

MONTHLY DIGEST

CHEMICAL AND BIOLOGICAL NEWS DIGEST

Institute for Defence Studies and Analyses

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Editor:
Monalisa



Institute for Defence Studies and Analyses

No. 1, Development Enclave, Rao Tula Ram Marg, New Delhi-110 010

Telephone: 91-11-26717983; Fax: 91-11-26154191

Website: www.idsa.in; Email: lbscidsa@gmail.com

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*Institute for Defence Studies and Analyses***MONTHLY
DIGEST***Director General: N. S. Sisodia**Editor: Monalisa***Contents**

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ARMS CONTROL**OPCW Director-General Visits Bosnia and Herzegovina and Opens International Seminar on Non-proliferation Obligations****25 June**

On 22 June 2009 the OPCW Director-General, Ambassador Rogelio Pfirter, paid an official visit to Bosnia and Herzegovina where he met with H.E. Dr Haris Silajdzic, Member of the Presidency of Bosnia and Herzegovina, and H.E. Mr Sven Alkalaj, Minister of Foreign Affairs.

The discussions focussed inter alia on effective national implementation. Dr Silajdzic and Foreign Minister Alkalaj reaffirmed Bosnia and Herzegovina's strong commitment to the objectives of the CWC and expressed their Government's firm support for the work of the OPCW in implementing the global chemical weapons ban.

Director-General Pfirter commended Bosnia and Herzegovina for its unwavering commitment to the CWC and work of the Organisation.

The Director-General and Foreign Minister Alkalaj jointly opened the "International Seminar on National Implementation of Non-proliferation Obligations: The OPCW as an Example of Effective Assistance in National Implementation of the Chemical Weapons Convention," which was organised by the Government of Bosnia and Herzegovina in conjunction with the OPCW.

The Director-General noted with satisfaction that all countries in the Balkans have now established a CWC National Authority and made significant

progress in enacting implementing legislation to cover all key areas of the Convention.

Source: <http://www.opcw.org/news/news/article/opcw-director-general-visits-bosnia-and-herzegovina-and-opens-international-seminar-on-non-prolifera/>

DISARMAMENT**'Smallpox — The Death of a Disease,' a Q&A with Dr. D.A. Henderson****17 June, Lori Kozlowski**

In 1947, smallpox hit New York. A visitor from Mexico, who had become ill, died five days later. During his stay in a hotel, 3,000 people had booked rooms there; public health officials wanted to vaccinate all of them. Eventually, the city decided to vaccinate the entire urban population. Six million were vaccinated in four weeks.

Dr. D.A. Henderson led the World Health Organization's campaign to success in eradicating smallpox. The last

In This Issue

Historical documents that were recently revealed show that chemical weapons were to be chosen in case of a British attack on Japan during World War II. A US government agency has reported that terrorists are attempting to purchase dual-use materials and military technology from US companies. This has heightened fears of the linkage between terrorism and biological weapons, particularly, through the US-Mexico border. In Asia, military preparedness in the wake of a terrorist attack received focus as both China and Singapore conducted a joint terrorism exercise, in China's Guangxi province.

Back home, in perhaps the first of its kind the Government of Maharashtra has formed panels to tackle WMD terrorism. This structure would be replicated in separate districts of the state.

We welcome our reader's feedback.

Editor

case occurred in October 1977. Smallpox is the only disease in history to have been deliberately, methodically eliminated.

Henderson's new book, "Smallpox — The Death of a Disease: The Inside Story of Eradicating a Worldwide Killer," takes us down the long road to eradication. From the time the idea was hatched that a living virus could be destroyed in the wild to the final patient, we go on the doctor's journey all over the world as he battled bureaucracies, created public health reporting systems and figured out how to stop a killer.

Henderson talked about his journey and the book in an interview:

When you became chief of the smallpox eradication unit for the World Health Organization, you were only 38 years old, with 10 years of public health experience. How did you feel when you got the job? Was the weight of the world literally on your shoulders?

Well, I must say, it was a bit overwhelming, particularly taking over the duties at WHO. Most of the others were 15 years older at least. The [National Communicable Disease Center, when Henderson had worked] had very little experience operating a program like this, and in the branch we were in, we had none. We just sort of went from solving problem after problem after problem. If they had come all at once, then we'd have been done in. They kept appearing one after the other, and we just kept going.

What was your greatest challenge throughout the entire process?

There were a number of challenges. One of them was working through the bureaucracy. We had to get something done and there was this continuing kind of feeling that the WHO was a fairly staid organization. Trying to break out of that mold was very difficult.

At the same time we were beginning the global program, there was a feeling amongst scientists that you could not eradicate an organism. There was a view that organisms — there's an ecology they fit into in a kind of way that's been around for years and years, and to eliminate them is impossible.

At the time, eradicating malaria was failing. So to take on a second eradication program and have that fail as well would reflect very badly on the World Health Organization.

Was there anything that you thought would be easy that proved more difficult than you expected?

I think the thing that was most startling was the problem of [the] vaccine. The Russians agreed they would provide 25 million doses a year. And they did. The U.S. would provide all the vaccinations to West Africa. Countries could not afford to do nothing and many countries were doing quite large programs. I thought: OK, vaccines won't be a problem.

But one thing we tested was different vaccines from different countries and I think less than 10% of the vaccine met the standard. In some places, they were using a liquid and no virus.

All we could do was try to improve vaccine production in different countries.

You mention your former boss Dr. Alexander Langmuir, chief of the CDC's epidemiology branch, and his introduction of the concept of disease surveillance as a key tool in disease prevention. He introduced this in the 1950s. How did disease surveillance help you in eradicating smallpox?

Up until the program began in 1967, they paid little attention to the number of people who actually had smallpox or who was vaccinated. You'd think countries would report all cases. They obviously weren't.

They looked at the data they had coming in. In some cases, countries reported nothing at all. The data was so bad we couldn't draw any conclusions. The idea of reporting regularly was a foreign idea. What we'd try to do is get health organizations to report every week.

At the time there was nothing like e-mail. There were few telephones. A lot of this was done by messenger. The idea was to get the data and vaccinate around where the cases were. The idea was to break the chain.

You dedicate a chapter to Africa and the challenges there. Can you talk about the continental specifics and which countries across the globe proved most difficult?

In terms of difficulties, the Democratic Republic of the Congo was a huge problem. They'd been through a civil war, and so by the time we were there, bridges were falling down. It is a huge country, and it was very difficult getting from place to place.

In terms of difficulty, I'd say the Congo. India is certainly up there. And Ethiopia.

What makes smallpox easier to eradicate than polio?

One thing is that we have to give just one vaccination and that will protect for at least 10 years. That vaccination [for smallpox] has been tested and it can last. With polio, you have to give a number of different shots, and you have to have refrigeration, otherwise it doesn't last.

In certain countries, smallpox had deities that people worshiped. They knew and feared the disease. With polio, it was not that dramatic.

With smallpox, 3 out of 10 will die if left unvaccinated. With polio, 1 out of 200 affected will get paralysis.

Smallpox is very evident. It leaves extreme pockmarks on the face. Wherever we traveled, we always knew where it was. With polio, it can circulate silently.

Is smallpox back in Third World countries? Any chance of a resurgence?

No, I don't think so at all. After the last case, we had teams going out not detecting any cases. They had to do this for three years. They searched villages over the world to see if there was smallpox there. That was a very effective way of checking it out. Of course, we knew there would be rumors. So they kept a rumor register, reporting cases and checking it out and making sure it was not smallpox. There were a number of cases reported as smallpox that were not.

Upon realizing you'd accomplished your goal, how did you feel about that?

One of the saddest days of my life was the day it was formally announced that smallpox had been eradicated. I thought, I've spent so much time with these people, trying to figure out how to solve these problems. It was not like being a tourist. Nothing like that. It was sleeping in some bad places and really getting to know the people and what they were thinking. I realized that day: I'm never going to be able to do this again.

Smallpox as a biological weapon — let's talk about that. How real is the possibility of that happening now?

It was very worrisome to us, especially when Ken Alibek defected from the Soviet Union and said they had a program to produce smallpox virus.

In the early 1990s, we learned they had a program with 60,000 people in 50 laboratories. We learned that this program was equivalent in size to their nuclear program. They had the capability to produce 50 to 100 tons of smallpox virus. They

also had a larger research laboratory in western Siberia. When the economic collapse happened in the Soviet, the scientists scattered. It is a difficult thing to detect, what other countries are up to in terms of biological weapons.

Suppose smallpox was released, what would we do? Would you employ the same strategy you used before?

If it was released, we'd find the case and set up a hospital, then vaccinate the family and all contacts. If you had a case in Los Angeles or Washington, you'd have lots of people who would want to be vaccinated.

Our belief is that we've used this program before for major outbreaks in Africa, and it works well.

We have more than enough vaccine to cover everyone in the United States, if we had to. More than enough. We're really prepared to move quickly.

The very idea that a life-threatening disease has been eliminated from the Earth is inspiring in many ways. What's your vision for future successes like this? Do you think there's any hope in HIV/AIDS prevention and eradication?

Yeah, I do. I think there's a lot of hope. I think that we achieved what we did provides a lot of hope. Many different countries and cultures pulled together. We worked very closely with the Soviets during the worst days of the Cold War. We worked very well together.

We recruited a lot of young people in their 20s and 30s to come up with strategies for different countries and what would make sense there. There is a considerable number of young people who want to make a difference, and that is inspiring. William Gates has come forward and given a lot of money to come up with programs against tuberculosis, against malaria, against HIV. They have been very liberal with giving the money, and that has been inspiring to a lot of young people. This generation is better prepared to do things than we were.

Source: http://latimesblogs.latimes.com/booster_shots/2009/06/smallpox-the-death-of-a-disease-a-q-a-with-dr-da-henderson-1.html

NATIONAL AND INTERNATIONAL

Spy leaked secrets 'like sieve'

A history project has uncovered evidence that a Soviet agent leaked atomic weapons research from a top secret munitions factory in Flintshire.

According to local historian Colin Barber, Klaus Fuchs was “leaking like a sieve” during his time at the Rhydymwyn Valley Works near Mold in the 1940s.

The site, now a nature reserve, is said to have made 40,000 chemical weapons shells weekly during World War II.

Members of the public can explore the plant at an open day on Sunday.

Mr Barber believes his research into the base, which was originally set up to make chemical weapons, proves conclusively that Fuchs was supplying the Soviets with classified information.

Fuchs, a scientist, left Nazi-ruled Germany because he was a communist and came to Britain in the 1930s. He earned his PhD in Physics at the University of Bristol and in 1942 was granted British citizenship and even signed the Official Secrets Act.

At Rhydymwyn, he worked for over a year on highly sensitive research into the manufacture of weapons-grade uranium, all the time passing those secrets to the Soviets, the historian claims.

After leaving Wales in 1943, Fuchs went to the United States to work on the Manhattan Project that ultimately led to the Hiroshima atom bomb.

But in 1950 he confessed that he had spied for the Soviet Union and was sentenced to 14 years in prison.

“He was a life-long Communist and considered it his duty to leak information to the Soviets, he felt they had a right to know about the research,” said Mr Barber.

“That’s why they were so much ahead of us. Because Fuchs worked in so many departments, he was able to let them have the results of that research. It saved them money and time.”

Rhydymwyn has been open to the public as a nature reserve since 2003, and its history can be traced back to a foundry in 1747.

At the outbreak of war, the site was chosen to become a chemical plant because of its history of industry and the infrastructure of roads and a railway that had been created there.

At first the factory, so secret it did not figure on any local maps, was involved in making mustard bombs and smoke grenades for the Allied Forces.

It was not until 1942, as part of Britain’s highly secretive ‘Tube Alloys’ project, that work into producing weapons-grade uranium with atomic potential, started there.

Many of the Valley Works scientists, including Fuchs, later went on to work in post-war atomic research at home and abroad.

Source: http://news.bbc.co.uk/2/hi/uk_news/wales/8110999.stm

Britain considered Japan chemical attack: records

25 June

LONDON (AFP) — Britain considered attacking Tokyo with chemical weapons almost a year before the US bombardments that ended World War II in Asia, declassified records revealed.

The records at the National Archives, which have remained hidden from public view for 65 years, revealed clear proposals to use gas on civilians in 1944.

Although the plan was never put into operation, a detailed memorandum laid out measures to ensure any attack would have the most devastating impact possible.

A Chemical Board note marked “secret” and signed by E.E. Haddon, Secretary, stated: “In his report on his discussions in America... Major General Goldnoy suggested that it might be worthwhile attempting to assess the probable effects of a C.W. (chemical weapons) bombing attack on Tokyo.

“Particulars of the population and layout and photographs of typical buildings and areas in Tokyo were kindly provided by the Director of Military Intelligence, War Office and those have now been studied by Professor Brunt.”

Blunt, in a memorandum attached to the document, suggested the initial bombardments should take place in areas of densely packed buildings, using incendiaries “sufficient to set the large areas involved on fire.”

Once the inflammable buildings of the Japanese capital have been destroyed, he suggested, a gas attack on the “more modern type of streets” could begin.

However, Blunt warned the military planners that the city’s layout could present obstacles to chemical warfare.

“In the densely built areas of Japanese-type buildings, where the streets are narrow, the flow of a gas cloud would be hindered by the narrowness of the streets,” he wrote.

The memorandum recommended attacking during the summer season because it said a cold winter could reduce the impact of mustard gas, although heavy rainfall was also highlighted as possibly leading to decontamination.

The memorandum concluded: “Persistent danger from mustard would only be achievable in the intervals between the summer rains.”

The document also said “very large numbers of small bombs” would be necessary in densely populated parts of the city.

Phosgene, mustard and incendiaries are all put forward as possible options.

“If mustard were used and it produced the effect of driving the population away from the densely built areas, attack with incendiaries should follow a few days later,” it said.

Mark Dunton, Contemporary History Specialist at the National Archives, said: “What is interesting about this file is that it shows we could have been ahead of America in our thinking.

“It seems shocking to modern eyes that the attempt to assess the effect of a chemical gas attack on civilians is described in such an objective way - the pressures of war brought their own terrible logic.”

The United States dropped nuclear bombs on the Japanese cities of Hiroshima and Nagasaki on August 6 and 9, 1945, killing more than 210,000 people.

Less than a week after the Nagasaki attack, Japan surrendered, ending World War II.

Source: <http://www.google.com/hostednews/afp/article/ALeqM5i-Mt8iRXw6dZ14gVuVblmbalOgtw>

Biological Weapons Pose Realistic Threat, Say Former Senators

29 June, Courtney Ann Jackson, Talk Radio News Service

Weapons of mass destruction may not be a phrase the public hears as frequently anymore, but they are still a major issue according to former Senators Bob Graham (D-Fla.) and Jim Talent (R-Mo.). The politicians participated in a discussion at the Heritage Foundation where they reported that the U.S. is uneasily vulnerable to a biological terrorist attack.

“It is more likely that that weapon of mass destruction will be a biological weapon rather than a nuclear weapon. I mentioned that there has been

an explosion in the biological area of capabilities...The thing that has kept us from a biological weapon thus far has been the unreliable defense of ignorance,” said Graham.

The findings come from the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism. Graham and Talent were the chairman and co-chairman of the Commission while in Congress.

Talent added that the U.S. is “running” to prevent any attacks but our opposition is “running faster.” He said terrorists will recruit life scientists to utilize bio weapons. However, he added that a biological attack is easier to prepare for than a nuclear attack.

Graham predicted that by 2013 a WMD will be used somewhere in the world.

Source: <http://talkradionews.com/2009/06/biological-weapons-pose-realistic-threat-say-former-senators/>

US boosts Hawaii defense to counter NKorea threat

18 June, Jae-soon Chang

SEOUL, South Korea (AP) — The United States has deployed anti-missile defenses around Hawaii amid reports that North Korea may fire its most advanced ballistic missile toward the U.S. islands early next month, adding to already high tensions in the region.

A report in a Japanese newspaper said Pyongyang might test-fire its Taepodong-2 toward Hawaii around the U.S. holiday of Independence Day. North Korea test-fired a similar long-range missile on July 4 three years ago, but it failed seconds after liftoff.

Pyongyang’s missile and nuclear programs are centerpieces of the regime’s catalog of weapons of mass destruction.

But the impoverished nation, which has put most of its scarce resources into boosting its military capabilities under its “army-first” policy, also has a large chemical arsenal, as well as capabilities to produce biological weapons.

An international security think tank warned that North Korea’s chemical weapons are no less serious a threat to the region than its nuclear arsenal.

The independent International Crisis Group said the North is believed to have between 2,500 and 5,000 tons of chemical weapons, including

mustard gas, phosgene, blood agents and sarin. These weapons can be delivered with ballistic missiles and long-range artillery and are “sufficient to inflict massive civilian casualties on South Korea.”

“If progress is made on rolling back Pyongyang’s nuclear ambitions, there could be opportunities to construct a cooperative diplomatic solution for chemical weapons and the suspected biological weapons program,” the think tank said in a report.

It also called on the U.S. to engage the North in dialogue to defuse the nuclear crisis, saying “diplomacy is the least bad option.” It said Washington should be prepared to send a high-level special envoy to Pyongyang to resolve the tension.

Associated Press writers Shino Yuasa in Tokyo, Hyung-jin Kim in Seoul, and Anne Gearan, Pauline Jelinek and Jeannine Aversa in Washington contributed to this report.

Source: <http://www.google.com/hostednews/ap/article/ALeqM5iURO8fOyWVOA0ytFlaAGuC9F7R9wD98TEP7G0>

The al-Qaida biological weapon threat from the Mexican Border

Universal Detection Technology (www.udetection.com) (OTCBB: UNDT), a developer of early-warning monitoring technologies to protect people from bioterrorism and other infectious health threats and provider of counter-terrorism consulting and training services, has issued an analysis of the al-Qaida biological weapon threat from the Mexican Border.

U.S. counterterrorism officials have authenticated a video by an al-Qaida recruiter threatening to smuggle a biological weapon into the United States via tunnels under the Mexican border, the latest sign of the terrorist group’s determination to stage another mass-casualty attack on the U.S. homeland.

The video aired this year as a recruitment tool makes clear that al-Qaida is looking to exploit weaknesses in U.S. border security and also is willing to ally itself with white militia groups or other anti-government entities interested in carrying out an attack inside the United States, according to counterterrorism officials interviewed by The Washington Times.

UNDT is a supplier of biological weapon detection systems that can detect agents such as anthrax, ricin and

botulinum toxins in as little as three minutes. UNDT’s customers include the DOD and the Washington D.C. Fire and EMS Services.

“The threat of terrorist organizations such as al-Qaida smuggling biological weapons such as anthrax through the Mexican border is very alarming,” said Mr. Jacques Tizabi, UNDT’s Chief Executive Officer. “First responders should be equipped with the latest technologies to detect such weapons before they can harm anyone,” he added.

Source: http://pr-usa.net/index.php?option=com_content&task=view&id=227029&Itemid=28

The weapon Britain hoped would defeat the Nazis...

Sewing machine needle tipped with anthrax was developed for war effort

26 June, Cahal Milmo

Tipped with a sewing machine needle and finished with a tail made from a drinking straw, they looked more like a schoolboy’s toy than a terrifying weapon.

For Britain’s wartime scientists, however, these tiny projectiles were the sharp end of a chilling project to secure victory over the Nazis by bombarding German troops with poisoned darts.

A secret file that details British research to develop the lethal anti-personnel darts, carrying a toxin likely to have been anthrax or ricin, casts rare light on the work that was carried out by the Allies during the Second World War into chemical and biological weapons that could be deployed against Hitler’s forces.

The document, released at the National Archives in Kew, London, reveals how scientists at Porton Down in Wiltshire, the site of Britain’s top secret weapons laboratory, worked between 1941 and 1944 to perfect the projectiles to ensure the maximum number of casualties and the quickest death for enemy soldiers.

Entitled *Research Into Use of Anthrax and Other Poisons for Biological Warfare*, the report said the idea of using darts dated back to the First World War but the novelty of adding a poison, either coated on to a grooved point or injected through a hollow needle, meant that a viable weapon to cause “death or disablement” had been created.

The researchers, working in conjunction with Canadian colleagues, developed a dart weighing no more than four

grams which could be loaded into bombs carrying 30,600 of the projectiles at a time. The researchers carried out multiple tests and calculations to work out the chances of hitting troops, ranging from 90 per cent for a soldier lying flat on open ground to just 17 per cent for one lying in a slit trench.

The consequences of being struck were dire. If a victim failed to pluck out each dart within 30 seconds, he was condemned to a grisly death. Detailing the effects of ricin, codenamed T1123, in tests on sheep and goats, one researcher reported: "The symptoms produced are: twitching of the muscles, profuse salivation and sweating, acute defecation, micturition and retching. The pulse becomes very slow and the blood pressure falls. The subject collapses and lies on its side with twitching muscles. Where the dose is lethal, death occurs in 30 minutes, usually preceded by convulsions."

Attempts by the scientists to perfect their projectile took on a darkly comical dimension when they approached Singer Sewing Machines Ltd, based in Bristol, to supply a variety of differently shaped needles without stating their purpose.

The request was met with bemusement by the company. In one letter sent in 1941, an executive wrote: "We are afraid we do not quite understand your requirements. From your remarks it would seem that the needles are required for some purpose other than sewing machines."

Despite the assertion of the researchers that their weapon was both more lethal and cheaper to make than conventional bullets, the darts never made it into mass production.

Noting that the projectiles were useless against any form of cover, a senior officer wrote them off as "highly uneconomical" and unlikely to cause mass casualties.

Source: <http://www.independent.co.uk/news/uk/this-britain/the-weapon-britain-hoped-would-defeat-the-nazis-1720008.html>

Maharashtra Government to form panels to tackle nuclear, chemical attack

23 June, PTI

"A committee has been formed under Industries Department Principal Secretary to handle attacks using chemical weapons," an official release said.

For tackling an attack using nuclear weapons, Principal Secretary (Home) would head a similar panel.

The Principal Secretary (Medical Education) would head another panel to tackle a terror attack through biological weapons, the release said.

Similar committees would be set at district level, the release said.

Source: <http://www.indopia.in/India-usa-uk-news/latest-news/605610/Maharashtra/1/20/1>

Ex-Soviet arms experts hit by global crisis

20 June

Reduced international contributions have endangered the work of a Moscow-based organization dedicated to providing civilian opportunities for weapons specialists once employed by the Soviet Union, Agence France-Presse reported yesterday.

"Our center clearly has less funds available than two or three years ago," said Adriaan van der Meer, head of the International Science and Technology Center.

The program has assisted more than 70,000 former Soviet scientists with employment opportunities and supplementary income, in an effort to keep them from selling their expertise to rogue nations or terrorist organizations. It remains involved in efforts to prevent the proliferation of potential agents selling potential biological weapons in Russia, Asia and Europe, according to Van der Meer.

"In the bio sector we are catching up on by providing possibilities for high-level, safe storage," Van der Meer said. "The preventive approach needs to be stronger, and we are working on that."

The organization spent only \$26.2 million last year, barely one-third the amount in 2003.

Van der Meer blamed the funding shortage on the worldwide economic downturn and on a shift of nonproliferation efforts to nations such as Iraq, Libya and Pakistan. The organization receives contributions from the European Union and nations including Canada, Japan, South Korea and the United States.

Source: <http://www.mosnews.com/military/2009/06/20/nonproliferationeffortcuts/>

First responders receive training

by Angelo Armbrister, Freeport News Reporter

Officers of the Royal Bahamas Police Force, Customs Department, Airport Crash and Rescue and the Port Department wrapped up an intensive three-week course on Chemical Biological Radiological Nuclear (CBRN) Weapons with a brief ceremony at police headquarters.

The course was a collaborative effort between the U.S. State Department and The Bahamas government to prepare first responders to effectively handle state emergencies such as terrorist attacks.

Instructor Patrick Richards, who works for the Diplomatic Security Anti-Terrorism Assistance Program for the U.S. State Department, said the participants were taught to respond, mitigate and rescue in an emergency situation from an attack of chemical, biological, radiological or nuclear terrorism.

“They are required to continually rescue people; this is a mass casualty-type event. I couldn’t imagine asking any better out of these guys. Every one of them gave their heart and soul to this thing,” he said.

Richards said they have carried out the training worldwide and while the course has been around for a number of years, the three-week-long course is the first with new and updated equipment and training materials.

“It’s a pilot course and Freeport, Bahamas, got the very first one,” he said.

Senior Assistant Commissioner of Police Marvin Dames noted that this particular course is an extremely important one for the Force, and expressed his hope that it will not be the last of its kind.

Source: http://freeport.nassauguardian.net/national_local/295611019085019.php

Singapore troops join China drill

China and Singapore conducted a joint anti-terrorism exercise in southern China’s Guangxi province.

The week-long drill was the People’s Liberation Army’s first anti-terrorism exercise with foreign forces, said Xinhua, China’s state news agency.

About 60 soldiers from each country were practicing reactions to attacks from enemies using radioactive contaminants and chemical and biological weapons.

China and Singapore signed a defence and security agreement early last year.

Analysts say that China’s presence in the Asian region has grown in recent years, through trade and investment, but development of strategic relationships, as seen in military ties, has been slower.

Source: <http://news.bbc.co.uk/2/hi/asia-pacific/8108547.stm>

Pentagon Announces New Appointees

23 June

The U.S. Defense Department announced the addition of four new senior officials, three of whom will be working on chemical, biological and nuclear weapons issues.

Ashton Carter, Andrew Weber, Michael Nacht and Elizabeth King have been working at the Pentagon for weeks, after being confirmed by the Senate. They were formally welcomed yesterday by Defense Secretary Robert Gates.

Carter is the new defense undersecretary for acquisition, technology and logistics — a post that involves issues relating to weapons of mass destruction, among other responsibilities.

Weber, serves as assistant defense secretary for nuclear, chemical and biological programs. As such he advises Gates and other Pentagon leaders on “all matters concerning the formulation of policy and plans for nuclear, chemical and biological defense programs,” according to a DOD release.

Nacht is assistant defense secretary for global strategic affairs. He will be in charge of a new office working on policies for dealing with WMD, missile and other threats.

King, assistant defense secretary for legislative affairs, will act as a liaison to lawmakers and the executive branch (U.S. Defense Department release, June 22).

Source: http://www.globalsecuritynewswire.org/gsn/nw_20090623_3719.php

New Paper on Bolivia Describes Its Descent into the Radical Abyss

19 June, Douglas Farah

The International Assessment and Strategy Center has published a paper I (Douglas Farah) wrote on the rapidly-deteriorating situation in Bolivia: “Into the Abyss: Bolivia Under Morales and the MAS.”

The study outlines several of the more dangerous elements of the Morales government and his ties to Venezuela and Iran.

Of greatest concern is the little-discussed endorsement of Chávez of the doctrine of asymmetrical warfare against the United States based on the principles pioneered by radical Islamist groups.

Since 2005 Chávez has rewritten Venezuela's security doctrine to scrub it of all outside, "imperialist" influences. To replace the old doctrine, Chávez and the Venezuelan military leadership have focused on developing a doctrine centered on asymmetrical warfare, in the belief that the primary threat to Venezuelan security is a U.S. invasion.

One of the main books he has adopted is *Peripheral Warfare and Revolutionary Islam: Origins, Rules and Ethics of Asymmetrical Warfare* (Guerra Periferica y el Islam

Revolucionario: Orígenes, Reglas y Ética de la Guerra Asimétrica) by the Spanish politician and ideologue Jorge Verstryngge.

Although he is not a Muslim and the book was not written directly in relation to the Venezuelan experience, Verstryngge's book lauds radical Islam (as well as past terrorists like Ilich Ramírez Sánchez, better known as Carlos the Jackal) for helping to expand the parameters of what irregular warfare should encompass – including the use of biological and nuclear weapons, along with the correlated civilian casualties among the enemy.

Central to Verstryngge's idealized view of terrorists is the belief that it involves fighters willing to sacrifice their lives in pursuit of their goals. Before writing extensively on how to make chemical weapons and listing helpful places to find information on the manufacture of rudimentary nuclear bombs that "someone with a high school education could make," Verstryngge writes:

We already know it is incorrect to limit asymmetrical warfare to guerrilla warfare, but it is important. However, it is not a mistake to also use things that are classified as terrorism and use them in asymmetrical warfare. And we have super terrorism, divided into chemical terrorism, bioterrorism (which uses biological and bacteriological methods), and nuclear terrorism, which means "the type of terrorism uses the threat of nuclear attack to achieve its goals."

Based on this book, Verstryngge was invited by Chávez to give keynote address to military leaders in a 2005 conference titled "First Military Forum on Fourth Generation Warfare and Asymmetric Conflict" held at the military academy. Following the conference Gen. Raúl Baduel, the army commander and Chávez confidant ordered a special pocket size edition of the book to be printed up and distributed throughout the officer corps with explicit orders that it be studied cover to cover. In a December 12, 2008 interview with Venezuelan state television Verstryngge lauded Osama bin Laden and al Qaeda for creating a new type of warfare that is "de-territorialized, de-stateized and de-nationalized," a war where suicide bombers act as "atomic bombs for the poor."

Given the level of training Venezuelan military institutions are giving their Bolivian counterparts and the level of on the ground Venezuelan leadership and advising in Bolivia, it is highly likely that this doctrine is being transmitted from one military to the other.

Source: http://www.familysecuritymatters.org/publications/id.3543/pub_detail.asp

Taleban elude attacks with US equipment

Barbara Ferguson, Arab News

Terrorist and foreign governments have increasingly attempted to purchase sensitive dual-use and military technology from companies in the US. This news wasn't leaked-it was released in report by a US government agency.

Taleban fighters in Afghanistan have managed to escape US and NATO attacks and carry out painful assaults against foreign forces, thanks to an American state-of-the-art military technology that has reached their hands.

The Government Accountability Office, the GAO, set up front companies and fictitious identities and was able to buy night-vision scopes and special infrared patches that US troops wear in Iraq and Afghanistan. These infrared patches are used to help soldiers distinguish the enemy from their fellow combatants.

"Based on our conversations with the Department of Defense, terrorists have used US uniforms and the infrared patches to get close to US and allied forces on the battlefield and at bases," the GAO's Jonathan Meyer recently told reporters.

Another piece of equipment, the inclinometer, measures an object's slope and inclination for medical, optical, range finder and robotics purposes; it can also be used to make IEDs. According to the GAO and the Department of Defense, this tool has been falling into the wrong hands at the cost of American lives.

Other items purchased in the bogus transactions included parts for making nuclear devices and guiding missiles that could carry nuclear warheads, body armor and other hardware for ground combat, triggered spark gaps used to detonate nuclear weapons, and electronic sensors used in improvised explosive devices and gyro chips used in guided missiles and military aircraft, said the report.

Gregory Kutz, a GAO managing director who led the 13-month investigation, said it found "sensitive dual-use and military technology can be easily and legally purchased from manufacturers

and distributors within the United States and illegally exported without detection.”

Kutz held up some of the items purchased by undercover investigators, including a small device that looked like a spark plug called a triggered spark gap. The item has medical applications and can also be used to detonate a nuclear weapon, he said.

Kutz also displayed a small device called a gyro chip that can be used to steer guided missiles. Other items on display in the committee room included some used in improvised explosive devices (IEDs) that target US soldiers in Iraq, as well as sophisticated body armor and night-vision devices.

Undercover investigators complied with all required checks in purchasing the equipment, Kutz said, including the submission of end-user agreements that forbid exporting the equipment or using it in any nuclear, biological and missile weapons. Such documents amount to an “honor system” pledge, rather than any enforcement mechanism, he said.

Source: <http://www.arabnews.com/?page=4§ion=0&article=123983&d=24&m=6&y=2009>

SCIENCE AND TECHNOLOGY

Researchers ‘All Aglow’ Over New Test Of Toxin Strength

20 June, *Science Daily*

A new National Institute of Standards and Technology (NIST) assay using a “glow or no glow” technique may soon help the U.S.

Department of Homeland Security (DHS) defend the nation against a spectrum of biological weapons that could be used in a terrorist attack. One very dangerous toxin on the list is ricin, a protein derived from castor beans that is lethal in doses as small as 500 micrograms—about the size of a grain of salt.

As part of its efforts to address the threat, DHS is working with NIST to create a standardized ricin sample with a known potency. Such a standard is needed both to check the accuracy of detection equipment, and, should an attack occur, to confirm the success of decontamination procedures. A major step toward this goal—the development of a rapid, reliable and precise assay of the potency of a ricin sample—has now been achieved by NIST scientists.

The NIST assay yields many advantages over traditional cytotoxicity measuring systems, including: a highly sensitive response to ricin (as little as 1 nanogram per milliliter) within six rather than 24 hours; detection of the toxin long before significant cell death has occurred; results that are highly reproducible; no need for the addition of any reagents; and the flexibility to measure the potency of other ribosome inhibitors, even nanoparticles, with the same precision as ricin.

Partial support for this work was provided by the DHS Science and Technology Directorate.

Adapted from materials provided by *National Institute of Standards and Technology*

Source: <http://www.sciencedaily.com/releases/2009/06/090617105052.htm>

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Institute for Defence Studies and Analyses

No. 1, Development Enclave, Rao Tula Ram Marg, New Delhi-110 010

Telephone: 91-11-26717983; Fax: 91-11-26154191

Website: www.idsa.in; Email: lbscidsa@gmail.com