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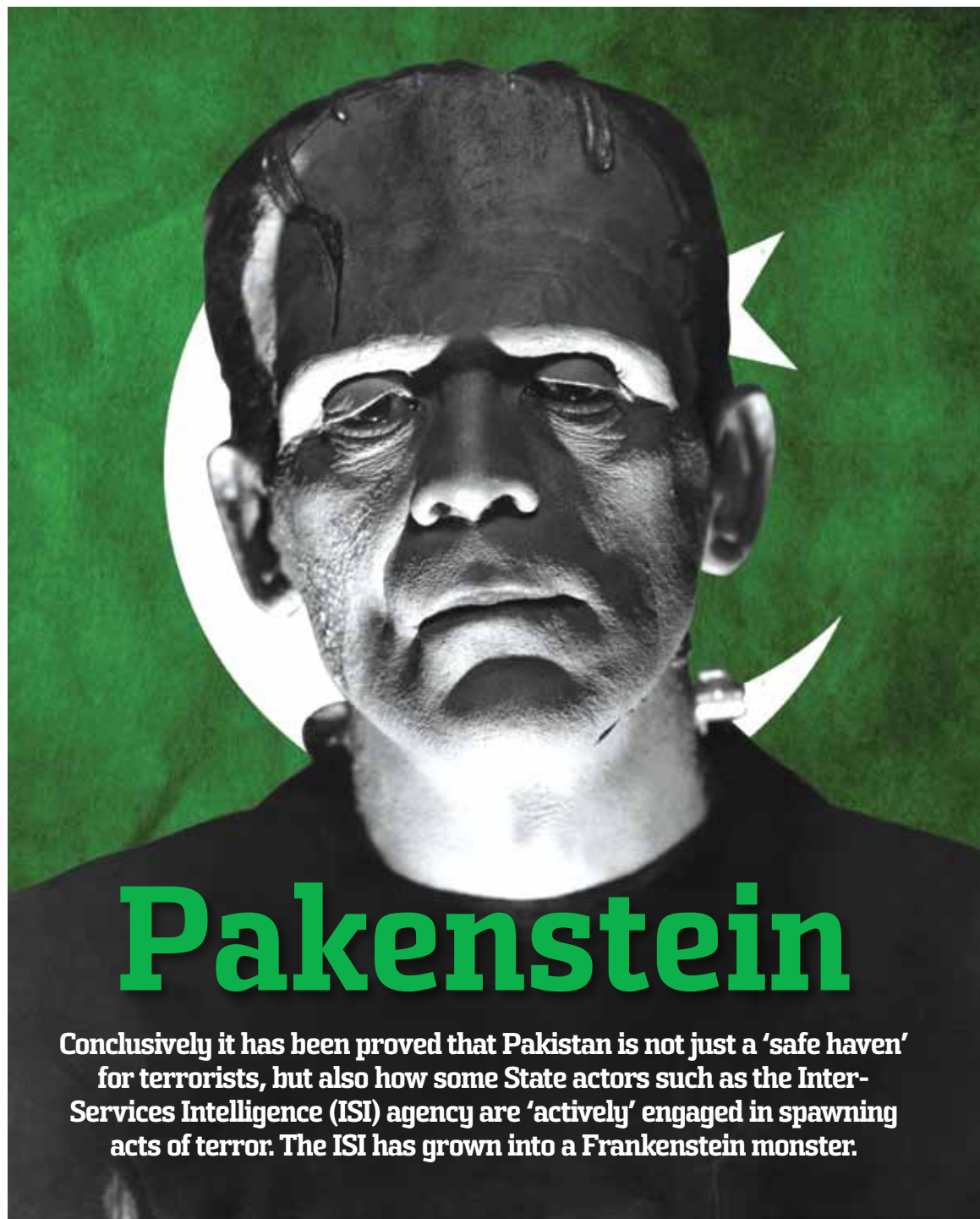
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Conclusively it has been proved that Pakistan is not just a 'safe haven' for terrorists, but also how some State actors such as the Inter-Services Intelligence (ISI) agency are 'actively' engaged in spawning acts of terror. The ISI has grown into a Frankenstein monster.



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Cover:

Conclusively it has been proved that Pakistan is not just a 'safe haven' for terrorists, but also how some State actors such as the Inter-Services Intelligence (ISI) agency are 'actively' engaged in spawning acts of terror. The ISI has grown into a Frankenstein monster.

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Pakistan at our doorstep

The killing of Osama bin Laden in Abbottabad, less than 1 km from an army college in Pakistan was proof to the world that Pakistan, has been 'harbouring' terrorists despite all its claims. India has always called Pakistan's bluff on this. In no uncertain terms, India has pointed out how Pakistan is not just a 'safe haven' for terrorists and other fissiparous elements but also how its spy agency—the Inter-Services Intelligence (ISI) is complicit in the evil designs.

David Headley (Daood Sayed Gilani) has confessed in a Chicago court how he was trained by the ISI in espionage activities against India and the frequent reconnaissance he had undertaken. And Mumbai underworld don, Dawood Ibrahim is cozily ensconced in the Pakistani terror-mechanism network. Then there are many others in the list of wanted who are on Pakistani soil. The official bungling aside by the Indian intelligence agencies in preparing the list of 'most wanted and sheltered in Pakistan,' the certainty of the neighbouring State spawning 'terrorists' no one can dispute.

These concerns have been raised by India in many a international forum. In the recent meeting between the Union Home Minister, P. Chidambaram and the US Secretary for Homeland Security, Janet Napolitano the issue of cross-border terrorism got centre-stage and the two countries have agreed upon strategic partnership to tackle the global threat of terrorism. The tactics adopted by smaller nations against a bigger adversary, no doubt, is to go for asymmetric warfare as they would miserably fail in a full-blown war. And that is what Pakistan is precisely engaging in.

In his fortnightly column, Lt General (Retd) P.C. Katoch is forthright on how India has to have both political and military will to deal with the threats emanating from the neighbouring region, even if it means a mission like that the Navy SEALs undertook to gun down Osama.

Talking about the Indian Navy, the recent Naval Commanders' conference underscored the importance of 'being ready today and prepared for tomorrow.' Indian Navy has strategised a long-term perspective towards comprehensive capability build up to strengthen all facets of the Naval fleet arm. A successful

beginning has been made through contract for 12 Boeing P-8I, long-range maritime reconnaissance (LRMR) & anti-submarine warfare (ASW) aircraft to augment surveillance capabilities over Indian Navy's areas of operations. In pursuance of maritime surveillance capability build up the next stage comprises of acquisition of assets for medium-range reconnaissance. Accordingly, Indian Navy has approved plans to acquire six medium-range maritime reconnaissance (MRMR) aircraft.

One of the contenders is Sweden's Saab and in an interview with Sucheta Das Mohapatra claims that the Saab 2000 MPA offered to the Indian Navy under the MRMR programme is fitting the Navy's requirement of an aircraft with long range, extended time on station, fast response, long service life and anti-surface warfare capabilities. And if Saab officials are to be believed, the aircraft on offer not only costs less than the other aircraft in the MRMR race, but also has a guaranteed life time of at least 25 years.

Irrespective of who is going to win the contract, there is no gainsaying the fact that India not only needs to modernise its defence forces, but also shore up its human intelligence network, a key in the emerging scenarios of global violence. **SP**

Jayant Baranwal
Publisher and Editor-in-Chief



Post-Osama events may impact security: Antony

The Defence Minister A.K. Antony recently asked the top brass of the Indian Armed Forces to continuously assess the security situation in 'our strategic neighbourhood' in the aftermath of the elimination of Osama bin Laden and remain prepared for any eventualities. Describing the US operations in Pakistan as 'a watershed in the global war on terror', Antony said the event has 'internationally stamped' Pakistan's position as the core of terrorist activities in the region.

Addressing the Unified Commanders Conference in New Delhi, he said the ripples of this event will have wide ranging impact on 'our strategic neighbourhood'. The security situation in Pakistan continues to be a cause for concern. Despite supporting the war on terror, China continues to remain its main strategic partner. The Defence Minister said if any real progress is to be made in improving bilateral relations, Pakistan must take concrete action to dismantle terrorist infrastructure on its soil.

The two-day annual conference was attended among others by the Minister of State for Defence Dr M.M. Pallam Raju, the Chairman Chiefs of Staff Committee, Chief of Air Staff Air Chief Marshal P.V. Naik, Chief of Naval Staff Admiral Nirmal Verma, Chief of Army Staff General V.K. Singh and the Defence Secretary Pradeep Kumar.



The Defence Minister said India has always desired friendly relation with all its neighbours. "Though we are not unduly concerned over China's moves to modernise and upgrade its military capability, we must on our part, keep up the ongoing process of upgrading our military structure." He expressed the hope that progress will be made in discussion with China on border dispute.

Dwelling on the ground situation in Jammu & Kashmir, he said it has shown improvement over the past few months. The violence level has declined and the political processes have come to the forefront, due in a large measure, to the sustained efforts of our security forces. He, however, said that the armed forces need to keep up the vigil to ensure that the levels of violence are kept to the minimum.

'This calls for a lot of restraint and upholding the human rights of the local people, without compromising over all our preparedness to meet any evil designs'. The summer months will be a crucial test of our response mechanism.

Referring to modernisation in the armed forces, he called upon the top brass to adopt a change in world view "just as the old brick and mortar economies have given way to the new economic architecture across the world, so too modernisation of our armed forces must chart a new path. The thrust for modernisation and change has to be necessarily top driven and that is where your role assumes a crucial significance". **SP**

Naval Commanders take stock

The Naval Commanders' Conference which concluded recently has laid emphasis on being 'ready today and prepared for tomorrow' concept. The Chief of Naval Staff Admiral Nirmal Verma took stock of various aspects involving acquisitions, operations, personnel and logistics in the presence

of senior leadership of the Indian Navy.

One of the focus areas during the conference was the prevailing security environment and the need to ensure that naval units are kept at the highest state of readiness to meet unforeseen challenges. To ensure this the Commanders were directed that training of personnel and honing of their skills be closely monitored for execution of the tasks assigned with the highest level of professionalism.

While reviewing the acquisition plans of the Indian Navy, stress was laid on close monitoring of ongoing projects to ensure timely completion and prevent cost overruns. Attention was also drawn to timely fruition of infrastructure development associated with operationalisation of new inductions and projects already approved by the government, particularly, operational turnaround bases in A&N Islands, forward operating base at Tuticorin and Naval Air Enclaves.

With regard to utilising budgetary allocations, the Chief of Naval Staff stressed that capital expenditure be evenly spread throughout the year and fiscal prudence be exercised in respect of revenue expenditure.

Various aspects of the induction and fleet integration of 'Vikramaditya' along with its air element of MiG-29K fighters was also discussed. The training and infrastructural preparations to operate this and other transformational assets were also reviewed. **SP**



PHOTOGRAPHS: PIB, Indian Navy

French Defence Minister in India

The French Minister for Defence, Gerard Longuet was on a two-day visit to India, as an important step to further Indo-French strategic partnerships, strengthened by the visit of the French President Nicolas Sarkozy in December last.

The French Minister who held several meetings with various senior officials both in the government and also with the Chiefs of the three armed services, was also pitching for Dassault Rafale aircraft which is one of the two shortlisted contenders for the medium multi-role combat aircraft acquisition by the Indian Air Force.

"We have one single speaking partner (Dassault) instead of four partners (Eurofighter Typhoon is from Italy, Germany, Spain and the UK)," Longuet said. **SP**



German Chancellor in India, reviews security scenario

German Chancellor Angela Merkel who arrived in India on May 31 held wide-ranging discussions with Indian leadership including with the Prime Minister, Dr Manmohan Singh. The two countries reviewed the security scenario in Pakistan and Afghanistan and its implications in the region.

Angela Merkel asserted that terrorism had to be fought 'on all fronts and not selectively'. Dr Singh responded, "We discussed the developments in Pakistan and Afghanistan. Terrorism is a serious challenge which will have to be fought on all fronts and not selectively." After the talks, India and Germany signed four agreements for cooperation in vocational education, medical research, science and technology and nuclear physics. The Chancellor too is pitching for IAF's acquisition of 126 medium multi-role combat aircraft (MMRCA) in which Eurofighter Typhoon has been shortlisted, alongwith France's Dassault Rafale. **SP**



Cassidian to assist in training of German armed forces

Cassidian, the defence and security division of EADS, will modernise the Stinger air defence training system of the German Armed Forces, thus increasing the protection of German soldiers.

Under a contract of the German Federal Office of Defence Technology and Procurement (BWB), the company is responsible for delivering a high-performance picture and scenario generator to be used in the so-called "Stinger dome trainers" at the Fassberg und Todendorf bases, which are the training centres for the Stinger air defence system. The Stinger dome trainer is the only indoor system enabling an interactive training of air defence soldiers in a virtual 360-degree environment. **SP**



General Dynamics sets up Centre of Excellence for Underwater ISR

General Dynamics Canada, a pioneer in the development of underwater acoustic processing systems, has set up an Underwater Intelligence, Surveillance and Reconnaissance (UW ISR) Centre of Excellence. The Centre is designed to accelerate the company's research and product development efforts as naval fleets around the world look to reestablish this critical capability in the face of new threats.

According to Bob Nugent, Vice President at naval market research and analysis firm AMI International, national security and economic stability are driving investment in new ship and submarine fleets that require underwater submarine warfare capability. "Global demand for submarines and associated ISR capabilities is increasing. Compared to any other region in the world, more submarines will be built or bought by Asian-Pacific navies over the next 20 years."

Located in Halifax, Nova Scotia, the Centre will leverage the company's strong collaborative relationship with Defence Research and Development Canada—Atlantic, a globally-renowned defence research centre with world-leading expertise in anti-submarine warfare and mine and torpedo defence systems.

The team's initial focus will be further development of the company's flagship acoustic products including the Matador torpedo detection system and the TrailBlazer mine and obstacle avoidance sonar, a joint development effort between General Dynamics Canada and Marport. The Matador system is an acoustic processing system optimised for torpedo detection and designed to be used with towed array sensors. Integrated within the system are sonar detection displays that provide operators a single-view summary of all acoustic data collected, as well as tools to allow rapid detection of torpedo signatures, accurate identification of torpedo bearings, and an interface for managing torpedo alerts and alarms. **SP**



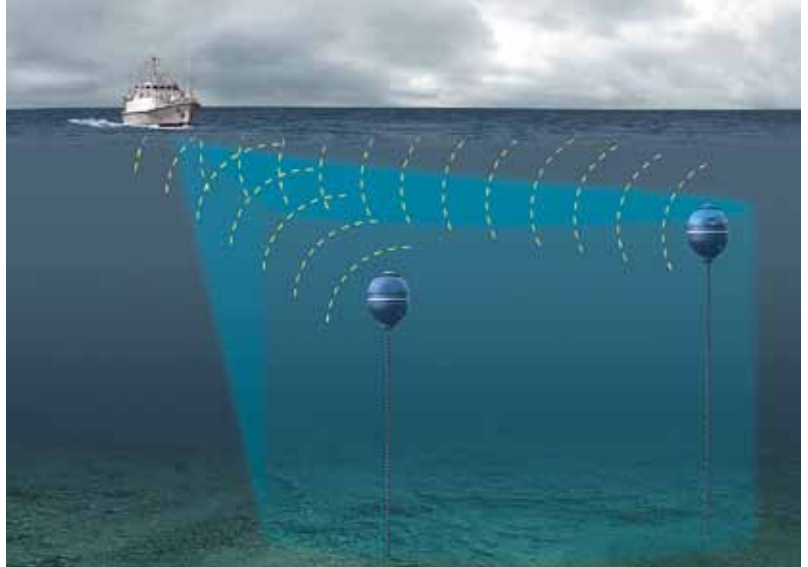
Navistar Defense bags military ambulances order

Navistar Defense has received a \$183 million delivery order for 250 International MaxxPro Dash ambulances with DXM independent suspension. The order from the US Marine Corps Systems Command for mine resistant ambush protected (MRAP) vehicles falls under the company's existing indefinite delivery/indefinite quantity contract and is Navistar's ninth major MRAP variant.

"Survivability and mobility continue to be key capabilities required to help our war-fighters complete their missions safely," said Archie Massicotte, President, Navistar Defense. "Medics face the same threats on the battlefield and we are proud to provide them with a vehicle that offers both MRAP level protection and independent suspension for off-road mobility."

The vehicle includes an easy-to-use litter assist system as well as a protected work space benefitting medics and patients. This solution, paired with the company's DXM independent suspension, helps medical aid navigate rough terrain to complete its mission. Navistar currently supports a fleet of more than 8,000 MaxxPro vehicles.

"All our MaxxPro units share commonality and this allows us to respond rapidly to changing mission needs with vehicle enhancements and fleet support," said Massicotte. "This flexibility extends across our other vehicle fleets and is just one piece of a business strategy that moves us steadily toward our goal revenue base of \$2 billion." SP



General Dynamics bags contract for advanced submarine technologies

General Dynamics Electric Boat has been awarded a \$33.5 million contract modification by the US Navy to develop advanced submarine technologies for current and future undersea platforms. Electric Boat is a wholly owned subsidiary of General Dynamics.

Electric Boat will perform advanced submarine research and development studies in support of a wide range of technology areas including manufacturability, maintainability, survivability, hydrodynamics, acoustics and materials. Electric Boat also will conduct research and development work in additional areas including manning, hull integrity, performance, ship control, logistics, weapons handling and safety. SP

Northrop Grumman to develop micro gyro technology for DARPA

Northrop Grumman Corporation, in partnership with the Georgia Institute of Technology, is to develop a new type of micro-electro-mechanical systems (MEMS) gyroscope technology for the Defense Advanced Research Projects Agency's (DARPA) microscale rate integrating gyroscope programme. The MEMS technology will form the basis for a micro resonator gyro capable of achieving navigation grade performance. "The new micro-fabrication process that Northrop Grumman and Georgia Tech are developing for this programme is truly groundbreaking," said Charles Volk, Vice President and Chief Technology Officer of Northrop Grumman's Navigation Systems Division. "It will enable us to move navigation technology forward by creating miniature gyros which can be utilised on a variety of applications, from unmanned vehicles to hand-held devices."

Cobham's technology to pinpoint location of sailors at sea

Asailor suffering from life threatening diabetic seizures received a quick rescue response recently when his Cobham 406 emergency position indicating radio beacon (EPIRB) signal was received and effectively provided global positioning system (GPS) coordinates, directing US Coast Guard (USCG) rescuers to the sailor's location 192 km south of San Diego.

An emergency signal from a Cobham ACR Products GlobalFix 406 EPIRB was received at 3:45 p.m, sent by the crew of a sailboat when the boat owner became ill and needed medical assistance. USCG crews reached the 71-year-old man at 5:45 p.m., just two hours after receiving the distress signal. SP



General Dynamics awarded software engineering contract by SAAB

General Dynamics Canada has announced it has been awarded an engineering support contract by SAAB AB for the continued integration of the Hydra multi-sensor sonar system on the Swedish navy's newest Visby-class corvettes. General Dynamics Canada is a premier provider of defence electronic systems and is a leading systems integrator of complete command, control, communication, computing, intelligence, surveillance and reconnaissance (C4ISR) solutions.

The Hydra multi-sensor sonar system provides both anti-submarine warfare and mine counter-measure capabilities to the Visby-class corvettes, both in open ocean as well as in the Baltic, which is considered to be among the most acoustically challenging waters in the world. The system integrates multiple subsystems into a single, streamlined architecture that supports variable depth sonar, hull-mounted sonar, towed array sonar, remotely operated sonar, own noise monitoring, sonobuoy receivers, underwater environment monitoring and three-dimensional underwater terrain modeling.

With the Hydra system, operators can efficiently manage multiple concurrent functions and transition through customizable user-friendly interfaces to collect and process a variety of tactical and environmental situational awareness intelligence data, enhancing the efficiency and flexibility of the platform. SP

Smallest thermal monocular from BAE Systems

BAE Systems OASYS recently completed its 2,000th delivery of the StalkIR, one of the highest performing and smallest thermal monoculars available. The device provides war-fighters with an effective surveillance tool to detect improvised explosive devices (IEDs) and other threats on the battlefield.

This clip-on system is the smallest device of its kind and serves as both a surveillance tool and a weapon sight. It features dual band aiming lasers, a modular rail interface for mounting on weapons and can be used in any situation where the war-fighter needs to assess and engage threats.

"This device is a game changer in supporting the counter-IED mission" said Vadim Plotsker, President of BAE Systems OASYS in Manchester, where the StalkIR is built. "Our technology allows the user to detect, recognise and identify threats in all weather conditions, day or night." The StalkIR which can also be used in a hand-held mode, is in full-rate production. The company expects more than 3,000 units to ship this year. SP

Textron bags contract for Armored Vehicles

Textron Marine & Land Systems, an operating unit of Textron Systems, a Textron Inc. company, announced a firm-fixed-price contract award from the US Army tank-automotive and armaments command (TACOM) for 88 M1117 armored security vehicles (ASV) and M1200 armored knight vehicles.

The award, valued at over \$64 million, exercises options for 37 M1117 ASVs, 51 M1200 armored knights and associated support equipment. The work will be performed through the end of 2012.

"The ASV is a versatile platform that continues to deliver exceptional mobility, reliability and survivability enabling the US Army to carry out a wide range of combat mission roles," said Textron Marine & Land Systems Senior Vice President and General Manager Tom Walmsley. "For more than 12 years our team has worked hard to consistently deliver ASV products, in a variety of configurations, which provide our soldiers exceptional levels of security and protection."

The ASV is a 4X4 wheeled armoured vehicle that offers significant crew protection through the employment of multiple layers of armour, defending against small arms fire, artillery projectile fragments, improvised explosive devices (IEDs) and land mines. It also uses a four-wheel independent suspension system to deliver superior mobility, agility, handling, and ride quality. SP





Apt for Indian Navy MRMR programme

[By Sucheta Das Mohapatra]

Swedish defence major Saab has responded to the Indian Navy's request for information (RFI) for a maritime patrol aircraft (MPA) to meet the growing challenges in the country's maritime realm. The company claims that the Saab 2000 MPA offered to the Indian Navy under the medium-range maritime reconnaissance (MRMR) programme is fitting the Navy's requirement of an aircraft with long range, extended time on station, fast response, long service life and anti-surface warfare capabilities. And if Saab officials are to be believed, the aircraft on offer not only costs less than the other aircraft in the MRMR race, but also has a guaranteed life time of at least 25 years.

"We responded to the Indian Navy's RFI in December 2010 and we updated it in February 2011," said Tommy Hultin, Business Development Director, Sales and Marketing, Aircraft Service Division, Saab. "The aircraft is apt for India both in conflict and peace time situations." Hultin further informed that the company is also offering its Saab 340 multi-role surveillance (MSA) aircraft to the Indian Coast Guard. "We are waiting for the RFI to be issued."

The Saab 2000 meets all the requirements of the Indian Navy RFI, claimed Saab officials, which include maritime patrol, anti-surface warfare, search and rescue, electronic intelligence (ELINT), electronic support measures (ESM), electronic countermeasure (ECM), communication intelligence (COMINT), etc. The aircraft is capable of carrying two anti-ship missiles (ASM) and a jammer pod. Its electro-optical device is a third generation forward looking infrared (FLIR), CCD TV, laser range finder and recording facility. "The aircraft is meeting the RFI in every way and in fact can perform additional roles," said Hultin, pointing out its anti-submarine warfare (ASW) capabilities not required in the RFI.

Operating in various configurations with 35 different operators across the world, the Saab 2000 MPA as claimed by Saab is a high performer providing tremendous operational flexibilities for various operation scenarios. It has a cruise speed of 350 knots; can climb to an altitude of 20,000 ft in 10 minutes; reach an operating area of 1,000 nm within three hours. It can operate at a maximum range exceeding 2,000 ft, or longer patrol times at higher altitudes even up to 31,000 ft. It can operate at a maximum range exceeding 2000 nm, with mission endurance exceeding 9.5 hours from high altitude airfields, taking off with maximum load and fuel even at very hot temperatures. Fur-



(Left) Peter Verebes, Business Development Director, Sales & Marketing Aircraft Services Division, Business Area Support and Services - Saab and (right) Tommy Hultin, Business Development Director, Sales & Marketing Aircraft Services Division - Saab

ther flight safety is maintained throughout all flight conditions, including single engine operations, where the aircraft can maintain an altitude at 20,000 ft.

The company is offering the aircraft with a guaranteed support for 25 years and 35,000 flight hours. "Obsolescence can be managed in the next 25 years. But the aircraft can go beyond 25 years with mid-life upgradation," said Hultin and added, "We have worldwide support network including logistic support assistance and maintenance repair overhaul (MRO) hubs." Though the Indian Navy's RFI has no mention of the MRO requirement, Saab officials informed that the company is talking to partners in India to set up a MRO hub and added that the lifetime cost is a larger part of the actual acquisition cost.

While the Saab 340 was designed in the 1980s, the Saab 2000 was designed in the 1990s. But the company officials do not find any issues even if their competitors come up with the latest model. "Guarantees and technical competence is much more important than having the latest model," said Hultin.

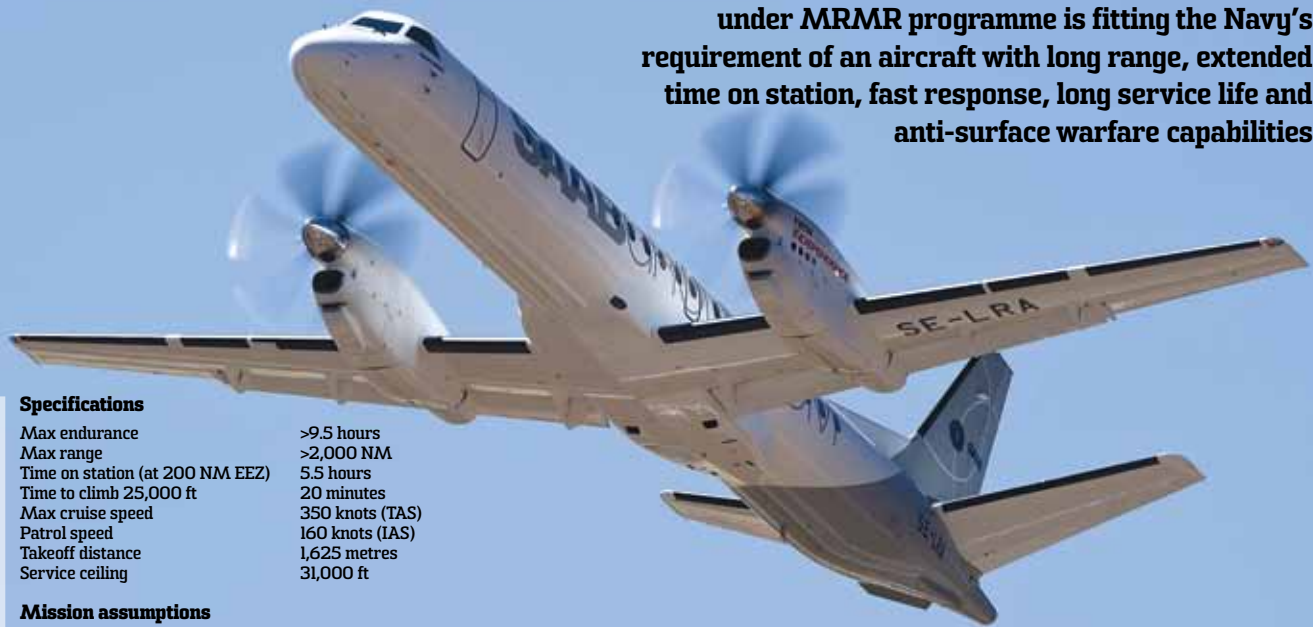
Speaking to *SP's M.A.I.* during their recent visit to India, Saab officials Hultin and Peter Verebes, Business Development Director, Saab AB, said that India's offset requirements and transfer of technology (ToT) is not a problem. "Saab has a long history of technology transfer," they informed.

Elaborating on the features of the aircraft on offer to the Indian Navy, they said that the Saab 200 MPA is equipped with Saab RBS15 anti-ship missile system and its command and control (C2) system facilitates a seamless planning of missile launching zones, trajectories and target seeking activities. The aircraft is also equipped with the state-of-the-art Selex





The Saab 2000 MPA offered to the Indian Navy under MRMR programme is fitting the Navy's requirement of an aircraft with long range, extended time on station, fast response, long service life and anti-surface warfare capabilities



Specifications

Max endurance	>9.5 hours
Max range	>2,000 NM
Time on station (at 200 NM EEZ)	5.5 hours
Time to climb 25,000 ft	20 minutes
Max cruise speed	350 knots (TAS)
Patrol speed	160 knots (IAS)
Takeoff distance	1,625 metres
Service ceiling	31,000 ft

Mission assumptions

ISA standard atmosphere, sea level airfield, nil wind.

Typical mission

Position 200 NM to EEZ, patrol at 2,000 ft for 5.5 hours and reposition 200 NM back to base, hold fuel for 45 minutes holding and alternate fuel for 100 NM diversion.

fifth generation active electronically scanned array (AESA) and RBS-15 anti-ship missile. The AESA radar onboard is a modern high performance system that supports the full range of maritime surveillance and coherent imaging modes used for both naval and overland operations. The radar provides the aircraft identification friend and foe (IFF) capability with customised interrogator functions. It is supported by a Saab R4A AIS transponder receiver/transmitter system for locating and identifying and naval activity. The AIS system provides an encrypted data link.

Likewise, for close range detection, identification and recording of surface objects and activities, the SAAB 2000 incorporates electro-optic (HDTV) and thermal imager sensors. It also has an ELINT system providing the capability to intercept and collect intelligence information consisting of detailed information of complex emitters active signal components, the relationship and the dynamics between active signal components. The aircraft on offer also has an ESM system for automatic identification of RF signal sources and direction finding of RF signal sources with high accuracy. For self-protection, a SPS system is installed including radar warning receivers, missile approach warning sensors, laser warning sensors as well as chaff



and flare dispensers.

The officials further elaborated that the aircraft is equipped with COMINT system that complements the baseline ELINT system for enhanced signals intelligence (SIGNIT) capabilities. The COMINT system in the aircraft includes both a direction finder function and intercept system.

The Saab 2000 MPA is also equipped with a command and control (C2) system that integrates and assists in controlling all mission sensors and provides the user interface to mission operators, through four workstations installed side by side in the cabin facing starboard, and to the pilots through a dedicated tactical display. The workstation also provides access to the mission communication system.

Additionally, no ground refuelling arrangement is necessary for the Saab 2000. "A bucket can be used for the refuelling purpose and thus there is no requirement for ground stations, support staff, technicians, etc. If required a pilot can easily do the job," informed Hultin.

Saab 2000 MPA was on display at Aero India 2011 in Bengaluru, and according to the company had a good number of visitors who had words of appreciation for the aircraft. "Many Indian Navy officials saw the aircraft at Aero India and liked it," said Hultin. **SP**



DGCA certifies first-ever Dhruv helicopter simulator

The Helicopter Academy to Train by Simulation of Flying (HATSOFF), the joint venture owned equally by the Hindustan Aeronautics Limited (HAL) and CAE, announced that its simulator cockpit for the civil/conventional variant of the Dhruv has been certified to Level D, the highest qualification for flight simulators, by India's Directorate General of Civil Aviation (DGCA).

The civil/conventional Dhruv simulator cockpit has been integrated with the CAE-built full-mission simulator currently in operation at HATSOFF. The simulator features CAE's revolutionary roll-on/roll-off cockpit design, which enables cockpits representing various helicopter types to be used in the simulator. This is the world's first-ever full-mission simulator for the HAL-built Dhruv helicopter.

"We are very proud of achieving Level D certification for the world's first simulator representing the indigenously developed HAL Dhruv helicopter," said Wg Cdr (Retd) Chandra Datt Upadhyay Chief Executive Officer of HATSOFF. "We look forward to welcoming the Indian Air Force and other civil operators of the Dhruv in offering simulation-based training that will undoubtedly prove to be a safe and cost-effective method for training Dhruv helicopter aircrews."

The cockpit for the civil/conventional variant of the Dhruv is the second for the HATSOFF training centre. The first cockpit for the simulator represented the Bell 412 helicopter and training for Bell 412 operators began in July 2010. Additional cockpits for the Indian Army/Air Force variant of the HAL-built Dhruv and the Eurocopter Dauphin will be added to the HATSOFF training centre over the next year. **SP**



A US Air Force KC-10A Extender aircraft refuels an F-16 Fighting Falcon over eastern Afghanistan

Air refuellers deliver over 350 million pounds of fuel

In the first four months of 2011, air refuelling aircraft supporting the air mission on the US Central Command area of responsibility have offloaded more than 357 million pounds of fuel to more than 26,500 receiver aircraft.

The 357 million pounds of fuel figure, which is calculated and tracked by the US Air Forces Central's Combined Air Operations Center in Southwest Asia, equates to approximately 52.58 million gallons—enough fuel to fill an F-16 Fighting Falcon to its capacity with two external tanks more than 29,750 times.

Meeting the demand for the air refuelling are the KC-135 Stratotanker and KC-10 Extender fleets. Both airframes operate in the US Central Command area of responsibility from non-disclosed bases in Southwest Asia as well as Kyrgyzstan. **SP**



Eurocopter X3 exceeds 430 kmph

Eurocopter's X3 hybrid helicopter demonstrator has delivered on the promise of pushing the frontiers in rotary-wing aviation by surpassing its original speed target of 220 kts, demonstrating the compound aircraft's performance, capabilities and maturity.

The X3's speed milestone was reached on May 12 during stable, level flight—with the hybrid demonstrator maintaining a true airspeed of 232 kts. (430 kmph) for several minutes. This occurred during only the third mission after a scheduled upgrade that integrated the X3's definitive gearboxes, enabling it to operate at full power.

"Eurocopter's teams have once again shown their ability to apply innovation as a cornerstone of our strategy in remaining the helicopter industry leader," said Lutz Bertling, Eurocopter's President & CEO. **SP**



Sikorsky delivers helicopters to Royal Thai Air Force

Sikorsky Aircraft Corporation has delivered three VVIP S-92 helicopters to the Royal Thai Air Force, introducing the first high-end LifePort medical system into an S-92 aircraft. Sikorsky helicopters have been in use by Thailand military forces since 1996 including those being flown by the Royal Thai Navy, which flies Seahawk helicopters and S-76 helicopters. In addition, the Royal Thai Army flies UH-60L Black Hawk helicopters. The latest delivery of S-92 helicopters marks the first Sikorsky products for the Royal Thai Air Force.

The S-92 aircraft are high-level VVIP aircraft, with the noteworthy distinction of having the first installation of a high-end LifePort medical system in an S-92 helicopter. The helicopters were delivered in April and have begun extensive training at Lop Buri Air Base which will last for approximately six months.

"These aircraft will be used for the Head of State mission. The customer specifically required an S-92 helicopter, recognising the safety and reliability of this aircraft and its track record of serving many other Heads of State," said Carey Bond, President of Sikorsky Global Helicopters. **SP**

Alenia Aeronautica delivers new mechanism for nEUROn to Dassault

Alenia Aeronautica, a Finmeccanica company, has recently delivered the weapon bay doors and mechanism for nEUROn (the new generation technology demonstrator for a European unmanned combat aerial vehicle - UCAV) to Dassault Aviation. This complex system was designed, built and integrated entirely by Alenia Aeronautica to include the weapon housing doors and the respective activation and control system.

The system delivered to Dassault Aviation fulfils the specific and extremely stringent programme requirements defined to ensure the very low observability of the aircraft. This required new design criteria to be adopted and the use of construction technologies. Alenia Aeronautica has patented the design for the "seal" around the perimeter of the weapon bay doors.

The programme, launched by the French Ministry of Defence and supported by Italy, Sweden, Spain, Greece and Switzerland, is to develop new technologies and lay the foundations for future unmanned aircraft programmes for military use. **SP**



Discussions on long-range strike bomber

Over 30 military and civilian strategic air power experts, under the aegis of the Bomber Advisory Group, gathered in the US recently to discuss ideas for a new long-range strike bomber. The group examined past and current global strike success stories and strategic air power's role in the 21st century.

Dr Rebecca Grant, the Director of the General William Mitchell Institute for Airpower Studies, and Lt General Jim Kowalski, the commander of Air Force Global Strike Command, attended the conference.

Not all the nation's decision-makers understand why America must build a new bomber right now, Dr Grant said, "And it is up to the prac-



Michael B. Donley

tioners of strategic air power to help us frame that answer—why does America need a new bomber right now, what are these missions?" Dr Grant discussed the evolution of bombers from 1917 on, as they addressed national strategy and security needs. "Air power is key to our foreign policy," she said. "Look what we did with Libya," referring to Operation Odyssey Dawn. "Air power was key to the ability to have that response."

In the Air Force Posture Statement for 2011, Michael B. Donley, the Secretary of the Air Force, discussed the need for a new long-range strike bomber.

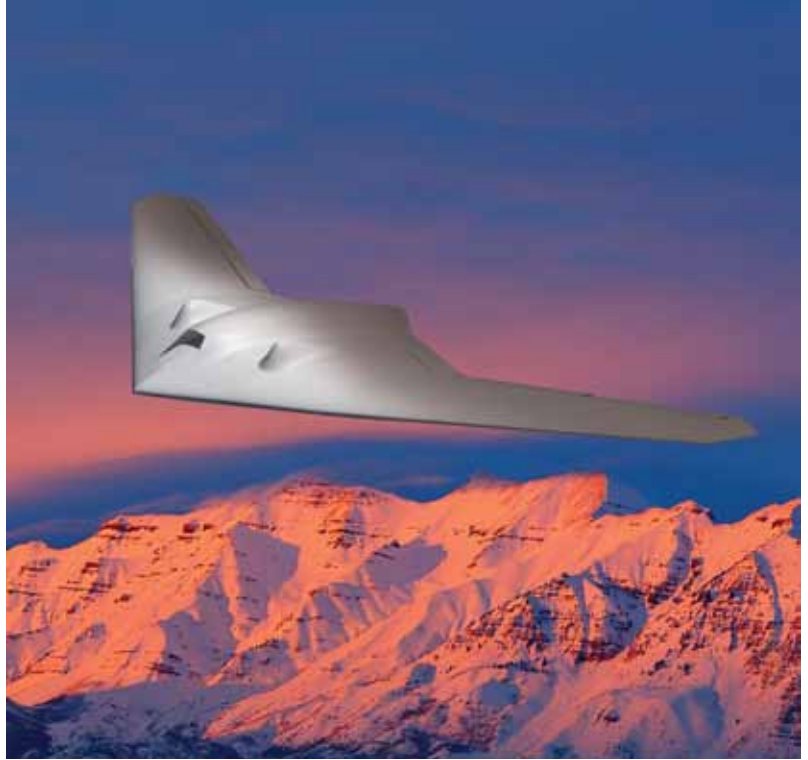
"We must sustain our ability to consistently hold any target on the planet at risk with the development of a long-range strike family of systems capability—including a new penetrating bomber—to create desired effects across the full range of military operations in both permissive and contested environments." **SP**



Rustom's second successful flight

The Rustom 1 UAV had its second successful flight recently. Developed by the Aeronautical Development Establishment (ADE), a Defence Research and Development Organisation (DRDO), the "Rustom 1" has an endurance of 14 hours and can go up to an altitude of 8,000 metres.

Rustom 1 has been converted from a manned aircraft in to an unmanned aerial vehicle by removing the pilot seat and making required electrical, mechanical and aerodynamic modifications. The test flight was conducted at the airfield belonging to the Taneja Aerospace (TAAL) located near Hosur.



Stealth Drones monitored bin Laden House

Classy new stealth drone aircraft were engaged by the Central Intelligence Agency to fly dozens of secret missions deep into Pakistani airspace and monitor the compound where Osama bin Laden was killed. The drones used were the Lockheed Martin RQ-170 Sentinel, the bat-winged shape larger stealth warplanes.

In an effort to capture high-resolution video that satellites could not provide, the agency conducted secret flights with the help of RQ-170 Sentinel over the compound of Laden for months before the May 2 assault. The drone has been designed to evade radar detection and operate at high altitudes.

The RQ-170 Sentinel represent a major advance in the capabilities of remotely piloted planes. The aircraft helped the CIA glide undetected beyond the boundaries that Pakistan has long imposed on other US drones, including the Predators and Reapers that routinely carry out strikes against militants near the border with Afghanistan.

The stealth drones were also used on the night of the raid, providing imagery that President Obama and members of his national security team watched as the US Navy SEALs descended in Pakistan. **SP**

Fact File

Mission. The RQ-170 is a low observable unmanned aircraft system (UAS) being developed, tested and fielded by the Air Force. It will provide reconnaissance and surveillance in support of the joint forces commander.

Background. The Air Force's RQ-170 programme leverages the Lockheed Martin Advanced Development Programmes and government efforts to rapidly develop and produce a low observable UAS. The RQ-170 will directly support combatant commander needs for intelligence, surveillance and reconnaissance to locate targets.

The RQ-170 is flown by Air Combat Command's 432nd Wing at Creech Air Force Base, Nevada, and the 30th Reconnaissance Squadron at Tonopah Test Range, Nevada.

Source: www.af.mil



Many improvements have been carried out since the last flight, in terms of piloting, landing, taxiing etc. The flight was a precursor to the flight with payloads as required by the defence services. The complete sequence of events went off well to the total satisfaction of the scientists and technical personnel of the Bangalore's Aeronautical Development Establishment who have developed the UAV. Lt Colonel Thappa from the Army was the external pilot for the total mission flight.

Dr Prahlada, Chief Controller, Research and Development (Aeronautics Programmes), said that ADE is geared up for integration of payloads with the UAV within the next three months, to demonstrate performance of payloads and necessary secure data-link to the users. **SP**



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Indo-US strategic partnership on tackling terror

At one of the highest level meetings between India and the United States, it was decided to have mutual cooperation in tackling terror and other security issues. The meeting held in Delhi was attended by Indian delegation led by the Union Home Minister, P. Chidambaram and the US Secretary for Homeland Security, Janet Napolitano.

The two sides issued a joint statement, affirming the strategic importance of cooperation for the security of the two countries and their people, based on their shared values of democracy, pluralism and openness; the threat of terrorism and other challenges, including cyber security, counterfeit currency, illicit financing and transnational crimes; and the deepening technological and economic partnership between the two.

The leaders expressed satisfaction with the growth in counter-terrorism and related security cooperation, particularly the mechanisms such as the Joint Working Group on Counter-terrorism, established in 2000, the Defence Policy Group, the Joint Working Group on Information and Communications Technology and the Aviation Security Working Group and the Counter-terrorism Cooperation Initiative of July 2010 in advancing India-US cooperation.

Pressure on Pakistan

The leaders discussed their cooperation in the investigations into the Mumbai terror attack in November 2008 and reiterated their governments' commitment to bring the perpetrators and the supporters of the Mumbai attack to justice. As Prime Minister Dr. Manmohan Singh and President Barack Obama stated in November 2010, the Minister and Secretary called on Pakistan to move expeditiously in prosecuting those involved in the Mumbai terror attack. The two sides committed their governments to comprehensive sharing of information relating to the Mumbai attack. The leaders reaffirmed their governments' resolve to defeating the forces of terrorism and called for effective steps by all countries to eliminate safe havens and infrastructure for terrorism.

Chidambaram said, "It is a truism to say that India lives in perhaps the most difficult neighbourhood in the world. The global epicentre of terrorism is in our immediate western neighbourhood. The vast infrastructure of terrorism in Pakistan has for long flourished as an instrument of state policy. Today, different terrorist groups, operating from the safe havens in Pakistan, are becoming increasingly fused; the society in Pakistan has become increasingly radicalised; its economy has weakened; and, the state structure in Pakistan has become fragile. Today, Pakistan itself faces a major threat from the same forces. Its people as well as its state institutions are under attack."

The two delegations decided to strengthen agency-to-agency engagement, including in the areas of intelligence exchange, information sharing, forensics and investigation, access and sharing

of data relating to terrorism, security of infrastructure, transportation and trade, conducting joint needs assessments, combating counterfeit currency, countering illicit financing and transnational crime. They agreed that the two sides shall designate points of contact and establish protocols for engagement.

They decided to foster capacity building in areas including counter-terrorism, counter-narcotics, counterfeit currency, illicit financing and transnational crime, security of infrastructure, transportation and trade, coastal security and large city policing. They agreed on the need for appropriate government agencies to work together and share best practices to enhance the security and resilience of the global supply chain.

They affirmed the importance of increased dialogue and



P. Chidambaram and Janet Napolitano

cooperation in the area of cyber security. They welcomed the decision of the two governments to negotiate a MoU between CERT-IN and US-CERT, the designated agencies for information exchange. They also decided to cooperate in capacity building and to work together, and with other countries, to advance cyber security standards.

The two sides agreed on a calendar of events, collaborative activities and initiatives to be implemented over the next 12 months. They also decided that the Home Secretary of India and the Deputy Secretary of Homeland Security should meet at the end of six months to review progress in their collaboration. They also committed to hold the homeland security dialogue annually to set strategic directions for continued cooperation in homeland security. **SP**



Headley confesses on training by ISI

The Mumbai terror attacks co-accused David Coleman Headley (Daood Sayed Gilani, a Chicago-based Pakistani American) has testified that the Pakistan's Inter-Services Intelligence (ISI), the spy agency, trained him in espionage against India.

Headley told a Chicago court, "ISI did provide me training" to a question by the defence attorney Charles D Swift during the trial of Pakistani-Canadian Tawahur Rana, another co-accused in the 26/11 attacks. The statements formed part of the testimony of Headley, who has pleaded guilty. These disclosures, endorse India's charges that elements of ISI were involved in the Mumbai attacks.

According to Headley, Major Iqbal was his ISI handler and training was imparted in a two-storey safe house in Lahore near the airport. Headley told the court that when he met Major Iqbal in 2006, he expressed dissatisfaction at the military and espionage training that he had received from the Lashkar-e-Toiba earlier, hence the intensified training by ISI. **SP**



The damaged Oberoi Trident hotel during the Mumbai terror attacks

CBI clarifies on bungling of list

The Central Bureau of Investigation has said that a document containing the list of 50 absconders (most wanted) was handed over to the Home Secretary of Pakistan in March 2011. In this list, the National Intelligence Agency (NIA) had furnished names of 10 absconders who are accused and figure in various cases being investigated by NIA. According to NIA investigations all these 10 accused are not currently available in India and are suspected to be in Pakistan.

The CBI said the failure to formally communicate the arrest of Khan Wazhul Kamar to CBI had resulted in his name being retained in the list. Wazhul Kamar had surfaced in Thane. After media reports indicated his presence in India, the CBI has removed his name from the list.

CBI said that Red Notices (RNs) are issued by the Interpol on the request of the CBI (designated nodal agency in the Government of India) for persons required/wanted/fugitives from justice by various Indian police and investigating agencies and who are believed to be absconding from India. Once the RN is issued by the Interpol, a copy of the same is circulated to the immigration authorities within India in the form of additions to the 'look out notice' list.

At the request of the Mumbai Police on January 2, 2004, the CBI proposed and got a RN published from the Interpol with regard to Khan Wazhul Kamar. The RN notice was published on March 16 and this was communicated by CBI to Mumbai Police on March 18, 2004.

When the Home Secretary level talks took place on March 28-29, 2011, a list was handed over including the name of Khan Wazhul Kamar. The list given to Pakistan in the bilateral talks held on March 6, 2007, at Islamabad also included the name of Khan Wazhul Kamar. It now transpires that the Mumbai Police arrested Khan Wazhul Kamar on May 21, 2010. This information of arrest and the request for consequent de-

letion of the RN was not sent by the Mumbai Police to the CBI. However, it has been gathered that the Mumbai Police had, in January 2011, conveyed to the Intelligence Bureau's (IB) office in Mumbai that Khan Wazhul Kamar had been arrested. This information, unfortunately, was not reflected in the list of fugitives maintained by the authorities and was overlooked while the list was prepared in March 2011.

The government immediately ordered a probe into the bungling, while transferring two mid-ranking officers and suspending an inspector. **SP**

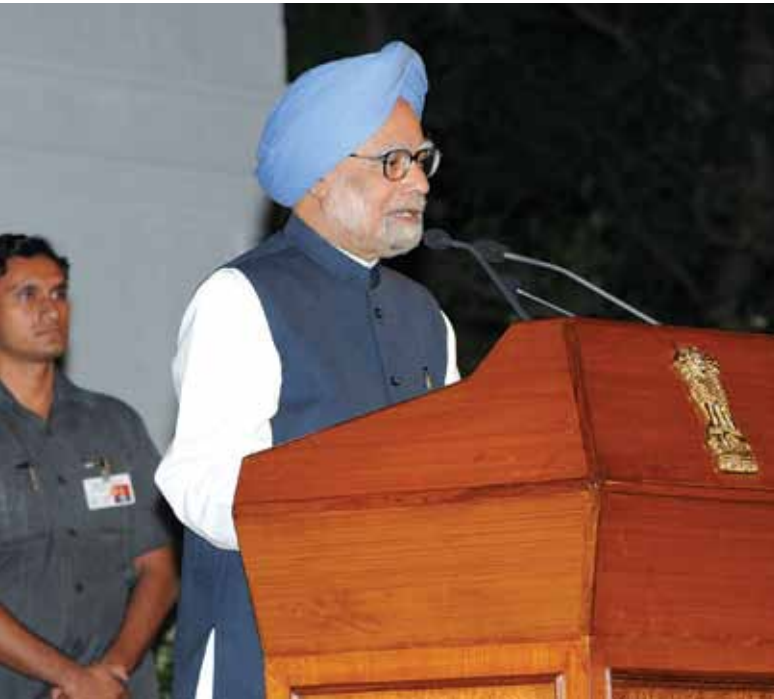
Pakistan unaware of US list

The Pakistan Army has clarified that it is not aware of any list of the most wanted Al-Qaeda and Taliban leaders handed over to the government by the US Secretary of State, Hilary Clinton during her recent visit to Pakistan.

American news channels had reported that the US Secretary had handed over a list of five most wanted militant leaders to Pakistan. The list includes two senior Al-Qaeda figures—Ayman al Zawahiri, Atiya Abdel Rahman—Afghan Taliban reclusive leader Mullah Mohammad Omar, Haqqani network commander Sirajuddin Haqqani and Ilyas Kashmiri, Harkat-ul-Jihad-al-Islami (HuJI). Kashmiri is considered the man who masterminded audacious attack on Pakistan's major navy air base in Karachi recently.

Kashmiri and Sirajuddin Haqqani are believed to be in North Waziristan, the only tribal region, still under control of several Taliban groups. The CIA considers this region as the launching pad for cross-border attacks into Afghanistan against foreign and Afghan forces, according to Islamic Republic News Agency of Pakistan.

US officials are reported to have said that they were testing Pakistan if it is committed to fight wanted militants on its soil. **SP**



Naxalism a major security challenge: Prime Minister

The Prime Minister, Dr Manmohan Singh, has reiterated that Naxalism continues to be a major internal security challenge and that the government has never underestimated the problem it posed.

Addressing a press conference recently, the Prime Minister said the government's strategy was two-pronged—initiating several developmental works in the Naxal-prone regions as well as countering the Naxalites in no uncertain terms. Both the Centre and the state governments were at it.

"I have been saying for the last three years that Naxalism remains the biggest internal security challenge facing our country," he said. "I have spoken to the Chief Ministers of the states many times on the Naxal issue. The Chief Ministers understand that it is imperative to control Naxalism for the country's growth."

On terrorism, the Prime Minister emphatically stated that the government is determined to 'squarely tackle' such acts. "Terrorism is a major national security issue and it has no religion." **SP**

Civil aviation security advisory council meets

The first meeting of the security advisory council to the Civil Aviation Ministry was held recently under the Chairmanship of the Secretary, Dr. Nasim Zaidi who stated that the council would be a platform between the ministry, security agencies and stakeholders, working for aviation security.

Dr. Zaidi suggested that there should be continuous review and upgradation of security mechanism to tackle the security breach and meet the international security standard. He also suggested that the passengers' convenience and passenger-friendly aspects should also be part of the security mechanism.

Senior officials of the Ministry, the Directorate General of Civil Aviation (DGCA), Bureau of Civil Aviation Security (BCAS), CISE, Delhi Police and DIAL, etc. attended the meeting. Issues such as improvements in existing procedures at airport, measures for implementation of screening like advance imaging technology, balanced implementation of security measures, cargo security, rules and regulations for enhancing aviation security, city-side policing, public interface of enforcement agencies, training and capacity building were also discussed. **SP**

Shoe bomb still a threat to aviation: Top US official

Secretary of Homeland Security Janet Napolitano has underscored the importance of international collaboration to ensure the safety of commercial aviation and improve the travel experience for all passengers through trusted traveller initiatives such as US Customs and Border Protection's (CBP) global entry programme.

Addressing delegates of the travel and tourism industry from around the world in the US recently, Secretary Napolitano reiterated the Department of Homeland Security's (DHS) continued commitment to facilitating legitimate trade and travel while enhancing security and keeping the American public safe.

DHS is currently piloting a number of programmes to expedite and enhance the international travelling process, including "OneStop," which is designed to reduce wait times by designating primary inspection lanes for international travellers arriving without checked baggage, and "Express Connection," which designates customs lanes for travellers who have short time windows between connecting flights.

The Secretary said that shoe bombs continued to be a threat and that for now US air travellers will have to continue to take off their footwear for security screenings. The department has been looking for a technological solution to the shoe problem, she said and remarked, "We're not there yet, so wear slip-ons." **SP**

CISF bans kirpan on duty

The Central Industrial Security Force (CISF) has said it cannot allow Sikh employees to wear kirpans at the Sri Guru Ramdas International Airport in Amritsar. Kirpan is among the 20 items that cannot be carried in an aircraft as per the ban by the Bureau of Civil Aviation Security (BCAS).

In 2005, the CISF had allowed Sikhs to carry kirpans on domestic carriers from domestic airports and on domestic routes but the ban continued at international airports and on international routes. CISF commandant at Sri Guru Ramdas international airport Sharad Kumar said a delegation of Shiromani Gurdwara Parbandhak Committee met him to discuss the issue. "We can't allow Sikhs kirpans on airside due to security concerns. There should be a clear-cut new policy on the issue." **SP**



ITT's coastal surveillance programme for Sweden

ITT Corporation announced the successful completion of production acceptance testing (PAT) for the first system of the reliability and modification (REMO) 870 programme to modernise Sweden's coastal surveillance radar systems.

For the past 20 years, Sweden's military forces have depended on ITT radars to defend against terrorists, pirates and other unwanted intruders. In May 2008, ITT began a series of design upgrades based on ITT's new LCR-2020 radar and its integrated, turnkey coastal surveillance system, the SABER-2020. This successful PAT milestone marks the first of multiple production deliveries—which will occur for the next few years—of the upgraded system.

"Our solution enables the Swedish military to scan the entire coastline and track potential threats on the surface and at low elevations, while providing excellent, all-weather detection," said Bill Devlin, Vice President and General Manager of ITT's Radar Reconnaissance and Acoustic Systems business area. "This milestone affirms our longstanding relationship as a major supplier to the Swedish defence forces and strengthens our position as a premier international supplier of integrated coastal surveillance solutions." **SP**

Taser bags two major orders

Taser International, a global provider of safety technologies that prevent conflict, protect life and resolve disputes, has announced two significant follow-on orders for Taser(R) X26(TM) electronic control devices (ECDs) and related accessories.

The first order received provided an unnamed international agency with 1,080 Taser X26 ECDs with 59,000 Taser cartridges and 100 Taser Cam units. The second order received provided an unnamed US agency with 200 Taser X26 ECDs. These orders are anticipated to ship the second quarter of 2011. **SP**



FBI adopts next-gen fingerprint identification system

The US Federal Bureau of Investigation (FBI) has announced a new technology designed to revolutionise law enforcement's ability to process fingerprints. The next generation identification system (NGI), built by Lockheed Martin, delivers an incremental replacement of the FBI's integrated automated fingerprint identification system (IAFIS). NGI provides automated fingerprint and latent search capabilities, electronic image storage, and electronic exchange of fingerprints to more than 18,000 law-enforcement agencies and other authorised criminal justice partners 24 hours a day, 365 days a year.

Upon completion, NGI will have the ability to process fingerprint transactions more effectively and accurately. In addition

to the new fingerprint identification technology, the NGI programme has also delivered advanced technology workstations to the FBI's fingerprint examiner staff. The workstations include significantly larger display screens with higher resolution and true colour support, allowing staff to see more detailed attributes of biometric data for more efficient decision-making. **SP**

MIT comes up with ultra-sensitive explosive detector

Chemical Engineers at the Massachusetts Institute of Technology (MIT) have come up with an ultra-sensitive explosive detector that is capable of detecting even minute traces of explosives.

The research team, which was led by Michael Strano, had built the sensor by coating hollow, single atom thick carbon nanotubes with the protein fragments called bombolitins, which is found in the venom of bees. This protein shows a reaction when exposed to nitro-aromatic compounds like TNT. The sensor would exhibit better sensitivity to explosives when compared to the detectors currently available in the market.

The new sensor technology was published online in the proceedings of the National Academy of Science. Strano is awaiting patent approval for the nanosensor.

For the past few years, Strano and his team have been working on developing carbon-nanotube sensors for detection of a number of molecules such as nitric oxide, toxic nerve gas sarin etc. The principle behind the sensing of molecules is that the sensor takes advantage of the inherent fluorescence of the carbon-nanotubes by binding the molecules to a particular target. The explosive sensor uses a slightly different detection technique in which the wavelength of the fluorescent light gets shifted when the target molecules bind with the bombolitins, without altering its intensity. This shift in the wavelength is seen through a microscope that is specially built for reading the signal. **SP**

CoreEL reaches distribution agreement with RFOptic

RFOptic has a distribution agreement with CoreEL Technologies, by which CoreEL technologies will now sell, distribute and support RFOptic range of products for the Indian region.

RFOptic, an Israel-based company, is a leading provider of electro optical and RF test equipment utilising fibre optics and RF technologies. The company gained its experience and customers from the Israeli Defence and Scientific communities by tailoring special solutions to their needs. CoreEL technologies will distribute the RFOptic range products to its defence and homeland security customers and support the integration of RFOptic products/solutions into the various indigenous defence programmes of India.

"CoreEL is happy to be a value-added distributor for RFOptic and its products will dovetail into our offerings in the defence and avionics arena. It will enable us to deliver the top of line solutions for RF-related projects and help our clients increase their test coverage and excel in verification for their test and development programmes," said Vishwanath Padur, Senior Vice President, Sales, Marketing and Business Development, CoreEL Technologies. **SP**

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Interview with God

Post-Operation Geronimo, there is much inquisitiveness whether the Indian Special Forces can fix interviews with God for notorious individuals like Dawood Ibrahim, Hafiz Saeed, Ilyas Kashmiri, Mahmood Azhar etc as the US Navy SEALs did for Osama bin Laden. There were pointed questions whether the task could be done in a similar manner. With Pakistan's Inter-Services Intelligence (ISI) having been caught with their pants down, Shuja Pasha, the ISI Director General, went through the farce of resignation, knowing it would not be accepted since the survivability of politicians in Pakistan is courtesy the ISI-Military.

Remember the feeble effort of the Pakistani President Asif Ali Zardari to bring the ISI under the Ministry of Interior, words he was made to swallow within 24 hours. Pasha then warned India to desist from trying anything similar as there would be a fitting reply from Pakistan, targets having been reconnoitered. In his haste to give this cheeky statement, Pasha gave yet another proof of ISI controlling terrorists - targets reconnoitered by goons like David Headley and Tahawwur Hussain Rana.

Coming to the question whether our Special Forces could have undertaken a similar raid?

It is very much possible if our boys had landed in the same compound but could they have landed there? Not at all, in the absence of national will and also because we throttled the concept of HUMINT (human intelligence) since Prime Minister Gujral's time. Such operation cannot be undertaken purely based on TECHINT (technical intelligence) even though the Director of CIA, Leon Panetta claims that the US was not sure whether Osama was present. If the US was not 200 per cent sure about Osama's presence, the raid would never have gone in.

Notwithstanding this, covert actions to arrange interviews with God are possible. We need to build both the political will and military will. Our Special Forces come into focus periodically when

incidents like the attack on the Parliament, 26/11 etc occur. There are calls for revisiting our Special Forces but the end result will be only unwarranted expansion in complete disregard to global norms.

The projected expansion rate in the US Special Forces Command (SOCOM) is 3.5 per cent for 2012, a special sanction is being sought to hike it to 4.12 per cent. In 2000-03, our Army Special Forces expanded by about 110 per cent. This year, we have gone and raised the eighth Special Forces unit, causing a manpower shortage of 80-90 personnel in all the Special Forces units. Already, India's Special Forces are at par in numbers with SOCOM, considering two-third strength of SOCOM is "in support" role comprising civilians and military.

Our Army Special Forces are short of manpower, officers, critical equipment like night vision and surveillance devices, combat free-fall equipment, laser target designators, etc.

Having sponsored terrorism in India for over two decades, Pakistan is becoming extremely jingoistic, increasing her nuclear toys, tacit Chinese support to *jihadi* policies and impending US withdrawal from Af-Pak region - even though complete withdrawal by 2014 is questionable.

Pakistan has no right to even meddle in Kashmir. The first ever opinion poll of its kind both sides of the line of control (LoC) in J&K was conducted by the Royal Institute of International Affairs (Chatham House), UK, in conjunction with the King's College during 2009-10 at the behest of Libya and Pakistan. The results established that 98 per cent of people in J&K do not wish to be part of Pakistan and 50 per cent of people in POK do not wish to remain with Pakistan. Keeping a dialogue open, should not imply that India should not call Pakistan's bluff. Let us heed Chanakya who said, "Do not be very upright in your dealings for you would see by going to the forest that straight trees are cut down while crooked ones are left standing." **SP**



Pasha (right) with Gen Kayani

An opinion poll conducted by the Royal Institute of International Affairs, UK, established that 98 per cent of people in J&K do not wish to be part of Pakistan and 50 per cent of people in POK do not wish to remain with Pakistan



US outlines international cyber security strategy

The US Government has proposed to create international computer security standards with penalties for countries and organisations that fall short. While administration officials did not single out any countries in announcing the strategy, several officials said privately that the hope was that the initiative would prod China and Russia into allowing more Internet freedom, cracking down on intellectual property theft and enacting stricter laws to protect computer users' privacy.

The strategy calls for officials from the State Department, the Pentagon, the Justice Department, the Commerce Department and the Department of Homeland Security to work with their counterparts around the world to come

up with standards aimed at preventing theft of private information and ensuring Internet freedom. A fact sheet released by the White House also promised that the US would respond to attempted hacking "as we would to any other threat to our country."

The international cyber security strategy has seven principles – economic engagement, protecting networks, law enforcement, military cooperation, multi-stakeholder Internet governance, international development and Internet freedom.

The presentation of the cyber security presented several principles, outlined the approach the US intends to take in the further development of cyber security protections, and indicated how the US might use the Internet to preserve its status as a superpower in the world.

Hilary Clinton said that cyber crime, Internet freedom and network security could no longer be "disparate stovepipe discussions." **SP**



Close cooperation with India on cyber security: US

The United States is having close cooperation with India on cyber security, according to Christopher Painter, the State Department Co-coordinator for Cyber Issues.

He said the two countries were talking about how to exchange information, cooperate in securing networks, and fighting cyber crime. "That's a global effort that requires countries like India to work together with us in reaching that result. So there's been very robust cooperation around that. And I've also been to India – not recently but I've been there a couple of years ago – and I've met with Indian officials here. So this is something we take very importantly," he said. **SP**

Government constitutes committee to fight cyber crime

The government has constituted a high-level committee which will be governed by R. Chidambaram, Principal Scientific Adviser, and it will guide in developing technologies to protect vital government portals and online resources. The committee came into force when the Central Bureau of Investigation (CBI) website was hacked and shut down by a group identified as the 'Pakistani Cyber Army'.

The committee has objectives to create firewalls and put in place adequate security measures that will make it impossible for others to penetrate countries databases. Moreover the committee is working on the project to design micro unmanned aerial vehicles that could provide help to forces fighting insurgency.

S. Sundaresh, a distinguished Scientist of Defence Research and Development Organisation, was reported as saying that India's military has the capability to detect any suspected intrusion by low-flying aerial vehicles, similar to what happened during the recent operation by the US Navy SEALs in Abbotabad, Pakistan. **SP**

India trains African officials on cyber crime detection

India is imparting training in capacity building and skill development to several African nations. About 450 individuals have participated in various programmes organised by different Indian institutes, be it cyber crime detection or new methods of drug law enforcement, etc.

These specialised courses were designed for African countries taking into account local conditions and were conducted at the Central Bureau of Investigation Academy in Ghaziabad, Uttar Pradesh and the National Academy of Customs, Excise and Narcotics, Faridabad, Haryana. "Three new courses on police investigation skills were designed keeping in mind the requirements of the African nations," said Gurjit Singh, Joint Secretary, Ministry of External Affairs. **SP**

Lockheed Martin data secure

On May 21, Lockheed Martin detected a significant and tenacious attack on its information systems network. The company's information security team detected the attack soon, and took aggressive actions to protect all systems and data.

Lockheed Martin said that "as a result of the swift and deliberate actions taken to protect the network and increase IT security, our systems remain secure; no customer, programme or employee personal data has been compromised."

Throughout the ongoing investigation, Lockheed Martin has continued to keep the appropriate US Government agencies informed. The team continues to work around the clock to restore employee access to the network, while maintaining the highest level of security. "To counter the constant threats we face from adversaries around the world, we regularly take actions to increase the security of our systems. Our policies, procedures and vigilance mitigate the cyber threats to our business, and we remain confident in the integrity of our robust, multi-layered information systems security." **SP**



RFI/RFP/TENDERS

Indian Army

RFI: **Dual technology mine detectors**

Branch: E-in-C Br

Publication date: March 21

Last date: June 30

Tender: **For civil charter flights on Delhi-Thoise-Delhi sector**

Branch: ADG

Publication date: May 19

Last date: June 13

Tender: **Fielding two Sangram wargaming modules**

Branch: Army War College

Publication date: May 19

Last date: June 18

Source: www.indianarmy.nic.in

Indian Navy

RFP: **Supply of J-24 sailing boat with accessories**

Branch: INS Jarawa, Port Blair

Publication date: April 10

Last date: June 10

RFI: **Movable covers for Surya Dock**

Branch: Naval Shipyard, Visakhapatnam

Publication date: May 5

Last date: June 5

Source: www.indiannavy.nic.in

Indian Air Force

Tender: **Supply of IL-78 aircraft spares Air Headquarters, MoD**

Publication date: March 10

Last date: June 9

Tender: **Supply of Pechora spares**

Air Headquarters, MoD

Publication date: March 10

Last date: June 9

Ministry of Home Affairs

Tender: **Deep search mine detector CISF**

Publication date: May 10

Last date: June 8

RFP: **Supply of telephone call interception system**

Police Modernisation Division

Publication date: April 29

Last date: June 16

Airborne Systems develops one-time ram air parachute

Airborne Systems, world leader in the design, development and technology of military parachutes and aerial delivery systems, announced a new addition to its family of guided precision aerial delivery systems (GPADS), with the first military application of a one-time, low-cost (disposable) ram air parachute.

The parachute gives commanders in the field greater operational flexibility, as it does not need to be recovered. It also reduces the equipment cost of providing aerial supplies using GPADS, a system which enables supplies to be flown autonomously and with precision to the programmed landing point. The one-time pre-packed parachute has the identical characteristics as the 2kFireFly parachute. **SP**



Centurion Naval decoy launcher

Centurion – an innovative, fully trainable Naval decoy launcher which represents a step increase in ship protection, has been launched. With expertise in manufacturing and improving anti-ship missile defence (ASMD) decoys for larger ships and to further increase the probability of defeating the incoming missile, it is necessary to accurately place the counter-measure payloads in a pattern in the sky.

Centurion is capable of carrying 12 x 130mm rounds, the NATO standard for naval decoys, and the whole assembly is enclosed within a radar cross section (RCS) reduction cover. The launcher design allows other calibre munitions to be accommodated. **SP**



New Xaver 400 Software Release

Camero has recently released new versions of its Xaver products and also a new software version for the Xaver 400. The new version includes an improved user interface, wider field of view and increased system performance.

The Xaver 400 allows for quick location of people hidden by walls and barriers, enabling tactical teams to step into the known and obtain mission-critical information. The Xaver 400 is a compact, lightweight and durable personal device, optimised for the speed of tactical entries. **SP**

Morpho launches multimodal technology for identification

Morpho (Safran group) has introduced MorphoAccess VP Series, the world's first range of physical access control terminals integrating its ground-breaking multimodal technology combining finger vein and fingerprint biometrics.

Suitable for authentication or identification, these terminals bring the benefits of finger vein/fingerprint multimodality to physical access control systems. This new multimodal technology guarantees unrivalled levels of security, accuracy and performance as compared with monomodal biometric devices. Morpho's terminals are PoE (Power over Ethernet) and wi-fi capable and have received FBI PIV-IQS and IP 65 certifications.

"We are proud to be a step ahead of the competition, bringing the first multimodal vein and fingerprint device to the physical access control market," said Jean-Paul Jain-sky, Chairman and Chief Executive Officer of Morpho. **SP**



DRS Defense Solutions earns CMMI maturity level 3 rating

DRS Defense Solutions, LLC has been appraised as fully compliant at a Capability Maturity Model Integration (CMMI) maturity level 3 for system engineering in addition to hardware and software engineering.

The CMMI rating is a critical evaluation factor in the acquisition of military programmes with significant engineering development content. The Maturity Level 3 rating confirms that DRS Defense Solutions has established effective, well-defined systems, hardware and software development processes that meet all of the requirements for providing products to the Department of Defense for mission-critical applications.

"This achievement is a critical element in recognition of our engineering capabilities and demonstrates that we have the tools and processes in place to develop and integrate complex advanced systems," said Richard Danforth, President and CEO of DRS Defense Solutions. SP

DRS Defense Solutions is largest worldwide provider of iGT hubs

DRS Defense Solutions announced that its Global Enterprise Solutions (GES) line of business has reached a major milestone in becoming the largest worldwide provider of iDirect Government Technology (iGT) hubs to US Government and defence customers.

"This accomplishment reflects our dedicated efforts to provide the latest and best services to both our customer and the end-user," says Dr. Mitch Rambler, President of DRS Technical Services, the business unit containing GES. "Our continued strategic growth and partnership with iGT ensures that the Department of Defense has access to high-performance, mission-critical satellite capabilities."

iGT satellite hubs allow customers to operate a shared bandwidth platform spanning multiple satellites, bands and transponders while simultaneously supporting a variety of topologies including mesh, star, single channel per carrier (SCPC) and hybrid networks. SP

Rolta revenues up by 16 per cent

Rolta India Limited, one of India's leading IT companies, specialising in Enterprise Geospatial & Defense Solutions (EGDS), Enterprise Design & Operation Solutions (EDOS), and Enterprise IT Solutions (EITS), announced that it had a consolidated revenue for Q3 2011 at ₹4.6 billion against ₹3.95 billion in the corresponding quarter in 2010, registering a year-on-year growth of 16.7 per cent. The consolidated profit after tax was ₹840.4 million against ₹671.0 million for the corresponding periods, registering a year on year growth of 25.3 per cent.

K.K. Singh, Chairman and Managing Director, said: "At Rolta, we have continuously striven to enhance our value proposition for our clients. Some recent wins are testimony to the success of our IP-centric solutions strategy. The company is now starting to monetise its investments in IP, and we expect to accelerate our progress along this path." SP

Terma expands activities in Asia

Defence and security company Terma marks the expansion of its business activities and opens its new office in Singapore emphasising the company's strong focus on the Asian market. Terma opened its first office in Singapore in 2007 to support the growing radar business. Since then, Terma has experienced a strong surge of orders and interest from Asian customers.

Corporate Vice President, Customer & Markets, Jørn Henrik Levy Rasmussen, said, "Terma holds a strong position, and we are focused on strengthening our international setup to support our customers in the region. For Terma, the customers are always our highest priority, and we look forward to expanding existing relationships and partnerships while building new ones." SP

SECURITY EVENTS

ArmorCon Military Armor Conference

6-9 June
Sheraton Premiere, Vienna, USA
www.ArmorConExpo.com

Network Centric Warfare Europe 2011

7-9 June
Marivaux Hotel, Brussels, Belgium
www.ncweurope.co.uk/Event.aspx?id=472972

Undersea Defence Technology 2011

7-9 June
ExCeL London, UK
www.udt-europe.com

Soldier Technology 2011

7-10 June
Olympia Conference Centre, London, UK
www.soldiertechology.com

Air Mission Planning

8-9 June
Cophthorne Tara Hotel, London, UK
www.smi-online.co.uk/airmission-planning2.asp

INDESEC 2011

20-22 June
Pragati Maidan, New Delhi
www.indesec-expo.com

Future Artillery India

20-22 June
Le Méridien New Delhi, India
www.FutureArtilleryIndia.com

Military Vehicles Canada

27-29 June
The Ottawa Convention Centre, Ottawa, Ontario, Canada
www.militaryvehiclescanada.com

International Defence Logistics and Support Conference

27-29 June
La Plaza, Brussels, Belgium
www.wbresearch.com/internationaldefencelogistics/home.aspx

Cyber Warfare & Security Summit

27-29 June
Washington Marriott Wardman Park, Washington DC Metro Area, USA
www.cyberwarfareevent.com

MAST Europe 2011

27-29 June
Parc Chanot, Marseille, France
www.mastconfex.com



US nuns go to jail for military break-in

As the US launched its 'shock and awe' bombing offensive in Iraq in October 2002, three Dominican nuns and members of Earth & Space Plowshares, a national disarmament organisation, broke into Minuteman III missile site in Colorado. Armed with hammers and prayers, the nuns poured their blood in the shape of a cross and pounded on the half-tonne concrete silo lid with a household hammer. They were in the silo for about an hour before the military police arrived and took them into custody.

In 2003, the nuns were charged and convicted of malicious destruction of property and interfering with national defence. The three nuns were Sister Jackie Hudson, Sister Carolyn Gilbert and Sister Ardeth Platte. Testifying at their trial, the nuns said their act was one of 'symbolic disarmament' and was not a threat to national defence. **SP**

Czech top brass embarrassed by breach at military HQ

The Czechoslovakian Defense Minister and the General Staff's office have conceded that a decision to remove the military police guard from the military headquarters was wrong after an embarrassing July break-in at the offices on Vítězné náměstí in Prague.

"Yes, we consider the decision to withdraw the military police who guarded the seat of General Staff in Prague as a bad decision," said Mira Trebická, spokeswoman for the chief of the Czech Army General Staff. Trebická said the only stolen objects were four memorial coins worth 1,000 Kc (\$51), while Vondra said it was important that the thieves did not get into the offices of Chief of General Staff Vlastimil Písek.

However, there was media speculation that the real motive behind the break-in was not the theft of coins but classified documents relating to military tenders. **SP**



Afghan intruder at Sandhurst

In 2009, a 20-year-old Afghan sneaked into the world famous military academy – Sandhurst – dodging security. Reports said that he got on to an Army coach, probably at Calais, as the bus headed to Britain from an Army base in Germany. He dodged Britain's border controls at Dover and travelled amid a group of officers who did not notice him until the vehicle was inside Sandhurst.

A military source, reported UK media, that this was a serious breach of security and that if he had smuggled a bomb inside Sandhurst, it would have been catastrophic. **SP**



Parajumper catches security off-guard at London Eye

Standing atop the London Eye dressed in a Milk Tray man outfit and waving at a crowd gathered below, he was as evident as the huge wheel. Seconds later he made the ultimate spectacle of himself by leaping from the 443 ft wheel and parachuting to the ground as passers-by looked on in awe. Gary Connery managed to carry off his breathtaking stunt without being spotted by the eight security guards on duty.

Father of two, Connery managed to sneak onto the base of the central London wheel. After reaching the top, he unfasted himself and signalled to his family, friends and photographers watching below before hurling himself off. **SP**

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