



Institute of Defence and Strategic Studies



Future Systems Directorate

RÉVOLUTIONNAIRE 10/2005

The Foremost Inter-Disciplinary Defence E-Bulletin

突破 *Revolucionario* *Revolutionary* *Merevolusikan* *Revolutionär* *Kraantikari*

5 September 2005

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CONTEMPORARY CONFLICT

[Can Democracy Stop Terrorism](#)

Foreign Affairs – September/October 2005

The Bush administration contends that the push for democracy in the Muslim world will improve U.S. security. But this premise is faulty: there is no evidence that democracy reduces terrorism. Indeed, a democratic Middle East would probably result in Islamic governments unwilling to cooperate with Washington.

[They Will Change Us](#)

The Prospect - August 2005

"They will not change our way of life," the Queen declared on Friday 8th July. Following the al Qaeda attacks on 9/11, American leaders similarly insisted that their country's libertarian way of life would not change in response to the threat of terrorism. The sentiment is admirable, but as a policy it is mistaken. We who live in liberal societies like Britain and America should change our way of life, to make ourselves less vulnerable to terrorism.

COUNTER-TERRORISM

[Submariners Learn Anti-Terrorism Tactics](#)

National Defense - September 2005

Navy submarine crews are using video games to practice anti-terrorism tactics designed to secure their boats while in port. The technology, called the Force Protection Anti-Terrorism Simulation Trainer, includes scenarios for defending the inside of the submarine, on the assumption that intruders have climbed on board. Other scenarios are less dramatic, such as discovering a mysterious package. "You notice a box that wasn't here when you started the watch, and it looks suspicious," explained Frank Boosman, chief marketing officer for 3Dsolve, in Cary, N.C. The company developed the simulation.

[How to Win in Iraq](#)

Foreign Affairs – September/October 2005

Because they lack a coherent strategy, U.S. forces in Iraq have failed to defeat the insurgency or improve security. Winning will require a new approach to counterinsurgency, one that focuses on providing security to Iraqis rather than hunting down insurgents. And it will take at least a decade.

DEFENCE INDUSTRY

[SGI to Help in Subterranean Search for Bin Laden](#)

San Francisco Chronicle – 22 August 2005

Silicon Graphics Inc. is teaming up with the U.S. military to help pinpoint enemy underground structures, including al Qaeda's hideouts, with the help of technology that U.S. companies use to look for oil and gas deposits.

DEFENCE STRATEGY

[Taming American Power](#)

Foreign Affairs – September/October 2005

U.S. policymakers debate how to wield American power; foreigners debate how to deal with it. Some make their peace with Washington and try to manipulate it; others try to oppose and undercut U.S. interests. The challenge for the United States is how to turn its material dominance into legitimate authority.

[New Science, Strategy Needed to Protect Bases](#)

National Defense, August 2005

Protecting installations from biological and chemical attacks is receiving fresh attention from the Department of Defense, as researchers develop tools and knowledge for managing such strikes. Fears that military bases, supply hubs and civilian installations might be targeted are driving some attention away from front line fighters to protect their rear flank.

DEFENCE TECHNOLOGY

[Military Examines 'beaming up' Data, People](#)

San Francisco Chronicle – 29 August July 2005

The U.S. Air Force has funded a study to examine possible ways to teleport humans and objects through space. Critics argue that funding studies into teleportation are a waste of money for now because of the tremendous energy and computation requirements.

[Military Laser Brings 'Star Wars' Reality Closer](#)

CNN - 24 August 2005

A U.S. Pentagon invention could make air combat resemble a battle scene from the movie 'Star Wars' with a laser so small it can fit on a fighter jet, yet powerful enough to knock down an enemy missile in flight.

[Explaining the Potential of Hydrogen Fuel Cells](#)

RAND Report – 2005

Hydrogen fuel cells have the potential to produce electrical energy and power vehicles, but decision makers need to be better informed as to the benefits and risks of hydrogen-related programs and policies.

[JASON on Tactical Infrasound](#)

JASON, The Mitre Corporation - 9 May 2005

The military and intelligence value of monitoring "infrasound" -- inaudible sound waves of a frequency less than 20 Hertz -- is the subject of a new report from the secretive JASON advisory group on military science and technology. "Using sound as a source of intelligence in a tactical setting has a long military tradition. Our study was undertaken to assess how this technique might be exploited in contemporary settings, in particular at tactical infrasound arrays," the JASON authors write.

"An array of low power robust sensors could be used to monitor diverse activities from a distance. Sonic data could provide strategic information to corroborate rocket launches that are detected by other means, including perhaps location information for mobile launch vehicles. Activity levels at military airfields could be monitored from a safe distance. Real time bomb damage assessments could be augmented with sonic data; particularly when attacking targets below the surface, listening for the explosions can help identify instances when the ordinance fails to detonate. These are but a few examples of the potential utility of sonic monitoring in the intelligence arena," the report stated.

[Laminate Offers Thug, Terrorist Shield](#)

National Defense - August 2005

A fiberglass laminate that not only offers ballistic protection, but also is ricochet resistant, can now protect vehicles, aircraft, buildings and bank teller stations. Called BRASS, this bullet proofing material is being produced by Norplex-Micarta of Pottsville, Iowa. Lighter than steel, it can be cut and installed with ordinary tools, says a company spokesman, who adds that the material is flame and smoke resistant. BRASS's ballistic rating has been validated by both the National Institute of Justice and the Federal Aviation Administration.

[Mini Spy in Sky Passes Flight Test](#)

National Defense, August 2005

A tiny autonomous reconnaissance craft—the brainchild of Honeywell of Phoenix, Ariz., and the Defense Advanced Research Projects Agency—successfully went through its first paces at a facility in Laguna, N.M. The 13-inch micro air vehicle was designed to be carried in the field by a single soldier. It is outfitted with forward and downward looking cameras and in the recent test took off, maneuvered to waypoints and landed on its own. It can operate in day or night. The MAV was conceived as a system to provide soldiers with enhanced situational awareness, improved security and the capability to acquire targets from the air in urban and rural settings.

MILITARY OPERATIONS

[Navy Wants Precision Weapons That Don't Endanger Civilians](#)

National Defense - September 2005

Navy fighter-bombers in the future will be equipped with smaller, multifunctional munitions that will give pilots a broader array of options for attacking ground targets than the 1,000- or 2,000-pound bombs they now use. The war in Iraq, where enemy targets are intermixed in the civilian population, has sparked a rethinking in weapon requirements for naval aviators, says Rear Adm. Thomas J. Kilcline Jr., director of the Navy Air Warfare Division.

[Army Gears Up to Use Northrop Robot](#)

LA Times – 23 August 2005

Hoping to reduce human casualties in Iraq, the Army is preparing to use unmanned robotic ground vehicles for use in surveillance and border-security missions, the first use of autonomous ground vehicles in a combat zone.

[Cybertroops Keep Wargames Real](#)

Wired News – 24 August 2005

The Pentagon marshals thousands of computer-generated soldiers, tanks, ships and networked flight simulators to make large-scale training exercises more realistic than ever before.

MILITARY TRANSFORMATION

[UAV Roadmap 2005-2030](#)

U.S. DoD Publication – July 2005

The anticipated development of unmanned aerial vehicles and associated systems over the next twenty-five years is the subject of a new planning document released by the Pentagon this week. "As the Global War on Terrorism (GWOT) enters its fourth year, the contributions of unmanned aircraft (UA) in sorties, hours, and expanded roles continue to increase," the new report states.

"As of September 2004, some twenty types of coalition UA, large and small, have flown over 100,000 total flight hours in support of Operation Enduring Freedom and Operation Iraqi Freedom. Their once reconnaissance-only role is now shared with strike, force protection, and signals collection...."

"UA systems (UAS) continue to expand, encompassing a broad range of mission capabilities.... UA, and unmanned systems in general, are changing the conduct of military operations in the GWOT by providing unrelenting pursuit without offering the terrorist a high value target or a potential captive." The term Unmanned Aerial Vehicle (UAV) has been superseded in the new report by the phrase Unmanned Aircraft Systems (UAS) to encompass ground stations and other supporting infrastructure.

[Alternative Future and Army Force Planning](#)

RAND publication - 25 August 2005

Predicting the force needs of the Army is difficult in today's uncertain world. Alternative futures analysis offers a spectrum of different "future worlds" to help force developers meet the challenges of the next 20 years.

REGIONAL DEVELOPMENTS

[Transformation of U.S. Pacific Command in full swing](#)

Japan Today – 11 August 2005

As part of the US military's realignment of the command and control structure in the Asia-Pacific region, a new warfighting headquarters was established this summer at Hickam Air Force Base in Hawaii. With the exception of the Korean Peninsula, the new headquarters will be responsible for US Air Force assets covering Japan, the north Pacific region, and the south Pacific and Indian Ocean area. A separate headquarters is expected to be established for South Korea. A total of ten warfighting headquarters will be established around the world in order to plan for and respond to emergency situations.

[Is China Building a Carrier?](#)

Jane's Defence Weekly - 17 August 2005

Chinese shipyard workers have been repairing a badly damaged ex-Russian aircraft carrier and have repainted it with the country's military markings, raising the question once again of whether China is pursuing longer-term plans to field its first carrier. In the latest developments, images show that workers at the Chinese Dalian Shipyard have repainted the ex-Russian Kuznetsov-class aircraft carrier *Varyag* with the markings and colour scheme of the People's Liberation Army (PLA) Navy (PLAN). Additional new photographs show that other work, the specifics of which could not be determined, appears to be continuing and that the condition of the vessel is being improved.