that the service plans to begin replacing its M113 and Bradley armored vehicles with a new infantry carrier vehicle within the decade. Gen. Peter Chiarelli laid out new details of the Army's new modernization strategy at an Association of the United States Army breakfast, focusing on the ground combat vehicle effort.

Army acquisition officials announced the ground combat vehicle effort after Defense Secretary Robert Gates killed the 27-ton manned ground vehicles portion of the Army's Future Combat Systems program in the fiscal 2010 defense budget, criticizing the design as ill-suited to survive current battlefield threats. "The ground combat vehicle represents one of the most important combat development and acquisition decisions we are going to make in a long time," Chiarelli said.

These futuristic vehicles, which the Army hopes to develop and begin fielding within seven years, will be designed to be flexible enough to fight in any environment and adaptable enough to be upgraded with technology that surfaces decades into the future, Chiarelli said.

General Peter W. Chiarelli will discuss "The Road Ahead for the U.S. Army" at IIITSEC 2009 in Orlando on Monday, 30 November, from 1:30 – 3:00 p.m. in Room 204 of the Orange County Convention Center. All IIITSEC attendees are invited to this event.

Turning Point

Reprinted from *Aerospace Daily & Defense Report*

The U.S. Air Force chief of staff is declaring a turning point in a cultural and operational evolution to unmanned aerial systems from manned aircraft within the service. "This is an inflection point," Gen. Norton Schwartz says.

The chief, an airlift pilot and former head of Transportation Command, acknowledged that there may be a loss of verve among some Air Force members who grew up around the panache of pilot-

ing high-performance fighters. But Schwartz also asserted that some Air Force cadets are asking to go to unmanned aerial systems positions because it allows them to get into combat operations relatively quickly, and that the future of long-endurance-type missions is unmanned.

Nevertheless, Schwartz said it is a "serious question" whether the U.S. will want its next nuclear bomber to be an unmanned platform. Schwartz also says it seems unlikely that transport aircraft can be automated to the same extent as combat-oriented systems.

Russian Subs Failed: Report

Reprinted from *Defense News*

Two Russian attack submarines are considered to have failed their secret mission in international waters after being detected by the United States and Canada, a report said August 13. "If the United States and Canada really detected the foreign submarines, that means they unmasked them. This represents the failure of their military mission," the Interfax news agency quoted a source close to the matter as saying. Canadian aircraft used to hunting Soviet submarines during the Cold War tracked the two Russian attack subs as they moved north after being detected off the U.S. coast, an official said.

Researchers: Problem-Plagued Russian Military

Reprinted from *Aerospace Daily & Defense Report*

Several U.S. researchers in Washington painted a grim picture of the Russian military, saying the former Cold War adversary has embarked on a necessary reform campaign after decades of corruption and shrinking capacity. Two researchers, Stephen Blank of the U.S. Army War College and Dale Herspring of Kansas State University, told a Hudson Institute audience that Russian media and military leaders are widely lamenting the state of Russia's military, recently brought to worldwide attention by its difficult, albeit ultimately successful, invasion of Georgia a year ago. "The Russians were not ready for that war," Herspring said.

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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.

President's *notes*

Rear Adm. Fred Lewis, USN (Ret.)

For NTSA Members:

Several months ago, during the depths of the current economic unpleasantness, I offered in this column some tentative thoughts on why our industry and community of practice might fare better than many. While claiming no piercing insight, I thought the increasing diversity of modeling and simulation applications, allied with the technology's ability to save costs in many areas, might help it weather the storm.

This may have in fact been the case—or other factors, which I am not schooled enough to discern, may have come into play. Whatever the reasons, if participation at I/ITSEC 2009 is any measure, the M&S community is signaling at least measured confidence both in the present and the future. Particularly indicative of this perhaps guarded optimism is the near-record number of first-time participants at I/ITSEC 2009. This, it seems to me, is evidence not only of expectations that there is business to be won in the current climate, but also that I/ITSEC is the place to win it.

I don't want to do too much cheerleading here. Our community, despite accelerating use of simulation training in other fields, is still largely military/national security oriented. In this light, defense spending and how it will be allocated in the coming years provides a cautionary note. As the nation's total defense outlay declines in absolute terms over the next several fiscal cycles, the pattern of resource allocation within that budget will also undergo marked change. Standing to benefit from a sharper focus on irregular conflict will be ISR, particularly UAV development and acquisition, LCS, various helicopter lift programs, the F35, the entire personnel account, and of course operations and maintenance. Suffering, of course, is the F22, elements of what was FCS, the pace of the carrier replacement program, missile defense, and the DDG-100, among others. One can argue the prudence, or lack thereof, of these shifts in an unpredictable

and dangerous world, but they are well in train, and will be the facts of life for some time to come.

As long as modeling and simulation technology remain focused on defense and national security applications, such changes offer pitfalls as well as opportunities. Various panels, papers, and other events at I/ITSEC will examine the significance of current defense trends in the context of our industry, and in considerable depth. I encourage all those attending this year's I/ITSEC to allocate time from your busy schedules to inform yourselves further about what the future holds at this important moment for all of us. Your company or organization will profit from your insight.

Finally, I have dedicated several of my columns over this past year to the vitally important subject of the American crisis in science and technology education. At I/ITSEC 2009, you will see more science, technology, engineering and math programs than ever before. The "America's Teachers" program will be greatly enhanced and will once again bring science and math teachers from across the nation to I/ITSEC. We hope to have representatives from the Business-Higher Education Forum on hand to brief a very sophisticated predictive model of the U.S. educational system which I have previously mentioned. This, coupled with the Future Leaders Pavilion, the Serious Games Challenge and Student Tours, will combine to make I/ITSEC 2009 a true STEM experience. And look for even more in 2010 as NTSA rededicates itself to a continuing role in meeting this existential challenge to our national security.

We always try to make each I/ITSEC better than the last by competing against ourselves to bring you the best possible sales, networking and marketing event of the year. We hope and expect we'll do so again this year. Come to I/ITSEC 2009 and test us out. See you there!



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The Global marketplace

Elbit Buys BVR Systems

Reprinted from *Aerospace Daily & Defense Report*

Elbit Systems is not easing up on acquisitions, having just announced that it is adding military training and simulation systems company BVR Systems to its portfolio. Israel's largest publicly traded defense company says it is paying \$34 million for BVR, which reported \$3.3 million in net profits in the first quarter and an order backlog of \$48.4 million. "The acquisition of BVR System's business activities is in line with our long-term strategy of growth through mergers and acquisitions" of complementary businesses, Elbit President and Chief Executive Officer Joseph Ackerman says. He adds that BVR's "capabilities complement Elbit Systems' other training capabilities."

Naval Head Warns of Chinese Challenge

Reprinted from *Jane's Defense Weekly*

India's naval chief has said that his country cannot hope to rival China when it comes to military strength, while warning that China will become a "primary challenge" for India in the future. Admiral Sureesh Mehta, who is also chairman of India's Chiefs of Staff Committee, said at a 10 August function organized by the National Maritime Foundation in New Delhi, "In military terms, both conventional and non-conventional, we neither have the capability nor the intention to match China, force for force."

Adm. Mehta's comments came shortly after the 13th round of negotiations aimed at settling the disputed India-China border concluded in New Delhi on 8 August, with little progress having been made. The Navy chief said there was a serious "trust deficit between Beijing and New Delhi on the issue."

"Coping with China will be one of our primary challenges in the years ahead," Adm. Mehta declared, cautioning that Beijing's territorial claims would become more assertive as its military capabilities continue to develop. He added that while India could not catch up with China militarily, it should aim to level the playing field as much as possible. "On the military front, our strategy to deal with China must

include reducing the military gap and countering the growing Chinese footprint in the Indian Ocean region," he said.

German-Pakistani Sub Deal on Course

Reprinted from *Defense News*

Pakistan's purchase of German Type 214 submarines is on track, said one German source in Islamabad, denying a news report that the German government had put a hold on the deal. The news magazine *Der Spiegel* reported on May 16 that the government, concerned about the security situation in Pakistan, had delayed final approval of the deal until after the German general elections set for September. The German source called that a rumor, and said the deal was to be signed by the end of Pakistan's financial year in August. "There is no official delay by the German government. That is pure speculation," the source said.

Arms Export Treaties Face Hurdles in Senate

Reprinted from *Defense News*

Work is resuming on two defense trade treaties stalled for more than a year in the U.S. Senate, but it remains unclear whether the new activity will lead to the treaties' ratification by the Senate or their burial by legislation in the House. The treaties are intended to eliminate the need for most of the export licenses that are now required when U.S. companies sell military goods and services to the United Kingdom and Australia.

The cooperation treaties were negotiated and signed by former President George W. Bush in 2007, but have languished since then despite Bush's call at the time for swift ratification. The latest delay comes as members of the Senate Foreign Relations Committee argue that "implementing legislation" is needed to give the U.S. government the authority to punish treaty violations.

Senators "have concerns about enforceability of the treaty," a defense industry official said. They worry that if U.K. or Australian companies receive U.S. military technology and then illegally sell it to third parties, "there's nothing we can do about it," the official said.

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Indeed, the self-criticism started as soon as just weeks after the August 2008 war. Senior Russian military officials, both active and recently retired, loudly criticized early setbacks in Georgia which included problems in air defense suppression, intelligence analysis and warning, air attack planning and speed of response. Russia's military is plagued by endemic corruption — perhaps around 40 percent of the annual budget is essentially stolen, the U.S. researchers said — and ineptitude. Moreover, technologically, Russia has suffered at least one lost decade. “Ten years were basically lost, 1990-2000,” Herspring said.

Indeed, Blank said, the idea that Russia is going to Israel to buy unmanned aerial vehicles is a scandal in Russia. In March, the armed forces said the defense ministry must acquire at least an initial batch of unmanned aerial vehicles from abroad, since local industry is not yet ready for the job.

“Don't expect major weapons modifications for several years,” Herspring said. The Russian military will be first focused on internal reform. Nevertheless, the latest Russian defense guidance reflects a “growing sense of anxiety,” according to Blank, refocusing on asserting a “sphere of influence around the Eurasian giant, while still eyeing the United States above terrorism, major weapons proliferation or even China.”

Energy disputes will lead to armed conflicts around Russia, especially the Arctic, Middle East and Central Asia, predicted Blank and Joshua Spero of Fitchberg State University. “The Russian military still sees NATO as a threat,” Spero said. Moscow will come to rely on its air, naval, electronic and even nuclear capabilities in the face of NATO and other challengers, according to Blank.

Carter: Protect U.S. Industrial Base

Reprinted from Defense News

Senior Pentagon officials must weigh the industrial implications of major program decisions and may have to protect key niche areas like stealth and space systems, said Pentagon acquisition chief Ashton Carter. “I feel industrial base issues are completely legitimate because having the best defense industrial and technology base in the world is not a birthright,” Carter said in a September 2 interview. He became undersecretary of defense for acquisition, technology and logistics on April 27.

The U.S. defense industrial base, still the world's most capable, may weaken within a few years due to extensive consolidation, an aging workforce and a lack of new major Defense Department programs. In recent months, some Republican lawmakers and industry officials have expressed concern about Defense Secretary Robert Gates' April comments that he did not consider industrial base implications when he canceled, delayed or otherwise altered about 50 major programs. But in the interview, Carter called defense firms the Pentagon's “partners” and said he wants an open relationship with them.

Cyberwar is Official

Reprinted from Aviation Week & Space Technology

A year after the 2008 fight between Russia and Georgia, the shadow it casts on future wars continues to grow as details surface about the use of 21st-century weaponry—in this case, computer network attacks—in the conflict. New studies reveal that cyber-attacks orchestrated from Russia created a strategic economic impact. Civilians and criminal organizations in several countries were recruited to aid the military effort. Analysts also suspect that digital time bombs were embedded in Georgian networks to cause future damage.

The use of advanced conventional weapons during the conflict has already gained note, particularly the Georgians' surface-to-air missile technology—“double-digit SAMs”—that shot down at least four, perhaps as many as eight, Russian aircraft. It has been dubbed the first conflict in which modern, digitally based air defense weapons were used.

Now analysts are looking at the assault on Georgia as another in the series of Russian-origin cyber-attacks including those on Estonia in April-May 2007, Lithuania in June 2008 and Kazakhstan in January 2009 that foretell the future of network warfare.

Defense Science Board Calls for Rapid Acquisition Agency

Reprinted from Aerospace Daily & Defense Report

The U.S. military needs to rethink the way it does rapid acquisition and place it under a new, dedicated agency, according to a Defense Science Board task force. “Current approaches to implementing rapid responses to urgent needs are not sustainable,” the task force says in its July report. “An integrated triage approach is required.” The task force recommended forming a dual acquisition path by standing up a new organization and funding stream dedicated to rapid acquisition and fielding. “A rapid process should be based on proven technology and is aimed at delivering a capability as quickly as two months, and no longer than 24 months after a need is identified,” the task force says.

Pentagon Warns Services of Lean Times Ahead

Reprinted from Jane's Defense Weekly

The U.S. Defense Department is asking its military services to assume zero budget growth between Fiscal Years 2011 and 2015, forcing the services to make tough trade-offs as it seeks to provide capabilities required under the forthcoming Quadrennial Defense Review. David Ochmanek, deputy assistant secretary of defense for force transformation and resources, said the U.S. military will have to find savings between \$50 billion to \$60 billion between FY11 and FY15 to free up money for important new defense capabilities.

Each military service will have to find ways to fill these capability gaps—such as the need for more vertical lift and civil affairs resources to make up for shortfalls in Iraq and Afghanistan—while

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Contracts

Fidelity Trainer for Norway

Reprinted from *Defense News*

Norway's military will train its forward air controllers and forward artillery observers on a virtual simulator supplied by Fidelity Technologies, Reading, Pennsylvania. The company has entered into a \$10.5 million contract with the Norwegian Armed Forces to provide a forward air controller/forward observer (FAC/FO) trainer. Forward air controllers are personnel deployed with ground troops who observe and coordinate attacks by friendly combat aircraft on enemy troop formations and installations. Forward observers perform the same tasks for their force's artillery. The FAC/FO trainer simulates terrain, obstacles and different climates and combat conditions, giving a realistic picture of the enemy. It also provides after-action reviews.

Weapons Contracts Awarded

Reprinted from *Aerospace Daily & Defense Report*

The U.S. Air Force has awarded two key weapons contracts. Boeing snagged a \$12.5 million contract to provide three massive ordnance penetrator separation test vehicles and a B-52H aircraft for two tests — the first a single release, the second a double release — of the 30,000-pound deep penetrating bomb for hardened and deeply buried targets. The Pentagon has accelerated the program so that the weapon will be operational by summer 2010. Meanwhile, Raytheon won a \$21 million contract for system improvement of the AIM-120 AMRAAM air-to-air weapon.

Overhaul

Reprinted from *Aerospace Daily & Defense Report*

The U.S. Navy awarded Northrop Grumman a roughly \$2.43 billion contract for the refueling and complex overhaul of the nuclear-powered aircraft carrier *USS Theodore Roosevelt* (CVN 71). The once-in-a-lifetime work, usually conducted halfway through a carrier's life, is expected to be completed by February 2013, according to the Pentagon. This is the fourth ship of the *Nimitz* class to undergo this major lifecycle milestone. More than 3,800 Northrop Grumman shipbuilding sector employees in Newport News, Virginia, will work aboard the carrier during peak periods of the project, the company said.

More 'Bots

Reprinted from *Aerospace Daily & Defense Report*

As part of an \$286 million indefinite delivery/indefinite quantity xBot contract, iRobot Corporation has received an order for \$35.3 million from the U.S. Army for 486 iRobot PackBot 510s

with FastTac Kit, to be delivered by March 31, 2010. The total contract value to date under the indefinite delivery/indefinite quantity contract is about \$125 million. The U.S. Army so far has taken delivery of more than 2,500 teleoperated PackBots, which are used for ordnance disposal, route clearance and other surveillance duties.

Wearable Control

Reprinted from *Aerospace Daily & Defense Report*

The U.S. Marine Corps awarded QinetiQ North America a \$2 million contract to develop a universal wearable controller to operate a wide variety of unmanned ground and air vehicles and unattended ground sensors. The common robotic controller will be lightweight and designed to fit in with other equipment that Marines are required to wear and carry. The project will include development of a wearable, integrated set of components including a robust, miniature computer system able to support necessary platform software requirements, a reliable power source, touch-sensitive display and a gaming style input device.

More M-ATVs

Reprinted from *Aerospace Daily & Defense Report*

Oshkosh Corporation has received a follow-on order to the tune of \$1.06 billion for an additional 1,700 mine resistant, ambush protected all terrain vehicles, on top of 2,244 already ordered under a similarly sized contract awarded in June. Oshkosh also will produce "aftermarket parts packages to be supplied by April 2010, along with field service support," according to a release from the company. Oshkosh also announced that it surpassed its first delivery requirements for 45 vehicles in July—churning out 46 trucks during the first month of the contract's life.

Sukhoi Secures Big New Russian Fighter Deal

Reprinted from *Aerospace Daily & Defense Report*

The Russian Defense Ministry on August 18 placed its largest order for combat aircraft in roughly two decades, with Sukhoi garnering the reportedly \$2.5 billion deal. Signed during the first day of the 2009 Moscow air show, the purchase covers 48 Su-30M2 aircraft. Deliveries of the Su-35S will run from 2010 through 2015, while both the Su-27SM and Su-30M2 orders are to be met by 2011. There is considerable speculation that the Su-27SM aircraft will be "new-build," perhaps using airframes originally intended for China. Similarly, the Su-30M2s may have initially been meant for an export customer. The Su-35S is the latest variant of the Su-27 Flanker family, and is in effect a midlife upgrade of the design. The Air Force already has 36 Su-34 strike variants of the Flanker on order, with the aircraft to be delivered over a five-year period.

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assuming no overall budget growth, Ochmanek said. "It's now up to the components to figure out how best to make real those new capabilities and capacities and to find offsets within an assumption of zero real growth," he said at a briefing in Washington.

Autonomy, Modularity Key to USAF Unmanned Vision

Reprinted Aerospace Daily & Defense Report

Modularity and autonomy are themes in the U.S. Air Force's new long-term vision for unmanned aircraft systems. The unmanned aerial system flight plan 2009-2047, unveiled July 23 at the Pentagon, lays out the doctrinal, organizational, personnel and technological steps required to institutionalize unmanned aircraft within the Air Force, and provides paths for the evolution of unmanned aerial system capabilities in four classes: small man-portable, including nano and micro; medium "fighter-sized"; large "tanker-sized"; and special low-observable, hypersonic, and ultra-long-endurance vehicles.

The Air Force vision for the MQ-M medium and MQ-L large unmanned aerial system classes is as "payload-agnostic" multimission platforms, according to Col. Eric Mathewson, director of the Air Force's unmanned aerial system task force. He sees vehicles being able to switch between bomber, tanker, transport and surveillance missions using modular payloads.

Autonomy is key to making unmanned aircraft more efficient and flexible, he says. Maintaining the Air Force's planned 50 MQ-1 Predator and MQ-9 Reaper combat air patrols will require 570 pilots, but multi-aircraft control now being demonstrated could cut this in half, with more autonomy providing bigger savings, Mathewson says.

Augustine Committee Closing in on NASA Spaceflight Future

Reprinted from Space News

A blue-ribbon panel tasked to recommend a range of options for NASA's manned spaceflight program narrowed its list of possible recommendations during a public meeting August 5. The options still under consideration run the gamut from sticking with NASA's current moon-focused Constellation program to skipping the moon in favor of Mars. All the options also assume that NASA will not complete its seven remaining space shuttle missions before the end of 2010, a retirement date that has been the basis of the U.S. space agency's budget assumptions since setting its sights on the moon five years ago.

NASA Survey of Threatening Asteroids Underfunded

Reprinted from Aerospace Daily & Defense Report

NASA has not been properly funded to meet the goal set by Congress that it discover 90 percent of all near-Earth objects 140 meters in diameter or larger by 2020, according to a National Research Council Panel. "Although Congress has mandated that NASA conduct this survey program and has established goals for the program, neither Congress nor the Administration has sought to fund it with new appropriations," the panel says in its interim

report. "As a result, NASA has supported this activity by taking funds from other programs, while still leaving a substantial gap between the goals established by Congress and the funds needed to achieve them."

NASA is faring better with another Congressional mandate—to detect and track 90 percent of planet-threatening near-Earth objects one kilometer or greater in diameter. "These objects represent a great potential hazard to life on Earth and could cause global destruction," the panel says. "NASA is close to accomplishing this goal." But the 140-meter class objects still represent "a very significant threat to life on Earth if they strike in or near urban areas," the report says. Finding and tracking 90 percent of these objects could require the construction of one or more additional observatories, according to the panel, possibly including a space-based telescope.

India, U.S. Agree on Defense Pact

Reprinted from Aerospace Daily & Defense Report

India and the U.S. have agreed on a defense pact that is expected to boost U.S. arms sales to India. In a significant step ahead in their bilateral relationship, India and the U.S. have agreed to enter into an understanding on the long-awaited end-use monitoring agreement, which will allow the U.S. government to monitor India's use of U.S.-made military equipment. The agreement "will pave the way for greater defense cooperation," U.S. Secretary of State Hillary Clinton said during a joint news conference with Indian External Affairs Minister S. M. Krishna. Indian officials had been objecting to the end-use monitoring requirement under the U.S. Arms Export Control Act of 1996, which requires monitoring the use of defense equipment and technology sold to other countries.

Lockheed Martin and Boeing are both competitors in India's 126-aircraft medium multirole combat aircraft procurement, and the fate of both U.S. defense giants' proposals would depend on the end-use monitoring's agreement. Other contenders are MiG-35, Dassault's Rafale, Gripen and Eurofighter. Two agreements on science and technology and civil space cooperation also will be part of the strategic dialogue the two governments have pledged to follow.

USAF Stands Up New Nuclear Command

Reprinted from Jane's Defense Weekly

The U.S. Air Force stood up its new Air Force Global Strike Command during a ceremony at Barksdale Air Force Base in Louisiana on 7 August. The newly-formed command will bring together the Air Force's nuclear-capable assets under a single command for the first time since the Strategic Air Command was disbanded with the end of the Cold War in 1992. "The command will bring together our strategic nuclear forces under a single commander, and will provide combatant commanders with the forces to conduct strategic nuclear deterrence and global strike operations through intercontinental ballistic missiles, B-2 and B-52 operations," U.S. Air Force Secretary Michael B. Donley said. The nuclear-capable B-1B Lancer is not included in this new command as it lost its nuclear role under the terms of a 1997 arms agreement with Russia.

Training & Simulation *report*

Trainer Accepted at Training Center in China

Reprinted from Aerosim Technologies Press Release

Aerosim Technologies announced the on-site acceptance of a B737 NG/A320 model virtual procedure trainer at the Hainan Airlines Training Center in China. The device marks the first of these devices to be located in an airline training center in China. The virtual procedure trainer is designed to be convertible between the Boeing 737 NG and Airbus A320 aircraft. The switch between aircraft types takes only seconds, allowing for maximum flexibility in training applications. Aerosim's virtual procedure trainer is designed to serve as a cost-effective means to improving the efficiency and quality of flight training programs.

Simulated Battle

Reprinted from *Aviation Week & Space Technology*

More than five years after entering the small but intensely competitive aircraft training and simulation business with a niche acquisition, Rockwell Collins finally is stepping up its challenge to market leaders CAE, Thales and L-3 Communications.

In designing a new software/hardware architecture, Rockwell Collins aims to help simulators keep pace with a growing number of software upgrades being added to civil and military aircraft to improve navigation and display or accommodate new weapon systems. Dubbed CORE (common open reusable elements), the architecture is designed to replicate the company's success with open-system avionics software that's currently used on a wide range of aircraft.

Since 80 percent of Rockwell Collins's simulation and training sales come from the military, it has long been known that the company wanted to expand its presence on the commercial side of the business. The launch of CORE will be watched closely by CAE and Thales, which lead the market for full-flight simulators used to train commercial aircraft crews.

Enhanced Exercise Trains USMC Aircrews for Afghanistan

Reprinted from *Defense News*

As an AV-8B Harrier attack jet roared overhead, U.S. Marines readied about two dozen helicopters and jets for their next missions. The large collection of aircraft—including six new UH-1Y Super Huey utility helicopters—was assembled at the Marine Corps Air-Ground Combat Center in mid-August and injected the biggest dose of firepower yet to “enhanced” Mojave Viper training. EMV, as Marines call it, is the latest iteration of the month-long live-fire exercise required for ground combat units heading to war. About 4,500 Marines took part in the August exercises, which marked the first time in years that such a large Marine air-ground task force had gathered at this desert base, trainers said.

Enhanced Mojave Viper, at 28 days, includes more conventional types of warfare missions and tasks—live-fire defensive operations, for example—that had faded from the training syllabus, and it marks a slight shift from training centered largely on urban warfare and counterinsurgency.

Taking Off

Reprinted from *Aerospace Daily & Defense Report*

A \$1.7 million upgrade of the Australian Defense Force's flight simulation research facility at the Defense Science and Technology Organization will go toward supporting in-service aircraft, as well as the acquisition of the multi-role helicopter and to perform analysis for new Australian Super Hornets, officials there say. “The upgraded facility will enable the Defense Science and Technology Organization to communicate live over secure networks with other defense facilities around the world, facilitating joint and coalition exercises on a larger scale,” adds Greg Combet, minister for defense personnel, materiel and science.

France Funds Simulator Upgrade

Reprinted from *Aviation Week & Space Technology*

France has agreed to use stimulus funding to upgrade simulation facilities to the Rafale F3 multirole standard now being introduced, and to acquire 15 additional 20mm cannons for Cougar and Caracal helicopters. The 63 million euro simulator upgrade, awarded to Dassault Aviation and Thales, will go to installations at the St. Dizier Air Force Base and Landivisiau Naval Air Center. The 22 million euro cannon contract, issued to Nexter Systems and Eurocopter, will reinforce the survivability of the helicopters in urban warfare conditions.

War Game Shows Need for Better Space Surveillance

Reprinted from *Space News*

Recent war games that simulated a 2019 conflict in space highlighted the United States' need for improved space situational awareness and closer cooperation with commercial satellite operators, a U.S. Air Force official said. During the Schreiver War Games 5 held at Nellis Air Force Base, Nevada, in April, a sophisticated spacefaring nation was able to deny the United States many of its space capabilities, Air Force Lt. Gen. Larry James, commander of the 14th Air Force, said during a speech at the Space and Missile Defense conference in Huntsville, Alabama. There were many more small satellites in the simulated future space environment than currently is the case, and the U.S. military was unable to determine the nature or source of all of the events that took place in the domain. Having better, more integrated sensors will be the key to winning in this kind of conflict, James said.

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U.S. Seeks to Ratify Trade Treaties with Australia, UK

Reprinted from *Jane's Defense Weekly*

The U.S. State Department has told *Jane's* that it is looking to introduce delayed bilateral defense trade treaties with Australia and the U.K. "as soon as possible" but has not confirmed that the accords will be ratified before the end of 2009. A spokesman said on 6 August, "The [State] Department remains committed to having both of these treaties, which would strengthen defense cooperation with these two close allies, enter into force as soon as possible."

Another Rotor Hub

Reprinted from *Aviation Week & Space Technology*

AgustaWestland plans to have fully integrated Polish helicopter maker PZL Swidnik by year-end, after being named the preferred bidder in the privatization process. European antitrust authorities still have to rule on the deal, although it is expected to receive the green light. Last year, the Polish government decided to privatize PZL Swidnik, with 87.62 percent up for sale. AgustaWestland is paying \$112 million for the asset. It previously had a 6.2 percent stake in PZL, which AgustaWestland has long regarded as an important strategic partner.

Fierce Battle for U.K. Armor Market

Reprinted from *Defense News*

General Dynamics and Lockheed Martin are on course to join forces in the United Kingdom to take on a BAE Systems drive to secure two major armored vehicle contracts. The two companies are discussing a tie-up that could see Lockheed Martin design a turret for the scout version of the General Dynamics Austrian Spanish Cooperative Development armored vehicle as it tries to unseat BAE's longtime favorite, CV90 MkIII, to win the British Army's future rapid effects system special vehicles program, said a senior industry executive.

Lockheed Martin is already head-to-head with BAE over a contract to update several hundred Warrior infantry fighting vehicles with a new turret, a 40mm cannon and other improvements. Together, the future rapid effects system and Warrior contests hold the key to BAE's armored vehicles business in London. Lose both, and it could help bring the curtain down on the company's manufacturing capabilities in the United Kingdom.

As Hope for F-22 Ebbs, Japan Weighs Options

Reprinted from *Defense News*

Japan may be relinquishing its dream of buying F-22 Raptor fighter jets, and preparing to settle instead for the Eurofighter Typhoon or the F-35 Lightning II. The Japan Air Self-Defense Force has long sought to buy 40 to 50 Raptors to replace its F-4J Phantoms. But the Obama Administration apparently has won its fight to end the program for the U.S. Air Force at 187 jets, and Congress shows

no sign of overturning the Obey Amendment that prohibits export of the Lockheed Martin-built stealth fighter. U.S. and Japanese officials have been meeting to discuss Japan's FX program, including at the Pentagon in August. The F-35 and Typhoon are seen as the likeliest F-22 replacements, but Boeing hints it may bid either the F/A-18EF or a new, stealthier version of the F-15.

U.S. Exported Arms Worth \$10.9 Billion Via FMS in 2008

Reprinted from *Defense News*

U.S. defense companies delivered \$10.9 billion worth of weapons to foreign governments through the foreign military sales program in 2008. That's almost \$1 billion less than the amount delivered in 2007, according to the Federation of American Scientists. But the decrease is almost certainly temporary, said Matthew Schroeder, head of the Arms Sales Monitoring Project run by the Federation of American Scientists. Agreements to purchase weapons through the foreign military sales program continued to increase sharply during 2008, Schroeder said. So the decrease in deliveries is likely due to the time it takes to build major weapons after they have been ordered, he said.

Foreign military sales agreements jumped from \$9.5 billion in 2005 to more than \$18 billion in 2006, then to \$36 billion in 2008. The global recession does not appear to be affecting the demand for weapons nor the ability to pay for them. Schroeder received a copy of the Annual Military Assistance Report from the Defense Department this summer, after filing a Freedom of Information Act request for it.

The report says that Israel led the pack of weapons buyers with \$1.36 billion in purchases. Almost a third of that—\$419 million—was spent on "petroleum, gases and fuels," according to the report. Another \$427 million went to "other equipment." Israel displaced Poland, which spent almost \$1.5 billion as the top weapons buyer in 2007. Poland dropped to fifth place in 2008 with \$733 million in weapon purchases.

Administration Announces Total Review of Export Controls

Reprinted from *Aerospace Daily & Defense Report*

The Obama Administration has announced a review of the whole U.S. export control system, including both the dual-use and defense trade processes, in a move immediately embraced by the industry. "The aim of the review is to consider reforms to the system to enhance the national security, foreign policy, and economic security interests of the United States," the White House said in an August statement. "The U.S. has one of the most robust export control systems in the world. But, it is rooted in the Cold War era of over 50 years ago and must be updated to address the threats we face today and the changing economic and technological landscape."

Major Program *report*

Navy Backs Single JSF Engine as F-35C Rolls Out

Reprinted from *Aerospace Daily & Defense Report*

The U.S. Navy has strongly endorsed a single engine for the Lockheed Martin F-35 Joint Strike Fighter, citing lack of space on its aircraft carriers to support an alternate powerplant. "I'm in the one engine camp," said Chief of Naval Operations Adm. Gary Roughead, speaking July 28 at the roll-out of the first Pratt & Whitney F135-powered F-35C carrier variant. "On a carrier, space matters."

The last of three JSF variants to be designed, the Navy F-35C has a number of significant differences from the conventional takeoff and landing F-35A and short takeoff and landing F-35B, including a larger wing and tail to minimize approach speed, beefed-up landing gear, arrestor hook and wing fold.

The first F-35C, aircraft CF-1, has been rolled off the final-assembly line and transferred to flight-test. An extensive first-of-type ground test campaign is planned, with the aircraft not scheduled to make its first flight until late December.

Australian Super Hornet One Step Closer

Reprinted from *Aerospace Daily & Defense Report*

Boeing has completed the first flight of the F/A-18F for the Royal Australian Air Force, after its July 8 unveiling. The flight lasted more than an hour and took place from Lambert International Airport, Missouri, near Boeing's St. Louis facilities. Boeing says the aircraft will be delivered before August, which the company says is three months early.

The next milestone looms in March when the first Super Hornet is due to Royal Australian Air Force Amberley. All 24 of the aircraft are due to be handed over before the end of 2011. The Royal Australian Air Force is fitting the Super Hornets with APG-79 active electronically scanned array radar and ATFLIR target pods. Half the fleet is being wired so they can be converted into EA-18G Growlers, although a decision on whether to pursue that upgrade has not been made yet.

Joint Vessel

Reprinted from *Aerospace Daily & Defense Report*

Construction on the first joint high speed vessel for the U.S. Army, Navy and Marine Corps should follow on the heels of its production readiness review scheduled for this fall. The review will study design maturity, the availability of materials and components, and shipbuilder Austal USA's readiness to successfully start fabrication.

The 10-ship, Navy-run program combines earlier, competing efforts under the Army's theater support vessel and the Navy and Marine high speed connector. The Army and Navy, whose military department includes the Corps, will split the intratheater transport fleet with five ships each.

They will be able to move 700 short tons 1,200 nautical miles at an average speed of 35 knots, and operate in shallow-draft ports and waterways, interfacing with roll-on/roll-off discharge facilities and on/off-loading a combat-loaded Abrams main battle tank (M1A2). Other joint requirements include an aviation flight deck to support 24-hour air vehicle launch and recovery operations, as well as airline-style seating for 312 embarked forces and fixed berthing for 104 more.

Construction of LCS 3 Starts at Second Attempt

Reprinted from *Jane's Defense Weekly*

Marinette Marine staged a ceremony at its Wisconsin shipyard on 11 July marking the long-delayed start of construction of a third littoral combat ship (LCS) for the U.S. Navy. *Fort Worth* (LCS3) is the second steel monohull frigate built by Marinette under sub-contract to Lockheed Martin, which itself secured a contract for long-lead items for the ship in March, allaying fears of a production gap between vessels.

Shipyard workers are reusing steel purchased for the ship in 2006 before a stop-work order was imposed by the Pentagon as a result of a series of multi-million-dollar cost increases in the program. A Lockheed Martin spokeswoman said that *Fort Worth* would consist of materials procured in 2006 as well as under the company's current production plan. It is scheduled for delivery in 2012.

"We expect LCS3 will benefit from lessons learned on LCS1, as well as the efficiencies of an in-sequence production process," the spokeswoman said. "These efforts, combined with a trained and experienced LCS workforce, have allowed the Lockheed Martin LCS team to achieve a significant reduction in the number of labor hours to construct the *Fort Worth*."

Upcoming events

Registration is open for these upcoming NTSA events.

NOVEMBER 30 - DECEMBER 3, 2009

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or contact Barbara McDaniel at

(703)247-2569 or bmcdaniel@ndia.org

for more information.

Who's where

■ **Roger Rose** has been named chief executive officer of Lockheed Martin India, according to a Lockheed Martin statement. He succeeds **Douglas Hartwick**, who has been appointed special adviser to the company's international business development team.

■ French Air Force **Gen. Stephane Abrial** took over as Supreme Allied Commander Transformation for NATO in Norfolk, Virginia, succeeding U.S. Marine Corps **Gen. James Mattis**, who continues as commander, U.S. Joint Forces Command. It is the first time in the alliance's history that a supreme commander is from a country other than the United States. Abrial was commander of the French Air Force.

■ CACI International, Arlington, Virginia, appointed **Gordon England**, who served as U.S. deputy defense secretary under former President George W. Bush, to its board of directors. England also twice served as secretary of the Navy in the Bush administration. Before his government service, he was an executive vice president at General Dynamics. England is now president of E6 Partners, a Washington consulting firm.

■ CAE, the Canadian builder of simulation systems for aviation training, announced that **Robert Brown**, its president and chief executive officer stepped down September 30. **Marc Parent**, CAE's executive vice president and chief operating officer, will succeed him.

■ **John L. Garrison, Jr.** has been appointed president and chief executive officer of Bell Helicopter Textron Inc., Fort Worth, Texas. He succeeds **Richard Millman**, who is retiring. Garrison was president of Textron's industrial segment.

■ Former U.S. national security adviser **Stephen J. Hadley** has

been named to the board of directors of the Raytheon Company, Waltham, Massachusetts. He is a senior adviser for international affairs at the U.S. Institute of Peace.

■ **Michelle A. Scarpella** has been promoted to vice president, F/A-18 programs. She was deputy program manager for the El Segundo, California-based Strike and Surveillance Systems division of the Northrop Grumman Corporation's Aerospace Systems Sector.

■ **Lt. Gen. William L. Shelton**, USAF, has been appointed chief of warfighting integration and chief information officer in the Office of the Secretary of the Air Force at the Pentagon. He was commander of the 14th Air Force, Air Forces Strategic-Space, Air Force Space Command and commander of the Joint Functional Component Command for Space, U.S. Strategic Command, Vandenberg AFB, California.

■ Honeywell has announced that **Tim Mahoney**, former Honeywell Aerospace chief technology officer, has been named president and chief executive officer, replacing **Rob Gillette**. Gillette has left to become chief executive officer of First Solar, a manufacturer of solar modules based in Tempe, Arizona.

■ L-3 Communications, New York, appointed **Nick Farah** senior vice president for strategic development and chief operating officer of its Integrated Systems Group. The group supports U.S. military intelligence, surveillance and reconnaissance (ISR) aircraft and airborne surveillance systems. In addition, **Alison Hartley** has been promoted to president of L-3's ComCept division, a systems engineering contractor involved in ISR projects. She was serving as senior vice president of business development for the Integrated Systems Group.

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

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