



Institute of Defence and Strategic Studies



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## CONTEMPORARY CONFLICT

### [Divide and Heal](#)

*The Prospect Magazine— May 2006*

Sometime in the next few days or weeks, a government of national unity will finally be formed in Iraq. This rare piece of good news will briefly rekindle some of the optimism about the political future of a unified Iraq that followed last December's election. But the reality on the ground is that Iraq is breaking up. The Kurdish north is largely independent and Basra, capital of the Shia south, is increasingly falling out of Baghdad's orbit. Moreover, there is anecdotal evidence of significant population movement—with Shias leaving Sunni areas, Sunnis leaving Shia areas, and Kurds (and many professionals of all identities) moving north to the relative sanctuary of Kurdistan.

### [Farewell to the Generals](#)

*The Economist —27 April 2006*

ONE of the most remarkable things about the new Israeli government that is expected to be sworn in next week is the absence of military men in its front row. For years, the country has been ruled by veterans of its military complex. Now, after the close election a month ago, it is to be led by a team of civilians, whose view of the world has been shaped elsewhere than in barracks or on battlefields. This week, Ehud Olmert, who became prime minister and leader of Kadima when Ariel Sharon, the party's founder, sank into a coma last January, cut a deal with Amir Peretz, head of the Labour Party. Given the narrowness of Kadima's election victory, Mr Olmert had no choice but to split the booty with Labour. In the new regime, Mr Peretz, a former trade-union boss, will be defence minister, replacing Mr Sharon's appointee, Shaul Mofaz, an ex-military chief of staff.

### [Nepal's Crisis: Mobilising International Influence](#)

*International Crisis Group – 19 April 2006*

Pro-democracy demonstrations and a general strike across Nepal in recent weeks mark a decisive shift in the country's political equations and probably signal the approaching end of King Gyanendra's direct rule. A successful popular movement could advance the search for peace but will depend on strong political party leadership in dealing with the Maoists; a messy transition would bring its own risks. Although domestic events will determine the speed and direction of political change, international players should use their influence to establish practical plans to help stabilise the situation and build a more lasting foundation for peace. This briefing argues for the early formation of a Contact Group (consisting of India, the U.S. and UK, working with the UN) and a complementary Peace Support Group (other key donors and international financial institutions) to form a common front on strategy and tactics to maximise international influence in assisting Nepal's escape from its worsening conflict.

## **DEFENCE INDUSTRY**

### [Exports Make Up Growing Number of Swedish Defence Sales](#)

*Jane's Defence Weekly – 28 April 2006*

Exports accounted for approximately 55 per cent of the Swedish defence industry's invoiced sales for 2005, according to research from the government's Inspectorate of Strategic Products (ISP). This was the first year in which the share of exports exceeded 50 per cent; the share in 2004 was 48 per cent.

### [More Than a Quarter of Russian Industries Face Insolvency](#)

*Jane's Defence Weekly – 28 April 2006*

Problems affecting the Russian defence industry have been thrown into stark relief by the disclosure by a government minister that more than a quarter of the nation's "strategic enterprises" face the prospect of insolvency. Addressing a conference on 25 April in Moscow, Deputy Minister of Industry and Energy Andrei Reus warned that 242 of Russia's 948 strategic enterprises are either facing or undergoing insolvency proceedings from the federal authorities. He attributed the poor performance of these companies partly to old-fashioned management practices and organisational structures at odds with free-market principles. Such enterprises have poor marketing skills, he added, and discourage individual executives from making pro-active business decisions. Reus also cited a lack of investment in manufacturing infrastructure as another contributing factor.

### [Aerospace Industry Slow To Embrace New MEMS Technologies](#)

*Space War News – 17 April 2006*

A conventional space satellite weighs more than 10,000 kilograms and costs \$150 million to manufacture, \$100 million to launch, and \$62 million to insure. On the other hand, a satellite using micro-electromechanical systems, or MEMS, would weigh one to ten kilograms and cost \$3 million to build, \$200,000 to launch, and \$800,000 to insure. Despite the obvious weight and cost advantages of the MEMS-enabled satellite, it resides in what the engineer calls the "valley of death" – the place between conceptual design and commercial implementation. Several other promising MEMS-based aerospace technologies are stuck in limbo, including a high-temperature sensor that could improve performance in fuel injection while reducing engine emissions.

## DEFENCE STRATEGY

### [Israel Outlines Defence Doctrine](#)

*Jane's Defence Weekly – 28 April 2006*

Iran may achieve nuclear weapons, which might lead other Middle East countries to obtain military nuclear capabilities. This is one of the conclusions arising from a highly classified document formalising Israel's national defence doctrine. Foreseeing a rise in the non-conventional threats to Israel, including a chance for non-conventional conflicts, the document recommends that Israel maintain its policy of 'nuclear ambiguity'. Concluding two years of work by some 20 multi-disciplinary military and civilian experts, the 250-page document, filed on 23 April to Israel's outgoing Defence Minister Shaul Mofaz, is a first attempt to formulate the country's defence doctrine. "We have never produced such a document in Israel," Dan Meridor, the former justice minister who led the project, told *Jane's*. "We tried to look 10 years ahead, recognise the world as it might be and define how Israel should prepare for it." The committee's leading conclusion is that Israel may face two main threats: the 'sub-conventional' in the form of terrorism and insurgent threats and the 'super-conventional', which is mainly the development of an Iranian nuclear weapon but also an increased chemical and biological weapon threat from countries such as Syria. The report foresees a continuous decrease in the likelihood of conventional warfare scenarios.

### [NATO endorses Effects-Based Approach](#)

*Jane's Defence Weekly – 21 April 2006*

NATO has moved to formally approve an Effects-Based Approach to Operations (EBAO) in an attempt to merge national drives toward the concept. A NATO Military Committee Memo on the implementation of EBAO has been sent to the various member states, which had until 21 April to respond. Lieutenant Colonel Johan Peeters, Strategic Engagement and Vision, NATO HQ Supreme Allied Commander Transformation, said EBAO has been a strategic concept since 1999 and is now widely accepted. He added that several member countries are focusing on its practical implementation. Speaking at the Defence IQ 'Effects-Based Approach to Operations' conference in London on 20 April, Col Peeters said EBAO allowed planners to focus on a desired end state and employ the various political, economic, civil and military capabilities needed to achieve this.

### [US Wants to Transform War from Massed Armies to Guerilla Warfare](#)

*Space War News – 28 April 2006*

Secretary of Defense Donald Rumsfeld has approved plans that designate the elite Special Operations Command, or SOCOM, as the Department of Defense's lead element for the "war on terror." Instead of creating wars with half trillion-dollar price tags and endless streams of roadside bombings and mortar attacks, Green Berets and SEALs will slide in, grab the bad guys, and fly off into the

night. If "terror" were a military problem that could be solved with military methods, the answer would be: "no." SOCOM is exactly what it's advertised to be: the world's most highly skilled warriors. Becoming a Navy SEAL, to give one example, takes two and a half years of training of such intensity that only one in five who start the program complete it. If military operations were the key to eliminating threats to our well-being in the years ahead, or at least reducing them to the level of irritants, SOCOM would be the folks you would want riding point. If military operations were the solution to groups like al-Qaida, the war on terror would have been over years ago, given that U.S. spending on defense roughly matches the rest of the world combined. The United States is not, however, meeting military forces on the field of battle, but facing a collection of various guerrilla and anarchist groups whose motivations are primarily economic, political, social, and most of all, religious.

## **DEFENCE TECHNOLOGY**

### [Directed Energy Weapons Emerge from Secrecy](#)

*Jane's Defence Weekly – 28 April 2006*

There's an old saying that goes, "good things come in small packages." That saying rings true for the warfighter when looking at the capabilities of the small diameter bomb, the Air Force's newest precision guided munition. At just 5.9 feet long and 285 pounds, the bomb's small size increases the number of weapons an aircraft can carry, therefore raising the amount of targets it can kill in one sortie. Because of its size and precision accuracy, it also reduces collateral, or unintended, damage in the target vicinity.

### [US Air Force Studies Shrapnel-Free Munition](#)

*Jane's Defence Weekly – 14 April 2006*

The US Air Force (USAF) is looking at a new version of the Small Diameter Bomb (SDB) that lacks shrapnel, relying on a more potent blast wave to achieve its killing effect. "What we're really interested in is seeing how close in we can allow things to be [to the target] while making sure we kill something," said Colonel Dick Justice, SDB programme manager. The new weapon - dubbed the Focused Lethality Munition (FLM) - would benefit from the inadvertent discovery by USAF researchers of a more powerful explosive fill and the development of an all-composite casing to replace the 250 lb (113 kg) SDB warhead's steel shell

### [Ceramic Armor Advance Achieved](#)

*National Defense Magazine – March 2006*

What to do with a light, extremely hard substance that would be ideal for body armor, except it tended to crumble and fracture during the manufacturing process? A Georgia Institute of Technology researcher has perfected a process

that makes boron carbide harder and poreless in high temperature manufacturing. The result is a material with remarkable ballistic armor properties. The scientist Robert Speyer subsequently created a company under the auspices of GIT that is fabricating prototypes of this material. The boron carbide formation process allows for the creation of complicated, curved shapes for use in helmets and other body armor. Shown here is a small-scale prototype helmet.

### [New Student-Designed System Tracks Firefighter and Special Forces](#)

*Space Daily News – 17 March 2006*

The old technique of using push pins and maps to track troop movements just got a radical new upgrade for soldiers or firefighters in rugged terrains. A group of University of Florida engineering students has designed a system to locate, track and communicate with special forces troops or firefighters in remote areas where no cell towers or other communications infrastructure exist. The system allows soldiers or firefighters to pinpoint their own and their comrades' whereabouts on digital maps displayed on handheld personal digital assistants. It can transmit this information via satellite phone, making it available to Internet-connected commanders or observers anywhere in the world. It even gives users the option of punching a panic button or sending text messages such as "need more water," "pull me out," or simply "help!"

### [Australian Leading Edge Superconductor Mine Sweeping System Revealed](#)

*Space War News – 2 May 2006*

The Parliamentary Secretary to the Minister for Defence, Senator the Hon. Sandy Macdonald, today unveiled a new class of highly advanced sea mine sweeping technology being developed by Australia's Defence Science and Technology Organisation (DSTO). During a visit to DSTO Sydney, Senator Macdonald witnessed a demonstration of the new technology. The new system is based around high temperature superconducting magnet technology and represents a leap forward in magnetic mine sweeping. Australia is believed to be the only country in the world currently investigating the application of high temperature superconductors to sea mine warfare.

### [Combat Balloon to Improve Communications](#)

*Space War News – 26 April 2006*

Warfighters who depend on ground communications for mission success will soon have improved technology, thanks to a system currently under examination here at the 2006 Joint Expeditionary Force Experiment. Combat Skysat uses balloons to take advantage of untapped airspace and improve line-of-site ground communications. "The former Air Force chief of staff, General (John P.) Jumper, wanted to explore the 'near space' realm," said Maj. Shawn Bratton, 111th Space Operations Squadron detachment commander. "Between where the satellites live

and where the planes fly is a chunk of space where nothing is operating." Skysat is a radio repeater platform launched into near-space. It is attached to what can be compared to a weather balloon and can transmit information hundreds of miles farther than traditional radios. Cruising altitude is between 65,000 and 95,000 feet.

### [Unmanned SkyTote Demonstrates Capabilities](#)

*US DoD news – 3 April 2006*

Air Force Research Laboratory scientists are working on a novel unmanned aerial vehicle called SkyTote that will take off and land vertically like a helicopter, but also transition into horizontal flight like a conventional aircraft. SkyTote's primary mission to deliver a payload to a specific point within a tactically relevant range and time is a Small Business Innovative Research Phase II effort orchestrated by AeroVironment Inc of Monrovia, Calif., for Air Force Research Laboratory's Air Vehicles Directorate.

## **MILITARY OPERATIONS**

### [Special Ops Sub Becomes Hub for Irregular Warfare](#)

*National Defense Magazine – April 2006*

ABOARD THE USS OHIO—A short cruise on board this former nuclear-missile submarine off the coast of Washington state offers a glimpse into how the Navy and special operations forces plan to engage in covert military action. During a three-year overhaul, the Ohio's 24 nuclear intercontinental ballistic missiles, known as Tridents, were removed to make room for 154 Tomahawk cruise missiles and facilities for as many as 66 special operations troops, plus a 35-man joint command element.

### [Soldiers Sharpen Humanitarian, Diplomatic Skills](#)

*National Defense Magazine – May 2006*

FORT IRWIN, Calif. — As they train for combat in mock Middle Eastern villages, soldiers find that their fighting skills often cannot make up for a shortage of interpreters and a poor understanding of Iraqi culture. A team of soldiers from the Fort Lewis, Wash.-based 3rd Stryker Brigade, a part of the Army's 2nd Infantry Division, is here at the National Training Center for a two-week rotation. They are about to launch a humanitarian aid mission at a refugee camp. The goal is to prepare soldiers to cope with the unpredictable hurdles that come with interacting with people from a different culture.

## NUCLEAR PROLIFERATION

### [Speaking to Tehran, With One Voice](#)

*The New York Times – 21 March 2006*

WITH the Iranian nuclear crisis about to land in the Security Council, the events that led up to the war in Iraq point clearly to what needs to be done. In the decade preceding the Iraq war, Mr. Hussein was able to defy the major powers when they were divided. Exploiting his advantage as a single actor and Washington's indecision over whether it most wanted nonproliferation or regime change, Mr. Hussein consistently outmaneuvered his diplomatic opponents. But he also knew that he could not buck the five permanent members of the United Nations Security Council when they were serious and united (as, for example, during the toughened United Nations inspections in the months just before the war), and he did not even try. The situation with Iran today is the same. Washington cannot decide whether the top priority of its Iran policy should be regime change or nonproliferation; as a result, others of the major powers do not trust and will not fully support its antinuclear efforts. Tehran has easily exploited this lack of unity among the major powers to frustrate every attempt to rein in its nuclear program. It has recruited international support through energetic diplomacy to the group of developing countries known as the G-77. Just as Mr. Hussein did, the leaders in Tehran have made diplomatic mincemeat of the big powers.

### [Striking Iran is an Option, Not Inevitable](#)

*The Christian Science Monitor – 11 April 2006*

Recent reports that the United States and Israeli militaries are weighing a possible strike against Iranian nuclear facilities have raised the stakes in Iran's effort to build a nuclear program. But a US or Israeli attack on Iran would be extremely destabilizing and counterproductive to America's war on terrorism. Iran has said it will not back down in its desire to build a nuclear capability. This has led to a growing sentiment among some US and Israeli officials that a limited military strike against Iranian nuclear facilities may be inevitable. It has also led to tit-for-tat military tests. Iran has test-fired several types of missiles in a show of force, and the US is preparing to test a 700-ton bomb designed to penetrate bunkers - perhaps like those housing Iranian nuclear facilities.