

# MONTHLY DIGEST

## CHEMICAL AND BIOLOGICAL NEWS DIGEST

*Institute for Defence Studies and Analyses*

Volume 1, Number 5  
May 2009

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## ARMS CONTROL

### U.N. Nations could refine PSI inspection terms

**Thursday, 28 May**

The five permanent U.N. Security Council member nations, South Korea and Japan are discussing when to authorize boarding of North Korean ships under a multilateral program to interdict shipments of weapons of mass destruction and related materials, the Canwest News Service reported.

In response to North Korea's nuclear test Monday, South Korea announced it would join the Proliferation Security Initiative, a U.S.-led nonproliferation effort that now has 95 participating nations.

"The inspection of ships and what you do on the high seas is one of the most difficult points," one high-level diplomat said of a closed-door meeting in which the seven powers were developing a Security Council resolution to respond to North Korea's latest nuclear test. "Who gives the legal (authority) to intercept a ship, inspect cargo, and decide what to do with cargo?"

In the aftermath of North Korea's first nuclear test in 2006, the Security Council passed a resolution endorsing the broad concept of boarding North Korean ships in search of WMD materials.

Meanwhile, South Korean and U.S. military forces today raised their alert levels on the Korean peninsula, Agence France-Presse reported.

"Surveillance over the North will be stepped up, with more aircraft and personnel mobilized," said South Korean Defense Ministry spokesman Won Tae-jae.

There is an increasing potential for a lower-level clash between the two Koreas, observers said.

It is unlikely that the United States could eliminate Pyongyang's nuclear weapons or related infrastructure through military action, and attacking the Stalinist state would almost certainly prompt a devastating retaliation against the South, according to AFP.

North Korea could employ biological, chemical or nuclear weapons in its response to an attack, according to AFP.

"If there were to be a full-scale war, the casualties would be unimaginable," said Chaibong Hahm, an analyst at the RAND Corp. "Ultimately there's absolutely no doubt in anybody's mind the combined U.S. and South Korean forces would prevail. But at what cost is a serious question."

War between the Koreas would kill or wound no fewer than 100,000 people, even if South Korea and the United States quickly destroyed North Korea's missile and artillery installations, according to a 2005 war game carried out by former high-level U.S. military officials.

Source: [http://www.globalsecuritynewswire.org/gsn/nw\\_20090528\\_3358.php](http://www.globalsecuritynewswire.org/gsn/nw_20090528_3358.php)

## In This Issue

Allegations regarding the use of chemical weapons in the Israeli offensive and in Afghanistan dominated news reports. There was positive news on global disarmament, US would be able to meet its treaty obligations under the CWC by 2012. In addition the EU launched a multi million dollar project to counter the threat of biological weapons and also issued rules for export controls on dual-use items. Meanwhile, Micro electrical-mechanical systems (MEMS) might be developed as chemical sensors in the future.

We welcome our reader's feedback.

Editor

## EC issues rules for exports, transfer, brokering and transit of dual-use items

Friday, 29 May

The Official Journal of the European Union has published on May 29th 2009, Regulation (EC) No 428/2009, of May 5th 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

An effective common system of export controls on dual-use items is necessary to ensure that the international commitments and responsibilities of the Member States and of the European Union, are complied with, especially those regarding non-proliferation.

According to Regulation (EC) No 428/2009, “dual-use items” will mean items, including software and technology, which can be used for both civil and military purposes, and shall include all goods which can be used for both non-explosive uses and assisting in any way in the manufacture of nuclear weapons or other nuclear explosive devices.

The existence of a common control system and harmonised policies for enforcement and monitoring in all Member States is a prerequisite for establishing the free movement of dual-use items inside the Community.

Decisions to update the common list of dual-use items subject to export controls must be in conformity with the obligations and commitments that Member States have accepted as members of the relevant international non-proliferation regimes and export control arrangements, or by ratification of relevant international treaties. This list implements internationally agreed dual-use controls including the Wassenaar Arrangement, the Missile Technology Control Regime (MTCR), the Nuclear Suppliers' Group (NSG), the Australia Group and the Chemical Weapons Convention (CWC).

Source: <http://euroalert.net/en/news.aspx?idn=8802>

## The Maritime Security Conference concludes successfully

The Maritime Security Conference, held under the Patronage of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE, and His Excellency Nicolas Sarkozy, President of the French Republic, and with special support of the UAE and French Navies, was organized by the Institute for Near East and Gulf Military Analysis (INEGMA) on the occasion of the

inauguration of the French Naval and Support Base (Peace Camp).

Two Plenary sessions titled ‘Technology and Cooperation,’ and ‘The Way Ahead’ were held today. They were followed by specialized closed workshops.

Within the conference discussions the universal view of the need to revamp outdated maritime laws regarding piracy was emphasized including the need for an international tribunal for pirates. Also in regards to threats there needs to be an effort to build joint intelligence capabilities to pre-empt threats, not just wait for them to emerge and have time to mature.

Both the Commanders of the French and the UAE Navies spoke about improving International and Gulf maritime security cooperation.

Admiral Pierre-Francois Forissier asserted that all of the main threats including nuclear, biological, and chemical weapons as well as terrorism need coordination to guarantee the freedom of the sea.

This effort needs to be parallel to international policy efforts to be unified. Still there are several areas where improvements need to be made that include the exchange and free flow of information amongst the Embassies and Ministries of the region. ‘Relations must break down this wall.’

Rear Admiral Mohammed Al Sabab Al Tenaiji argued that the GCC needs to work together against threats in order to maintain national security emphasizing that maritime cooperation is the key to balance in the region through multi and joint operations. Energy, WMD regional consciousness, and emergency planning need to be coordinated in order to neutralize threats, specially asymmetric threats.

Source: <http://www.ameinfo.com/198194.html>

## DISARMAMENT

### Bulgaria hosts Chemical Weapons Banning Organization regional forum

26 May

Economy and Energy Minister Petar Dimitrov unveiled in Sofia Chemical Weapons Banning Organization forum for East European countries. The Director-General of the organization Rogelio Pfrter attended the opening ceremony.

The choice of Bulgaria as the venue of the 8<sup>th</sup> organizations' regional meet is a recognition of the pro-active policy Bulgaria has adhered to in the non-proliferation of weapons of mass annihilation, the forum's principal speaker said.

Source: [http://www.bnr.bg/RadioBulgaria/Emission\\_English/News/B-6+2605.htm](http://www.bnr.bg/RadioBulgaria/Emission_English/News/B-6+2605.htm)

## Getting it done

Pueblo Chemical Depot, US, has a firm commitment for increased funding and employment for on-site biological treatment of the waste product from the destruction of chemical weapons stored there.

Jean Reed, Army deputy assistant for chemical demilitarization, told The Chieftain last week that \$250 million has been added to the Department of Defense budget, bringing the program amount to \$545.2 million.

"The money will be used to increase labor costs," he said. "Actual destruction operations in Pueblo will start in the fourth quarter of 2014 and conclude in the fourth quarter of 2017, with the work being done 24/7."

A previous 2020 completion date was accelerated by the program's decision to have waste product - called hydrolysate - treated biologically at the Pueblo depot, rather than ship it out for treatment in another state. Pueblo Chemical Depot has a stockpile of 780,000 artillery shells and mortar rounds containing a total of 2,611 tons of mustard agent.

Source: <http://www.chieftain.com/articles/2009/05/18/editorial/doc4a10dcf814c95926904746.txt>

## CTR programme eliminates 10 ballistic missiles

**Tuesday, 26 May**

The U.S. Cooperative Threat Reduction program eliminated 10 submarine-launched ballistic missiles and secured four nuclear-weapon train shipments in April, U.S. Senator Richard Lugar (R-Ind.) announced on April 16.

Since its inception in 1991 to secure and eliminate weapons of mass destruction in one-time Soviet states, the Nunn-Lugar program has deactivated 7,514 strategic nuclear warheads and destroyed 752 ICBMs, 498 ICBM silos, 143 mobile ICBM launchers, 643 submarine-launched ballistic missiles, 476 SLBM launchers, 31 ballistic missile-capable submarines, 155

strategic bombers, 906 nuclear air-to-surface missiles and 194 nuclear test tunnels.

In addition, the program has safeguarded 438 nuclear-weapon train shipments, boosted security at 24 nuclear weapons storage facilities and constructed 18 biological agent monitoring stations. It removed all nuclear weapons from Ukraine, Kazakhstan and Belarus, nations that once respectively held the world's third-, fourth- and eighth-largest nuclear arsenals.

Lugar on Friday plans to attend the formal opening of Russia's Shchuchye chemical weapons disposal facility, which received significant financial assistance from the CTR program.

Russia is expected to drain roughly 2 million munitions containing warfare materials such as VX nerve agent, destroy the weapons and neutralize their chemical contents.

Source: [http://www.globalsecuritynewswire.org/gsn/nw\\_20090526\\_8420.php](http://www.globalsecuritynewswire.org/gsn/nw_20090526_8420.php)

## Pentagon looks to destroy 90% of Chemical Stockpile by Treaty Deadline

**Wednesday, 20 May**

The U.S. Defense Department hopes to eliminate 90 percent of its stockpile of chemical weapons by 2012, the year designated by an international treaty for full disposal of the arsenal, *Defense Environment Alert* reported.

That percentage would seem to cover demilitarization operations that are completed or under way at seven U.S. chemical weapons storage sites.

Left over would be the Blue Grass Army Depot in Kentucky and the Pueblo Chemical Depot in Colorado, where chemical neutralization plants are not yet finished. Disposal work is now expected to be completed in 2020 at Pueblo and three years later at Blue Grass.

The Chemical Weapons Convention requires the U.S. stockpile, which stood at nearly 30,000 tons of warfare materials such as mustard blister agent and sarin nerve agent when the pact entered into force in 1997, to be eliminated by April 2012. Defense officials have acknowledged they cannot meet that schedule, and are now aiming at a 2017 deadline set by Congress.

The Pentagon budget proposal for the next fiscal year includes \$550.4 million for preparation of the Colorado and Kentucky plants, a \$250 million hike from the

anticipated funding request. The extra money is intended to help “complete destruction of the remaining 10 percent of the U.S. chemical stockpile as close to 2017 as possible,” according to a Defense Department budget document released this month.

The fiscal 2010 defense budget request includes \$1.71 billion for the full range of chemical demilitarization activities, encompassing operations and maintenance, research and development and military construction.

Source: [http://www.globalsecuritynewswire.org/gsn/nw\\_20090520\\_4587.php](http://www.globalsecuritynewswire.org/gsn/nw_20090520_4587.php)

## **OPCW Director-General attends opening ceremony of the Shchuchye Chemical Weapons destruction facility in the Russian Federation**

**Friday, 29 May**

On 29 May 2009, the Director-General of the Organisation for the Prohibition of Chemical Weapons (OPCW) Ambassador Rogelio Pflirter attended the opening ceremony of the Shchuchye Chemical Weapons Destruction Facility situated in Kurgan Oblast, the Russian Federation.

In connection with the commissioning of this new facility, the Russian Federation was represented by the Minister of Industry and Trade, H. E. Mr V. Khristenko; the Plenipotentiary Representative of the President of the Russian Federation to the Volga Federal District and Chairman of the State Commission on Chemical Disarmament.

The Honorable United States Senator Mr Richard G. Lugar also attended the ceremony, as well as the Ambassador of the United States to the Russian Federation and representatives of Canada, France, Finland, the United Kingdom and other donor countries.

The Minister of Industry and Trade and other Russian authorities underlined that the opening of the Shchuchye Facility constituted a further step, and a clear reaffirmation, towards the full and timely fulfillment by the Russian Federation of its obligations under the Chemical Weapons Convention.

Senator Lugar, who from a very early stage promoted United States’ support to the construction of the Shchuchye Facility, highlighted the value of the U.S.-Russian cooperation in the field of disarmament and stressed the symbolic value of the new Shchuchye Facility in that context.

Director-General Pflirter commended the generosity of the countries which are supporting the Russian Federation and noted that the coming online of the facility at Shchuchye was a sterling example of the crucial cooperation and assistance that the States Parties can offer each other in pursuing the goals enshrined in the Convention.

The Shchuchye facility began on 5 March 2009 the destruction of rocket warheads filled with sarin (GB). The weapons to be destroyed at Shchuchye contain in total about 5,460 metric tonnes of nerve agent including sarin and VX; this represents about 14% of the chemical weapons that Russia is obliged to destroy. During the destruction process, OPCW inspectors will maintain a 24-hour presence at the facility to ensure that all chemical weapons at the site are irreversibly destroyed.

As at 30 April 2009, the Russian Federation had destroyed 12,169 metric tonnes of its Category 1 chemical weapons, or 30.35%, of the aggregate amount declared. To fulfil its obligations under the Chemical Weapons Convention the Russian Federation will destroy 45% by 31 December 2010 and 100% by 29 April 2012.

Source: <http://www.opcw.org/news/news/article/opcw-director-general-attends-opening-ceremony-of-the-shchuchye-chemical-weapons-destruction-facilit/>

## **NATIONAL AND INTERNATIONAL**

### **MoD admits use of controversial ‘enhanced blast’ weapons in Afghanistan**

**Richard Norton-Taylor**

British pilots in Afghanistan are firing an increasing number of “enhanced blast” thermobaric weapons, designed to kill everyone in buildings they strike, the Ministry of Defence has revealed. Since the start of this year more than 20 of the US-designed missiles, which have what is officially described as a “blast fragmentation warhead”, have been fired by pilots of British Apache attack helicopters.

A total of 20 were also fired last year after they were bought by the MoD from the Americans last May.

The missiles are a variant of the AGM-114N Hellfire missile, described by the Pentagon as “designed to produce higher sustained blast pressure in multi-room structures.

It adds: “The enhanced blast from the ... warhead is more effective against non-traditional targets; multi-room structures expected in military operations in urban terrain operations, caves, and fortified bunkers.” The missile’s warhead is made with a mixture of chemicals rather than a simple blast mechanism.

“The thermobaric Hellfire missile can take out the first floor of a building without damaging the floors above, and is capable of reaching around corners,” according to Global-Security.org, a US thinktank.

It describes the effects of the missile as “formidable”. Unlike conventional warheads, it produces a sustained pressure wave. US forces have deployed the missiles in Iraq as well as Afghanistan.

Doctors say they found horrific burns on victims of the slaughter a week ago.

They believe they could have been caused by the chemical, which bursts into fierce fire on contact with the air and can stick to flesh and burn deep into it.

Its wider use was disclosed by John Hutton, the defence secretary, in answer to a parliamentary answer from Nick Harvey, the Liberal Democrat defence spokesman. “Given the MoD’s reluctance to admit they were even going to use these weapons, they now seem to be getting rather more trigger-happy,” Harvey said yesterday. “If these controversial weapons are being fired on a weekly basis in Afghanistan, we need to know that they are being used according to strict rules of engagement.

“Human rights groups have serious concerns about the effect of these weapons in populated areas, and their legality seems to be a grey area. The last thing we need in this counter-insurgency campaign is the allegation that civilians are dying at the hands of some kind of terror weapon. Parliament must be reassured these are a weapon of last resort.”

Source; <http://www.rawa.org/temp/runews/2009/05/28/mod-admits-use-of-controversial-enhanced-blast-weapons-in-afghanistan.html>

## Supreme Court turns down two suits on poison gas left in China

**Kyodo News**

The Supreme Court on Tuesday turned down appeals by 22 Chinese plaintiffs in two separate suits seeking damages for their suffering caused by poisonous gas munitions left behind by the Imperial Japanese Army in China at the end of World War II.

Justice Tokiyasu Fujita, presiding over the top court’s Third Petty Bench, ruled against the Chinese victims and their family members, denying the responsibilities of the Japanese government.

In September 2003, the Tokyo District Court handed down a landmark ruling that ordered the government to pay some ¥190 million in compensation in one of the two suits.

But the decision was overturned by the Tokyo High Court in July 2007, which said it “cannot acknowledge a strong probability that the Japanese government could have prevented the incidents.”

In the other case, the damages claim had been rejected by both district and high courts.

Of the Chinese victims, some suffered aftereffects from inhaling poisonous gas at construction sites in Heilongjiang Province, and others when a shell abandoned by the Japanese military exploded. The incidents occurred between 1950 and the 1990s, according to the high court.

Source: <http://search.japantimes.co.jp/cgi-bin/nn20090527a9.html>

## FDA gets new chief

**21 May**

The US Food and Drug Administration’s (FDA) new commissioner, Margaret Hamburg, will be the second woman to ever lead FDA. She comes from a background in public health and bioterrorism, and she appears to have the backing of the pharmaceutical and biotechnology industries.

Despite Hamburg’s lack of experience at the FDA, the Senate unanimously confirmed her nomination on 18 May. The Pharmaceutical Research and Manufacturers of America (PhRMA) and the Biotechnology Industry Organization (BIO) endorsed the nomination, and lobbied for a quick confirmation.

Hamburg has said her first priority will be to address the H1N1 influenza, also known as swine flu, which has spread over 30 countries and caused at least 7 deaths in the US. Hamburg wants to review the FDA’s work on H1N1 to determine whether there are additional steps that the agency can take to make safe and effective medical products and laboratory tests available.

Also at the top of her agenda are improving food safety, fostering innovation, and making medical product safety

advances by 'building safety considerations into every aspect of product development' with close aftermarket monitoring.

'There has never been a time when advances in science and technology have offered so many opportunities to bring new medical products to the market and to the people who need them,' she remarked at a Senate confirmation hearing on 7 May. 'As FDA Commissioner I would strive to lead an agency that appropriately balances innovation with regulation.'

Source: <http://www.rsc.org/chemistryworld/News/2009/May/21050902.asp> *International Peoples' Tribunal supports Vietnamese AO victims*

## **International Peoples' Tribunal supports Vietnamese AO victims**

Nhan Dan Online - The International Peoples' Tribunal of Conscience on May 18 concluded that the chemical war launched by the US army in Vietnam had violated the UN Charter mandate and that the US government and chemical companies which manufactured and supplied Agent Orange must fully compensate the Vietnamese victims of Agent Orange and their families.

During two days of hearing in Paris, France on May 15-16, the tribunal received evidence and testimony from 27 people including victims and expert witnesses. The testimony from the victims was very compelling and the testimony of the experts tied the damages that these victims suffered to their exposure to Dioxin. A summons and complaint announcing the tribunal was sent to the United States Government, and the Chemical Companies which manufactured Agent Orange. Despite notice neither the Government nor the firms responded.

The tribunal found that the evidence presented to the tribunal has established that during the war of USA against Vietnam, from 1961 to 1971, military forces of the United States sprayed chemical products which contained large quantities of Dioxin and caused damages to the people, the land, the water, the forest, the ecology and the economy of Vietnam.

The use of Dioxin was a war crime because it was a poisoned weapon outlawed both in customary international law and by the Hague Convention of 1907. By providing poison weapons, the US chemical companies were complicit in the war crimes committed

by the US government and produced so much pain, suffering and anguish to at least 3 to 4 million people and their families. The effects of these crimes will be felt for generations to come.

The tribunal recommended that the Agent Orange Commission be established to assess the consequences of Agent Orange suffered by the Vietnamese people. The Agent Orange Commission will determine the amount necessary to provide specialised medical facilities and rehabilitation and other therapeutic services to the victims and their families. The Agent Orange Commission will also estimate the costs of the necessary studies of contaminated areas and the cost of environmental repair in the future.

The full report of the tribunal shall be submitted to the US President Barack Obama and the United Nations Secretary-General Ban Ki-moon.

Source: [http://www.nhandan.com.vn/english/news/210509/domestic\\_i.htm](http://www.nhandan.com.vn/english/news/210509/domestic_i.htm)

## **Rift Valley and Eastern hard hit as cholera deaths reach 37**

*Nation Correspondent, Thursday, 21 May*

37 people have died of cholera in Kenya. The victims are among 1,839 cholera cases reported in 23 districts countrywide recently. However, the government has allayed fears of the spread of the disease.

A Health ministry official on Thursday said there was no risk of the disease in Nairobi, adding that two cases reported in Kawangware and Rongai recently were imported.

The most affected regions are Eastern and Rift Valley provinces where 26 new cases were reported recently. A weekly disease outbreak update from the ministry identified the affected districts as Moyale, Tinderet, Laisamis and Kajiado. According to the head of the Division of Disease Surveillance and Response, Dr Charles Nzioka, the situation was now contained.

Hotel and restaurant owners were asked to ensure they had health certificates and that their staff were healthy. The recent highest number of deaths were in in the North Eastern district Moyale where 10 people have died followed by Tinderet and Laisamis with one death each. At the same time, Kenyans have been advised to be careful about the chemical waste emitted into the environment.

## Environment

Speaking during the opening of a chemical weapons convention workshop at Afya House on Thursday, Health permanent secretary Mark Bor, called for cooperation between industries and the military to ensure the safety of both plant and animal life. “The implementation of the Chemical Weapons Convention will contribute to improved global security and protect the environment,” he said.

The CWC is an international agreement which bans the development, production, accumulation transfer and use of chemical weapons among member states.

Source: <http://www.nation.co.ke/News/-/1056/601690/-/ujntvg/-/>

## India hosts International Workshop on ‘Green Customs Initiatives’

New Delhi, 22 May

India hosts a five-day international workshop that started from May 25 on ‘Green Customs Initiatives’ to bring awareness about environment protection and the role of customs officers in enforcing environmental laws on the borders.

“The role of customs departments of the international community is important especially in view of the fact that national and international crime syndicates are indulging in environmental crimes for pecuniary gains,” an official statement said today.

The National Academy of Customs, Excise and Narcotics (NACEN), the training arm of the Central Board of Excise and Customs (CBEC), hosted the event under the aegis of the World Customs Organisation (WCO) at NACEN in Faridabad.

‘Green Customs Initiatives’ has been launched by the secretariats of the MEAs such as Basel Convention, Rotterdam Convention, Stockholm Convention, Montreal Protocol, Chemical Weapons Convention and others in cooperation with United Nations Environment Programme (UNEP) and the WCO.

Source: <http://www.zeenews.com/news533793.html>

## Israeli human rights group wants napalm-like weapon banned

Malaysia Sun, Friday, 22 May

Moves are afoot in Israel to ban the use of white phosphorus.

The chemical weapon, which has similar applications to napalm which was widely used in the Vietnam War, was responsible for a number of deaths during the Israeli army’s Cast Lead operation in December and January.

The human rights organisation, B’Tselem has now written to the judge advocate general, demanding that the military stop all use of munitions containing phosphorus.

B’Tselem also demanded that all cases in which the military used phosphorus during Operation Cast Lead be thoroughly investigated for breaches of international humanitarian law.

Human Rights Watch investigated six cases and found that at least thirteen Palestinians had been killed by phosphorus, among them four women and seven children, including a one-year-old infant. In addition, the use of phosphorus caused extensive damage to property. There is documentation of fires throughout the Gaza Strip that resulted from the use of phosphorus in the bombing of houses, UN facilities, and humanitarian-aid warehouses.

During the December/January offensive, Israeli officials denied that the military was using white phosphorus. As the number of reports on the use of phosphorus increased, and pictures proving its use appeared, officials were forced to admit that the military had indeed used phosphorus. However, they insisted its use was lawful under international humanitarian law.

Recently, the results of the Israeli army’s inquiry into “munitions containing phosphorus components” were made public. According to the inquiry, the army used two kinds of such phosphorus munitions. The first kind, which was used less, was shells in which phosphorus was a major component. These shells, the inquiry found, are not intended to provide a smoke screen. Nevertheless, the inquiry determined, because they were fired at open areas, and “phosphorus munitions were not fired at a built-up area and not against humans,” their use conformed to international law. Although not required by the strict letter of the law, the military decided to cease use of this ammunition.



The second kind of phosphorus ammunition, whose use was more prevalent, was munitions that “contained felt dipped in phosphorus.” To the best of B’Tselem’s knowledge, it says, most of the injuries to civilians and of property damage resulting from the use of phosphorus were caused by this kind of ammunition.

**The report of the military’s inquiry states that these munitions are intended only for smokescreen purposes.**

Therefore, it holds, in its conclusions, that they are not subject to the special restrictions specified in international law regarding the use of “incendiary” munitions, and, in any event, are permitted under international law.

The findings of the inquiry, say B’Tselem raise doubts about the military’s willingness to seriously examine the claims raised about its conduct of the operation. “The published comments are completely detached from the effects of the use of phosphorus in the field. Not one mention is made of injury to humans, buildings, or farmland, as if it were a theoretical exercise in international law,” said B’Tselem in a statement Friday. “The claim that the use of phosphorus was “in a configuration that is not intended to harm humans or ignite fires,” and that it was intended “only for smokescreen purposes,” is so divorced from the reality of use of phosphorus in the field that it raises doubts as to the material the investigators had at their disposal, or, alternatively, as to their commitment to the truth,” said B’Tselem.

White phosphorus has been also used extensively in the Iraq War. For many years however the U.S. military denied it was being used. In November 2005 the U.S. ambassador to the UK Robert Holmes Tuttle said that U.S. forces “do not use napalm or white phosphorus as weapons.”

The BBC however took issue with the statement and sought a confirmation from the Pentagon. A spokesman, Lieutenant-Colonel Barry Venable, then confirmed to the British broadcaster a week later, that white phosphorus had been used as an antipersonnel weapon, and was quoted as saying: “It has been used as an incendiary weapon against enemy combatants.”

The chemical weapon was used during the 2006 Israel - Lebanon War, and civilian victims have died in Afghanistan showing symptoms of white phosphorus burns. U.S. and NATO forces there say they suspect the Taliban may be using the weapon.

Source: <http://story.malaysiasun.com/index.php/ct/9/cid/b8de8e630faf3631/id/504608/cs/1/>

## Are we safe yet?

**Daniel Stoffman**

An electromagnetic pulse attack is the sort of thing that keeps counterterrorism experts up at night. Depending on the blast’s size and location, such an attack could leave all of North America in primitive conditions. The emp threat typifies the terrorist threat. The chances of it happening are low at any given time. But it could happen, because there are international terrorists with the motivation, brains, and patience to pull it off. Osama bin Laden has said it is his “religious duty” to acquire nuclear weapons to attack the West. And al Qaeda has repeatedly cited Canada as one of its targets.

Graham Allison, an expert on the threat of nuclear terrorism and director of the Belfer Center for Science and International Affairs at Harvard’s Kennedy School of Government, puts the answer this way: “If the US and other governments just keep doing what they are doing today, a nuclear terrorist attack in a major city is more likely than not by 2014.”

On the face of it, we should be safer. After 9/11, the federal government rushed the Anti-terrorism Act into law, giving police and intelligence agencies broad new powers, including enhanced use of electronic surveillance and the right to arrest people suspected of planning to commit a terrorist act.

All told, we’re now spending \$25 billion a year on national security — a figure that encompasses defence, the RCMP, intelligence services, and air, border, and coastal security.

Then there is the curtailed privacy that comes with counterterrorism. It’s too late to do anything once the suicide bomber has walked through the turnstile of the subway station; you have to find out about his plans before he puts them into action, which means security operatives must snoop and watch and eavesdrop. Citizens of totalitarian countries take such things for granted. Most Canadians don’t, at least not yet.

Martin Rudner, founding director of the Canadian Centre of Intelligence and Security Studies at Carleton University, believes the costs of security are worth it.

**“There is no question in my mind,” he says, “that the reason Canada has been spared a deadly attack since 9/11 is not because the terrorists haven’t tried, but because counterterrorism has succeeded.”**

To take one example, the strategy of pre-emptive enforcement saw its first visible results last fall, when Canadian prosecutors won their first convictions under the Anti-terrorism Act.

According to Matthew Bunn, co-principal investigator of the Project on Managing the Atom at Harvard's Belfer Center, the ingredients for nuclear weapons exist in hundreds of buildings in forty countries. Some sites are secure, he says, but others "have little more than a night watchman and a chain-link fence." Once terrorists obtained nuclear material, it would be easy for them to import it into Canada; only 4 percent of containers arriving at our ports are inspected to determine their contents.

Another weapon of mass destruction is biological. To grasp the potential of such an attack, consider a war game called *Dark Winter* that was conducted by the United States just prior to 9/11 to simulate the effects of a smallpox strike.

In the exercise, six days after the first identified case, in Oklahoma City, 2,000 people had the disease and 300 were dead. The worst case predicted by the simulation saw three million Americans infected and one million killed. Should this actually happen, hundreds of thousands of Canadians could die, too.

Source: <http://walrusmagazine.com/articles/2009.05-security-are-we-safe-yet/>

## EU launches eur100 million anti-biological weapons program

18 May

European Union defense ministers launched a EUR100 million project to counter the threat against biological weapons.

The program, named 'Bio-Edep,' is an initiative of five E.U. nations - the Czech Republic, France, Germany, the Netherlands and Spain.

"Other (E.U.) member states have expressed their intention to join," the European Defense Agency said in a statement. The aim is to develop equipment capable of detecting and identifying biological agents used against troops.

The scheme will address "an important shortfall in the CBRN (chemical, biological, radiological and nuclear) defense area," the European Defense Agency statement said.

Source: <http://www.easybourse.com/bourse-actualite/total/eu-launches-eur100-million-anti-biological-weapons-program-FR0000120271-669830>

## Two different presidential helicopters may be in the works

As the White House and the Pentagon weigh options to replace the canceled VH-71 helicopter program, officials are considering buying two types of helicopters for the next presidential fleet.

Defense Secretary Gates told lawmakers that the President may need two helicopters at his disposal, one that would ferry him on routine trips from the White House to destinations such as Andrews Air Force Base or Camp David and one that would be a more capable escape helicopter designed for emergencies.

Gates announced plans to cancel the VH-71 in April after the program's costs soared from \$6.1 billion to more than \$13 billion for 28 aircraft. He acknowledged that a major problem with the VH-71 program was the abundance of requirements for the helicopter. According to critics, the requirements for the VH-71 had spun out of control. The requirements included increases in the range of the helicopter and the number of passengers it must carry to changes in the amount of protective gear required on board.

The Pentagon plans to spend \$1.2 billion to terminate the VH-71 program and upgrade the fleet of decades-old VH-3 Sikorsky helicopters that carry the president as Marine One.

Buying a fleet of 23 of the less-capable VH-71s would cost 485 million apiece, but the aircraft would lack necessary protections against chemical, biological and nuclear weapons and only have 55% of the range of the existing VH-3s.

Source: <http://www.rotor.com/Default.aspx?tabid=510&newsid905=61433>

## A training course for experts

A training course for experts available to the United Nations Secretary-General for investigations of the alleged use of chemical, biological and toxin weapons was held in Umeå, Sweden, from 25 May to 5 June.

Funded by the Government of Sweden, the course was organized by the European Chemical, Biological, Radioactive, Nuclear and Explosive (CBRNE) Centre at the University of Umeå, with the support and cooperation of the United Nations Office for Disarmament Affairs.

In 2006, the General Assembly encouraged the Secretary-General to update the roster of experts and laboratories, as well as the technical guidelines and procedures available to him for the timely and efficient investigation of alleged chemical, biological and toxin weapons use. The Office for Disarmament Affairs, which maintains the roster, has updated it over the past couple of years and it currently lists more than 200 experts and 40 analytical laboratories nominated by 41 Member States.

Endorsed by General Assembly resolution A/Res/45/57C of 1990, the technical guidelines and procedures for the timely and efficient investigation of reported possible use of chemical and bacteriological (biological) or toxin (chemical, biological or toxin) weapons stipulate that “any interested Member State may designate to the Secretary-General relevant specialized training or courses available to qualified experts in support of their possible role on his behalf in carrying out investigations of possible use of CBT agents, including exchange of information and expertise, in order to facilitate achievement of a common basis of understanding and operation”.

The training course in Umeå is the first to be offered by a Member State for experts on the Secretary-General’s roster.

Source: [http://7thspace.com/headlines/310047/experts\\_to\\_attend\\_training\\_course\\_on\\_investigation\\_of\\_chemical\\_biological\\_toxin\\_weapons\\_use\\_in\\_ume\\_sweden\\_25\\_may\\_5\\_june.html](http://7thspace.com/headlines/310047/experts_to_attend_training_course_on_investigation_of_chemical_biological_toxin_weapons_use_in_ume_sweden_25_may_5_june.html)

## ICRC appeals for urgent aid for wounded civilians

**B. Muralidhar Reddy**

Hours after the military announced it has wiped out the military capabilities of the LTTE, the International

Committee of the Red Cross (ICRC) made an urgent appeal for wounded civilians in the war zone to be given medical care.

In a statement, the ICRC, the only international agency present inside the war zone but for the last three days before Eelam IV was declared over, said for nine consecutive days the ICRC had been pursuing efforts to reach the area of north-eastern Sri Lanka hard hit by fighting in recent weeks.

“Under international humanitarian law, the lives of all those who are not or are no longer fighting must be spared. Wounded and sick people must be collected and cared for immediately, and detainees must be treated humanely,” said ICRC’s director of operations, Pierre Krähenbühl, from the ICRC’s headquarters in Geneva. “This is all the more urgent since no humanitarian aid has reached those who need it for over a week.”

Separately, China sent the first batch of humanitarian aid to the internally displaced people in Sri Lanka. A statement by the Sri Lankan government said Senior Presidential Adviser Basil Rajapaksa, MP, accepted the consignment of 6,300 tents handed over by China’s Ambassador to Sri Lanka Yang Xiuping.

China sincerely hopes that Sri Lanka achieve economic development and also realise national reconciliation in a short time,” said Ms. Yang.

Meanwhile, the pro-LTTE TamilNet launched a no-holds-barred attack on the government and the international community hours after the LTTE lost the battle completely.

In a report the website said: “Although they initially claimed that the objective of the war was to defeat the LTTE, they have in fact killed and wounded several thousands of innocent Tamil civilians with heavy weapons. They used chemical weapons and cluster bombs on innocents, but they continue to deny the usage of such weapons”.

“This war has claimed more than fifty thousands lives just within the last few months but the Sri Lankan government is not going to open their mouth and tell this truth to the world. United Nations, who is supposed to be a guardian for the oppressed people in the world, turned out to be a silent spectator of a man made disaster that has taken the lives of many thousands”.

Source: <http://www.hindu.com/2009/05/19/stories/2009051960241300.htm>

## Together 4 peace.org: Should Netanyahu be charged with war crimes during visit with president Obama?

TEMECULA, Cal., May 19, PRNewswire-USNewswire/

Together4Peace.org, a volunteer-based group, is urging President Obama's administration to consider filing Criminal Charges against Israeli Prime Minister Benjamin Netanyahu for his role in the Gaza massacres earlier this year. Cluster bombs and chemical weapons were used on the civilian population, causing a humanitarian crisis of catastrophic proportion, mounting death, and large scale injuries exacerbated by massive devastation to most homes and infrastructure.

Together4Peace.org is looking to mobilize a "One Million votes for the Peace Petition," calling for an end to Israeli occupation. Giving equal rights to all Jews, Christian, and Muslims of the Holy Land, this petition will be delivered simultaneously to all members of Congress, the U.S. Peace Envoy, members of the United Nations Security Council, and President Obama.

The group is requesting the administration to redirect all financial aid that would go to Israel back to the U.S., with an eye towards improving the U.S. economy.

Earlier this year, while polls indicated two thirds of the American public disapproved of the Israeli massacres in Gaza, Congress did not seem to pay attention to its constituents, or international law, rather voted 390 Yes, 5 No in support of Israel, a disgraceful vote and an indication of who dictates policy to U.S. congress ... unfortunately, NOT the people!

Source: <http://sev.prnewswire.com/aerospace-defense/20090519/DC1974419052009-1.html>

## Coalition: Militants use white phosphorous

KABUL, Afghanistan, 20 May (UPI)

White phosphorous, which can inflict severe burns, is used by militants to attack NATO-led forces in Afghanistan, coalition force officials said.

Citing recent incidents of white phosphorous being used as a weapon, something human rights groups oppose, the coalition said the militants used the chemical and the other high explosives as mortar rounds against a NATO-led combat outpost in Paktika province but there were no injuries, CNN reported.

The United States has denied accusations coalition forces have similarly used the chemical against people, the report said.

Earlier this month, CNN said the U.S. military disclosed numerous instances when militants had either used or stockpiled white phosphorous-based weapons.

"The data, obtained from incident reporting from February 2003 through the present, show that insurgents have stockpiled and used white phosphorus against personnel in both indirect fire attacks as well as improvised explosive devices," the military was quoted as saying.

Source: [http://www.upi.com/Top\\_News/2009/05/20/CoalitionMilitants-use-white-phosphorous/UPI-26291242818347/](http://www.upi.com/Top_News/2009/05/20/CoalitionMilitants-use-white-phosphorous/UPI-26291242818347/)

## SCIENCE AND TECHNOLOGY

### Metal organic frameworks for chemical recognition

Mark D Allendorf and Peter Hesketh, 19 May

*Frameworks with adjustable nanoporosity, high surface area, and many known structures may pave the way for portable, low-cost chemical sensors.*

The need for real-time, compact, and inexpensive chemical detectors has become more pressing in recent years. Homeland security and defense applications need effective portal monitoring, chemical weapons sensing, and water quality testing.

Devices that can serve as personal exposure monitors, provide advance warning of food spoilage, and enable breath analyzers to uncover pre-symptomatic infection are also in demand. These applications pose many challenges because they require high levels of sensitivity and specificity in small, economical packages.

Many existing technologies, such as mass spectrometry and chemiluminescence, lack the combination of sensitivity, selectivity, portability, and low cost needed for these applications.

Micro electrical-mechanical systems (MEMS) offer a potential solution that can be cheaply mass produced. Microcantilever sensors have many of the desired characteristics and can be exquisitely sensitive platforms for chemical and biosensing.

These devices require simple instrumentation, and arrays of cantilevers on a single chip can provide sensitivity to multiple analytes. Yet, such systems still need better recognition chemistries that can identify a broad range of analytes.

Our results demonstrate that MOFs can serve as effective recognition chemistries for a variety of gases. Our current device is far from optimized, yet we showed sensitivity to alcohols and insensitivity to N<sub>2</sub>, O<sub>2</sub>, and CO<sub>2</sub> in the hydrated state. We are now evaluating different MOF chemistries with greater adsorption-induced distortions to determine their ability to detect explosives, chemical weapon surrogates, and molecules such as polyaromatic hydrocarbon, which are of interest for environmental monitoring

Source: <http://spie.org/x35098.xml?highlight=x2406&ArticleID=x35098>

## New virus will not touch?

**Aliya Yesembekova , 22 May**

Recently the government of Kazakhstan approved the program on development of diagnostic drugs and vaccines and monitoring for dissemination of AH1N1 virus - of so called swine flu.

The issue was considered by the High scientific-technical commission under the government of the republic. The program is meant for three years, and although the money were not sent, scientists of the scientific and research institute of the problem of biological safety of the National center of biotechnologies of the republic, since the first days of virus appearance in Mexico, started works on research and struggle against new highly pathogenic virus.

The experience in scientific-practical direction is accumulated enough. It is the oldest scientific institution in the village of Otar Zhambyl oblast, in the Soviet time, which refers to the military-industrial complex and dealing with study of biological weapon, recently has developed a vaccine against bird flue. During its explosion the experts managed to create the vaccine "Kazakhstan 15" for prophylactics of this disease, and already the second year the Ministry of agriculture orders the vaccine to Kazakhstani producers.

At the moment scientists work on the creation of the medicine, which allows to diagnose swine flu and, in the perspective, under the creation of medicine. They attended the Institute of flu in Saint-Petersburg, which is the referent center on this virus, where they get necessary

consultations and medicines, which in cooperation with the WHO experts.

In the republic after the first cases of the virus registration in Mexico there were started anti-epidemic events. The head of the Committee of the state sanitary-epidemic control Anatoliy Belong has declared, that actions on prevention of the disease bringing on the territory of our country there were one of the most important measures among taken by the Ministry of Healthcare.

"Kazakhstan at the moment is the only country on the CIS territory, which has Tamiflu medicine in reserve," stressed chief state sanitary doctor of the republic. "According to the data of the regional WHO representative office, this medicine is efficient in the struggle with a new highly pathogenic virus. At the storages of the Republican Sanitary Epidemic Station there are about 30 thousand doses, and there are reserves of this medicine in every oblast.

Source: <http://eng.gazeta.kz/art.asp?aid=132106>

## Is poisonous pollen enough to put bees off their dinner?

**Science Daily, 23 May**

Chemical weapons against uninvited dinner guests: ETH Zurich scientists test whether the pollen of certain flowers contains toxins that give bees an upset stomach and protects the plant from the diligent pollen gatherers.

Andreas Müller, Curator of the ETH Zurich's entomological collection in Professor Silvia Dorn's applied entomology group, however, now sees this relationship somewhat more soberly. Bees – besides the honey bee there are over 600 species of wild bees in Switzerland – are herbivores that have specialized in high-protein pollen as their staple diet in the course of evolution. Bees need an enormous amount of pollen – often the entire pollen content of several hundred flowers just to produce one single offspring. And that can be a considerable disadvantage for plants, stresses the researcher.

## Poison keeps bees at bay

Andreas Müller's team of researchers has now discovered a new mechanism that plants use to ward off pollen eaters. To their surprise, they found that a number of bees belonging to the genus *Colletes* specialize in the

aster family; generalists within the same genus that gather pollen randomly, however, steer clear of this plant family although it is rich in species. Furthermore, the aster family – unlike members of the Fabaceae family such as peas – makes it easy for the guests to gather the pollen.

The notion of defending pollen chemically therefore seemed the obvious explanation to Müller. “Plants often stop themselves from being eaten by insects by storing toxins in leaves. Why should pollen be any different?” asks the researcher, who described his idea as the “aster paradox” in a recent scientific publication.

### **Is aster pollen inedible?**

Claudio Sedivy, a PhD student in the applied entomology group, is now collaborating with chemist Rafal Piskorski and the student Claude

Hüsser to test whether pollen from members of the aster family contains toxins and whether the corresponding bees have adapted their metabolism especially in order to use the pollen.

With their research, the ETH Zurich scientists are entering unknown territory. The evolutionary research appears to have ignored this aspect of floral biology, as Müller points out: “The chemical protection of pollen must have had an enormous impact on the evolution of the relationships between insects and flowers.”

Source: [http://scienceblogs.com/clock/2009/05/my\\_picks\\_from\\_sciencedaily\\_677.php](http://scienceblogs.com/clock/2009/05/my_picks_from_sciencedaily_677.php)

### **Disclaimer**

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