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Articles from subscriber only sites are available on request. Révolutionnaire is edited by Alvin Chew, with contributions from Bernard Loo, Joshua Ho, and Manjeet Singh Pardesi.

CONTEMPORARY CONFLICT

Troop Withdrawals Could Begin Next Year, Casey Says

Defense Link New - 27 July 2005

A "fairly substantial" withdrawal of U.S. forces from Iraq could take place next spring or summer if the insurgency doesn't grow and the country's political process continues as scheduled, the commander of coalition forces said here today. U.S. Army Gen. George W. Casey, head of Multinational Force Iraq, spoke during a surprise visit to Iraq by Defense Secretary Donald H. Rumsfeld. At a later joint news conference with Rumsfeld, Iraqi Prime Minister Ibrahim Jaafari said the departure of U.S. forces from his country depends on how soon Iraq can train, equip and field its own soldiers and police to take over security duties. "We do not want to be surprised," Jaafari said, if U.S. troops leave before the Iraqis are prepared to assume security.

COUNTER-TERRORISM

JTIC Briefing: Understanding the Terrorist Threat to Underground Rail Networks

Janes Terrorism and Insurgency Centre - 13 July 2005

Underground rail networks have historically presented a tempting soft target for terrorists wishing to create fear and disruption in metropolitan areas, to paralyse transport systems and to cause economic damage. The terrorism threat, in large measure, is a reflection of the inherently unique vulnerability of underground rail networks. Modern high-density passenger subway transportation is designed with the one overarching intent - that of achieving the rapid, unimpeded movement of high volumes of passengers, through accessible and open architecture to facilitate the boarding of trains within a minimum cost structure.

Aptitude for Destruction, Volume 1: Organizational Learning in Terrorist Groups and Its Implications for Combating Terrorism

RAND Publication - 2005

Better ways are needed to understand how terrorist groups become more effective and dangerous. Learning is the link between what a group wants to do and its ability to actually do it; therefore, a better understanding of group learning might contribute to the design of better measures for combating terrorism. This study analyzes current understanding of group learning and the factors that influence it and outlines a framework that should be useful in present analytical efforts and for identifying areas requiring further study.

Aptitude for Destruction, Volume 2: Case Studies of Organizational Learning in Five Terrorist Groups

RAND Publication - 2005

Better ways are needed to understand how terrorist groups increase their effectiveness and become more dangerous. Learning is the link between what a group wants to do and its ability to actually do it; therefore, a better understanding of group learning might contribute to the design of better measures for combating terrorism. This study analyzes current understanding of group learning and the factors that influence it. It presents detailed case studies of learning in five terrorist organizations and develops a methodology for ascertaining what and why groups have learned, providing insights into their learning processes.

The Logic of Suicide Terrorism

The American Conservative – 18 July 2005

This interview from the *American Conservative* showcases expert Robert Pape's detailed analysis of the roots of suicide terrorism. His central finding is that, overwhelmingly, "suicide-terrorist attacks are not driven by religion as much as they are by a clear strategic objective: to compel [foreign occupiers] to withdraw military forces from the territory that the terrorists view as their homeland." A "demand-driven" phenomena, Pape notes that "the suicide terrorists have been produced by the invasion" in Iraq and other countries.

DEFENCE STRATEGY

US military basing posture undergoes transformation

Janes Intelligence Review – 25 July 2005

The latest phase of the worldwide shake-up of Washington's military basing strategy was signalled by the issue of the September 2004 Global Defense Posture, followed by the public release of the report by the US Overseas Basing Commission. *JIR* examined the report, providing detailed insight into the future shape of US military basing strategy in the coming decades and fleshing out the broad principles developed in the Global Defense Posture. In essence, Washington plans to withdraw a sizeable proportion of US military forces and their dependents from foreign garrisons and relocate them in the continental US. This will entail closing down roughly a third of the overseas basing inventory of the US (an estimated 860 foreign bases). The move will follow the deployment of more than half of the 197,000 US soldiers, sailors, airmen and marines currently stationed overseas. This figure does not include roughly 200,000 US military personnel undertaking temporary operations in Iraq, Afghanistan and other

theatres. These changes would reduce the number of US ground forces in Europe to as little as a single brigade.

DEFENCE TECHNOLOGY

Energy Beam Weapon May Lower Iraq Civilian Deaths
USA Today – 25 July 2005

Troops in Iraq will soon be shooting an experimental weapon that fires an invisible beam of energy instead of bullets to repel insurgents without killing civilians. Radiation similar to some forms of radar fired by the Active Denial System (ADS) penetrates just below the skin's surface to cause an excruciating burning sensation until it is turned off. Extensive testing has shown no lasting damage, the military said.

The Well-Dressed Aviator
Defence Tech- June 2005

The Joint Protective Aircrew Ensemble (JPACE) came into advanced development in 2000. This Air Force-led project focused on developing an aviator suit that would protect against chem-bio hazards, be fire resistant, and launderable (while uncontaminated). There's nothing like wearing a suit of carbon when your jet fuel is on fire, so the fire resistance was important, but the launderable was too - the pilots had to look good and smell good in their one-piece outfits (another requirement - the JSLIST was a frumpy two-piece outfit). Also, the JPACE had to have pockets that would hold those pens, notebooks, and aviator glasses (kidding). Initial plans were to have this suit out to the field by 2005, but, unrealistic plans and technology not cooperating, this date was extended past 2007.

Drone Developed for Small Infantry Units
National Defense - July 2005

A vertical launch unmanned aerial vehicle that is designed to support infantry platoon and company operations recently twice negotiated a course of 10 waypoints in southern California. The ducted fan aircraft is being developed under a Defense Advanced Research Projects Agency program. Built by BAE Systems, this new multi-mission UAV will be proficient in “reconnaissance and surveillance, path-finding for friendly ground vehicles, maneuver force protection and targeting for non-line-of-sight fire operations,” according to a company official.

Runway-Sweeping Radar Seeks Dangerous Debris

New Scientist - 30 July 2005

A runway-sweeping radar that seeks out potentially dangerous debris is to be installed at Vancouver International Airport in Canada next year.In July 2000 an Air France Concorde caught fire and crashed shortly after take-off, killing 113 people and speeding the aircraft's retirement. Metal debris that had fallen onto the runway from another aircraft shredded the Concorde's tyres, and chunks of hot tyre rubber punctured the fuel tanks, igniting the fuel.To prevent such accidents, defence technology firm Qinetiq of Farnborough, UK, has developed the runway radar. It can detect smaller objects than normal radar because it uses radio waves with a wavelength of around a millimetre. Standard radar uses microwaves of around 20 centimetres in wavelength, so objects smaller than that cannot be picked up. In tests, the runway radar has detected metal, plastic, glass, wood, fibreglass and animal remains to an accuracy of 3 metres from up to 2 kilometres away, says Stephen Spark of Qinetiq's airport radar division.

Nano Could Lead to New WMDs

United Press International - 23 May 2005

Nanotechnology could soon enable a new generation of chemical and biological weapons that could escape current arms inspection schemes, experts told UPI's Nano World. There is a very good possibility of weapons developed on the most recent advancements in nanotechnology in the next 10 years or so," said social scientist Juan Pablo Pardo-Guerra of the National University of Mexico in Mexico City

Viruses, Security Issues Undermine Internet

Washington Post - 26 June 2005

E-mails were flooding in from all over the country. Something strange was going on with the Internet, alarmed computer users wrote. Google, eBay and other big sites had suddenly disappeared. Kyle Haugsness scanned the reports and entered crisis mode. Part of the Internet was broken. For the 76th time that week. Haugsness was on duty for the Internet Storm Center, the closest thing to a 911 emergency-response system for the global network. He and a few colleagues began investigating and discovered that a hacker had taken advantage of yet another security hole. As many as 1,000 companies had effectively had their connections "poisoned," so when their employees typed in legitimate addresses they were taken to bogus Web destinations. Haugsness wrote up an alert and a suggested solution, and posted it on the Web.

Terminal Travels Well, Offers Multiple Uses

National Defense - August 2005

A recently introduced lightweight, broadband, secure satellite communications terminal, which fits in two travel bags, is compact enough to be transported in overhead airliner bins. Set-up of the terminal—that can send a receive data at rates ranging from 64 kbps to 9.1 mbps—can be accomplished in less than 15 minutes and advanced software permits operation by soldiers or civilians with no satellite communications background. The Auto-Explorer, developed by Globecomm Systems Inc. of Hauppage, N.Y., was designed with multiple uses in mind, including tactical support, peacekeeping, global newsgathering and distance learning.

MILITARY OPERATIONS

Despite Promise, Energy-Beam Weapons Still Missing from Action

Technology Review - 14 July 2005

For years, the U.S. military has explored a new kind of firepower that is instantaneous, precise and virtually inexhaustible: beams of electromagnetic energy. "Directed-energy" pulses can be throttled up or down depending on the situation, much like the phasers on "Star Trek" could be set to kill or merely stun. Such weapons are now nearing fruition. But logistical issues have delayed their battlefield debut -- even as soldiers in Iraq encounter tense urban situations in which the nonlethal capabilities of directed energy could be put to the test.

Bomb Attacks Test U.S. Technological Ingenuity

National Defense - August 2005

The Army has ordered 330 small robots to help soldiers search for hidden explosives along Iraq's roads.They are simple contraptions: remote-controlled toy cars outfitted with a pan/tilt camera that can look down and over objects up to three feet tall.Troops in Iraq have been testing 30 of these so-called Marcbots—or multifunction advanced remote-controlled robots. Their sole mission is to drive down range and scan boxes, bags and guardrails. From a safe standoff range, soldiers can see whether these objects are camouflaged bombs, explained Lt. Col. Lee D. Gazzano, commander of the Army's "Rapid Equipping Force" team based in Iraq.

Navy Network-Centric Warfare Concept: Key Programs and Issues for Congress

CRS Report for Congress – 31 May 2005

Network-centric warfare (NCW) is a key element of defense transformation. Key programs for implementing NCW in the Navy include the Cooperative Engagement Capability (CEC), the Joint Fires Network (JFN), the IT-21 program, and ForceNet. A related program is the Navy-Marine Corps Intranet (NMCI). Congress has closely followed and expressed concern for some of these programs, particularly NMCI.

Our Troops are Part of the Problem

Guardian – 15 July 2005

Former British Foreign Minister Robin Cook argues that US troops' "trigger-happy approach" to combating the Iraqi insurgency is in fact fueling the insurgency. He therefore approves of the Pentagon's plans in the leaked UK memo of July 2005 for a "bold reduction" in US troops, even though President George Bush's administration is pursuing a draw-down of troops purely for domestic political reasons.

NUCLEAR PROLIFERATION

North Korea's Nuclear Weapons: How Soon an Arsenal?

CRS Report for Congress - 12 May 2005

In December 2002, North Korea ended the eight-year freeze on its nuclear program by expelling international inspectors and restarting plutonium production facilities. In 2005, North Korea announced it had nuclear weapons and that it would withdraw from the Six Party talks, shut down its small reactor, and made preparations that some observers believe may be for a nuclear test. Before 2002, the CIA estimated that North Korea might have enough plutonium (Pu) for 1 or 2 weapons. Now, many assume that North Korea has successfully reprocessed the 8000 spend fuel rods at Yongbyon, which had previously been under seal, yielding enough Pu for 6 or 8 weapons. The Yongbyon reactor is estimated to produce plutonium for one weapon per year. Two unknown factors are the status of North Korea’s uranium enrichment efforts and whether Pakistani scientist A.Q. Khan gave North Korea a weapons design, as he did to Libya.

REGIONAL DEVELOPMENTS

FM: Pentagon Report on China's Military 'Groundless'

China Daily – 20 July 2005

China blasted a Pentagon report asserting that its fast-modernizing military could pose a threat to the region, saying that the United States, the world's biggest defense spender, had no ground to stand on. The U.S. Department of Defense report, made public on Tuesday, reflects concern in Washington over China's growing military and economic might, and in particular the fear that a changing balance of power in Asia could threaten Taiwan. "The report groundlessly attacks China's military modernization and makes unwarranted charges about China's normal national defense building and military deployments," Vice Foreign Minister Yang Jiechi said. Yang noted that the U.S. military budget was almost 18 times that of Beijing's military budget of about $26 billion. But the Pentagon claimed that China's military spending in 2003 might be as high as $65 billion. He called on the United States to "respect the facts, correct its errors, stop gratuitously attacking China, stop interfering in China's internal affairs, stop its words and deeds that damage Sino-U.S. relations." Foreign Minister Li Zhaoxing dismissed the Pentagon report and said China's rise would be peaceful.

Japan Joins U.S. in Dangerous Space Race

Pacific News Service, 17 Jul 2005

Space technology is developed for two primary reasons: to better coordinate warfare on Earth; and to profit from naturally ocurring elements found in space. Nations and corporations view space as the "new world," where gold can be found on asteroids, water and helium-3 on the moon, and possibly magnesium, cobalt, and uranium on Mars. Corporations intend to venture to these planetary bodies and secure massive profits in the years ahead. But first new space technologies have to be created that make it possible, and cost effective, to "mine the skies."