



Institute of Defence and Strategic Studies



Future Systems Directorate

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

## **CONTEMPORARY CONFLICT**

### [US looks at strategy for stability operations](#)

*Jane's Defence Weekly – 2 March 2005*

The US armed forces has progressed in the development of its new strategy for stability operations – the security reconstruction and nation-building tasks that have been a continual source of problems in Iraq and are expected to be of increasing importance in future wars. The US Department of Defense (DoD) has drawn up a broad list of goals it has to “put stability operations on a comparative footing to combat operations” so that stability operations are exercised and planned for as much as the shooting part of a war. The US Army, which is likely to have the lead in future post-conflict situations, has recently started a study on how to best organise its forces for stabilisation.

## **COUNTER-TERRORISM**

### [Iran's terrorist sponsorship](#)

*IJSS Strategic Comments, Volume 11, Issue 2 – March 2005*

Iran has been one of the world's most persistent and active state sponsors of terrorism since its Islamic revolution in 1979, having debuted on the US State Department's official list of such sponsors in 1984 and appeared every year since. But Tehran's most recent inclination has been to confine its support for terrorism to the Middle East and Persian Gulf region. The reformist government's desire for international political legitimacy, a more pragmatic tilt on the part of some members of the clerical establishment, and diminishing regional pretexts for terrorist sponsorship have tempered Iranian provocations.

## **DEFENCE MANAGEMENT**

### [Shaping the Future](#)

*Scientific American – 28 March 2005*

Three persons from the RAND Pardee Center, an economist, a physicist, and a computer scientist, have been fundamentally rethinking the role of analysis. The three have constructed rigorous, systematic methods for dealing with deep uncertainty. The basic idea is to liberate the decision maker from the need for precise prediction by using the computer to help frame strategies that work well over a very wide range of plausible futures. Rather than seeking to eliminate uncertainty, we highlight it and then find ways to manage it. Already companies such as Volvo have used our techniques to plan corporate strategy. The methods offer a way to break the ideological logjam that too often arises in

Washington, D.C. By allowing decision makers to explore a rich variety of what-if scenarios, the new approach reframes the age-old but unanswerable question – What will the long term future bring? – to one better reflecting our real concern: What actions today will best shape the future to our liking?

## **DEFENCE STRATEGY**

### [US begins quadrennial defence framework](#)

*Jane's Defence Weekly – 23 March 2005*

The Quadrennial Defense Review (QDR), a major study intended to guide how the US armed forces are organised, trained and equipped to meet the country's future security challenges will be driven by an already completed strategy rather than formed as an integral part of the effort. The study will seek to determine the structure and posture of US forces for addressing expected future threats, rather than a broad defence strategy as in similar past reviews. The broader framework will be provided by the first ever National Defense Strategy, which was recently completed.

## **DEFENCE TECHNOLOGY**

### [Sensors Everywhere](#)

*Information Week – 24 January 2005*

Science Applications International Corporation (SAIC) is developing technology for the Defense and Homeland Security departments that could use hundreds of tiny, wireless sensors packed with computing power to help secure U.S. borders, bridges, power plants, and ships by detecting suspicious movements or dangerous cargo and radioing warning back to a command centre. BP plc, aims to knock down the cost of monitoring equipment at a Washington state oil refinery, from thousands of dollars per measurement to hundreds, by replacing big, dumb, wired sensors with wireless ones in a network.

### [New Robots Approach More Human Like Gaits](#)

*Scientific American – 18 February 2005*

Scientists have developed three new robots that walk a lot like humans do. The androids, unveiled at the annual meeting of the American Association for the Advancement of Science in Washington, D.C., are extremely efficient, using about the same amount of energy as a person out for a stroll does. The inspiration for the robots' novel designs came from simple toys that have been around for centuries: the force of gravity allows them walk down a shallow slope without the need for motors. Teams from MIT, Cornell University and Delft

University of Technology in the Netherlands exploited the phenomenon, known as passive-dynamics.

### [QinetiQ consortium bids for contract in human sciences](#)

*Jane's Defence Weekly – 2 March 2005*

The Haldane-Spearman Consortium will bid for the UK MoD's enabling contract "Preparing People for Operations: Human Contributions to Effectiveness" which seeks to identify a preferred supplier to the MoD of human factors expertise. The consortium plans to focus on five distinct elements of human factors in the armed force – medical support and health care; team-based working; personnel recruiting and retention; physicality; and psychology. The consortium was formed by the UK science and technology group QinetiQ and Thales-owned Quintec together with 25 other partners.

### [NASA Tests Shape-Shifting Robot Pyramid For Nanotech Swarms](#)

*Space Daily – 30 March 2005*

Like new and protective parents, engineers watched as the TETWalker robot successfully traveled across the floor at NASA's Goddard Space Flight Center in Greenbelt, Maryland. Robots of this type will eventually be miniaturized and joined together to form "autonomous nanotechnology swarms" (ANTS) that alter their shape to flow over rocky terrain or to create useful structures like communications antennae and solar sails.

### [South Korea May Move Up Radar Satellite](#)

*Spacewar – 3 April 2005*

South Korea has announced plans to move up the launch date for a radar-equipped satellite that can provide images at night and in clouds. The Korea Times reports that the Ministry of Science and Technology now plans to launch Arirang V in 2008, a year ahead of Arirang III. The SAR system allows satellite coverage when conditions are bad for photography and even provides images undersea and underground for mineral exploration.

### [Sea-Based X-Band Radar Platform Completes Initial At-Sea Testing](#)

*Spacewar – 4 April 2005*

On March 24, the Sea-Based X-Band Radar platform vessel had successfully completed five days of initial at-sea testing. The Sea-based X-band Radar departed the Keppel/AMFELS shipyard in Brownsville, Texas on March 13 to conduct "builder's trials" in Kiewit Offshore Services. The X-band radar will be installed and integrated, following which, the Sea-Based X-Band Radar will depart for an extended test and verification program in the Gulf of Mexico. The Sea-Based X-Band Radar is being developed by the Missile Defense Agency to

serve as a primary radar for the Ballistic Missile Defense system, and will be used to track ballistic missiles for both testing and actual defensive operations.

### [Australia signs up Bushmasters for Iraq](#)

*Jane's Defence Weekly – 6 April 2005*

The Australian Army has taken the unusual step of committing a major new capability to operations before it has been accepted for entry into service. As part of Canberra's deployment of a second Australian Defence Force contingent to Iraq, army leadership has authorised that the 450-strong task group be augmented by at least a dozen new Bushmaster 4 x 4 IMVs. The decision to deploy the Bushmaster to a combat zone before the type has been accepted into ADF service is rare in a capital equipment acquisition environment where adherence to due process typically outweighs pending operational considerations.

## **INTELLIGENCE/COUNTERINTELLIGENCE**

### [The National Counterintelligence Strategy of the United States](#)

*Office of the National Counterintelligence Executive – March 2005*

The National Counterintelligence Strategy of the United States has four essential objectives, that is to: (1) identify, assess, neutralise, and exploit the intelligence activities of foreign powers, terrorist groups, international criminal organisations, and other entities who seek to do the U.S. harm; (2) protect the U.S. intelligence collection and analytic capabilities from adversary denial, penetration, influence, or manipulation; (3) help enable the successful execution of the sensitive national security operations of the U.S.; (4) help safeguard our vital national security secrets, critical assets, and technologies against theft, covert foreign diversion, or exploitation.

### [The Spy Game](#)

*The Economist – 17 March 2005*

America's and Britain's spying operations both stand cursed at the moment. Two years after the Iraq war began, both services are guilty first of supplying faulty information about Saddam Hussein's weapons of mass destruction and then of letting that information be exaggerated, or at least simplified, by their political masters. America's vast security apparatus also failed to prevent the September 11th atrocity. Add in other errors from the not-so-recent past—the failure to foresee the end of the Soviet Union or that India and Pakistan would go nuclear—and these intelligence systems look dangerously accident-prone. In fact, both countries have now launched their most thorough intelligence reorganisations since the end of the second world war. Do these reorganisations

make sense? Or have the two countries just handed over more liberties and cash to bureaucrats skilled in telling politicians what they want to hear?

### [Dissent on Intelligence Is Critical, Report Says](#)

*The Washington Post – 30 March 2005*

A presidential commission assigned to look into the intelligence failures leading up to the Iraq war will recommend a series of changes intended to encourage more dissent within the nation's spy agencies and better organize the government's multi-tentacled fight against terrorism, officials said yesterday. In a report to be made public tomorrow, the officials said, the panel will propose more competitive analysis and information-sharing by intelligence agencies, improved tradecraft training, more "devil's advocacy" in the formation of national intelligence estimates and the appointment of an intelligence ombudsman to hear from analysts who believe their work has been compromised. The report will also suggest the creation of a new national nonproliferation center to coordinate the fight against weapons of mass destruction, according to officials who have read the 700-page classified version of the report and declined to be identified because it has not been released.

## **WARFARE**

### [Whitehall looks to regulate private military companies](#)

*Jane's Defence Weekly – 2 March 2005*

The UK government is moving towards the regulation of UK private military companies (PMCs) to shake off the image of the "uncontrolled mercenary roaming the globe". With the private sector taking an ever-expanding role in security operations in Iraq, senior MPs and industry officials believe it is time to action recommendations made by a 2002 government Green Paper on the options for regulating PMCs. Those within the industry also welcome the move to regulate the industry and believed that the sector should not offer an offensive capability. The conflict in Iraq had seen by far the largest ever deployment of PMCs and the demand for military services had led to companies being set up quickly to grasp a share of the opportunities.

### [A Science Fiction Army](#)

*The New York Times – 31 March 2005*

The U.S. Army's Future Combat Systems (FCS) is an ultra-high-technology complex of weapons, robots and communications networks known collectively as Future Combat Systems. The original vision for the FCS of a light and highly mobile force that could do with less armour because it would have more advanced information about enemy movements is more suitable to battles against recognisable, conventional forces on relatively open terrain than in the

new world ushered in by 9/11 and the war in Iraq. In the Iraq war, the Army needs more armour and not less in order to deal with the indefinitely prolonged campaign against hit-and-run insurgents who melt in and out of cities and villages and fire rocket-propelled grenades that make armoured vehicles a life-and-death need.

### Irregular Warfare

*National Defense - April 2005*

The anti-insurgency tactics the U.S. military is learning in Iraq could be applied globally, which would turn the war on terrorism into a “war on insurgency,” said Lt. Gen. William Boykin, deputy undersecretary of defense for intelligence and war fighting support. In Iraq and other trouble spots, the United States has to come to grips with the nature of the enemy. An insurgency is a political-military activity, in which the political aspects are much more important than the military aspects.

## **REGIONAL DEVELOPMENTS**

### Taking on Tehran

*Foreign Affairs – March/April 2005*

If Washington wants to derail Iran's nuclear program, it must take advantage of a split in Tehran between hard-liners, who care mostly about security, and pragmatists, who want to fix Iran's ailing economy. By promising strong rewards for compliance and severe penalties for defiance, Washington can strengthen the pragmatists' case that Tehran should choose butter over bombs.

### China and the key to Asia peace

*The Economist – 23 Mar 2005*

China is no longer shy at counting itself among the world's great powers. Its seemingly insatiable economy drives its diplomats ever farther afield in search of new relationships to bolster trade and secure raw materials, in Africa, Central Asia, the Middle East and Latin America, as well as in Europe and North America. Yet, for all China's modern-day market magnetism, a claim to regional leadership in East Asia will long remain premature for two broad reasons. The first is that China's impressive economic growth hides a multitude of problems, including increasingly resented disparities between rich and poor, rampant corruption and capricious party rule—as hundreds of thousands of local protesters in recent years have demonstrated, quite literally, out on the streets. Should the economy falter for any reason, China's political stability is far from assured. Secondly, they will be contested energetically both by Japan, China's natural local rival, and by the United States which, while not an East Asian power by geography, is very much an Asia-Pacific power and one with no intention of

pulling either its troops or its influence back across the water. Yet just as conflict between China and Taiwan would do untold damage, so North Korea's nuclear ambitions, unless curbed sharply and soon, could set off a chain reaction that could militarise alarmingly the enduring rivalries of East Asia. In both cases, East Asia's fate is largely in China's hands.

[China, India eye energy needs](#)

*CNN.com – 3 April 2005*

The race between China and India is on to secure the energy they need to fuel their growing economies. In volatile trouble spots from Sudan to Myanmar, both countries are competing to snap up resources where most Western companies cannot, or dare not, compete, as well as facing off in less difficult environments. With rapidly growing demand, and increasing dependence on imports, the two countries have more than just their rivalry in common.