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MILITARY/Viewpoint 9
Special Forces meeting nation's
future challenges

[LT GENERAL (RETD) P.C. KATOCH]

AEROSPACE 10
News Updates

C-130 Hercules is widely used for special ops

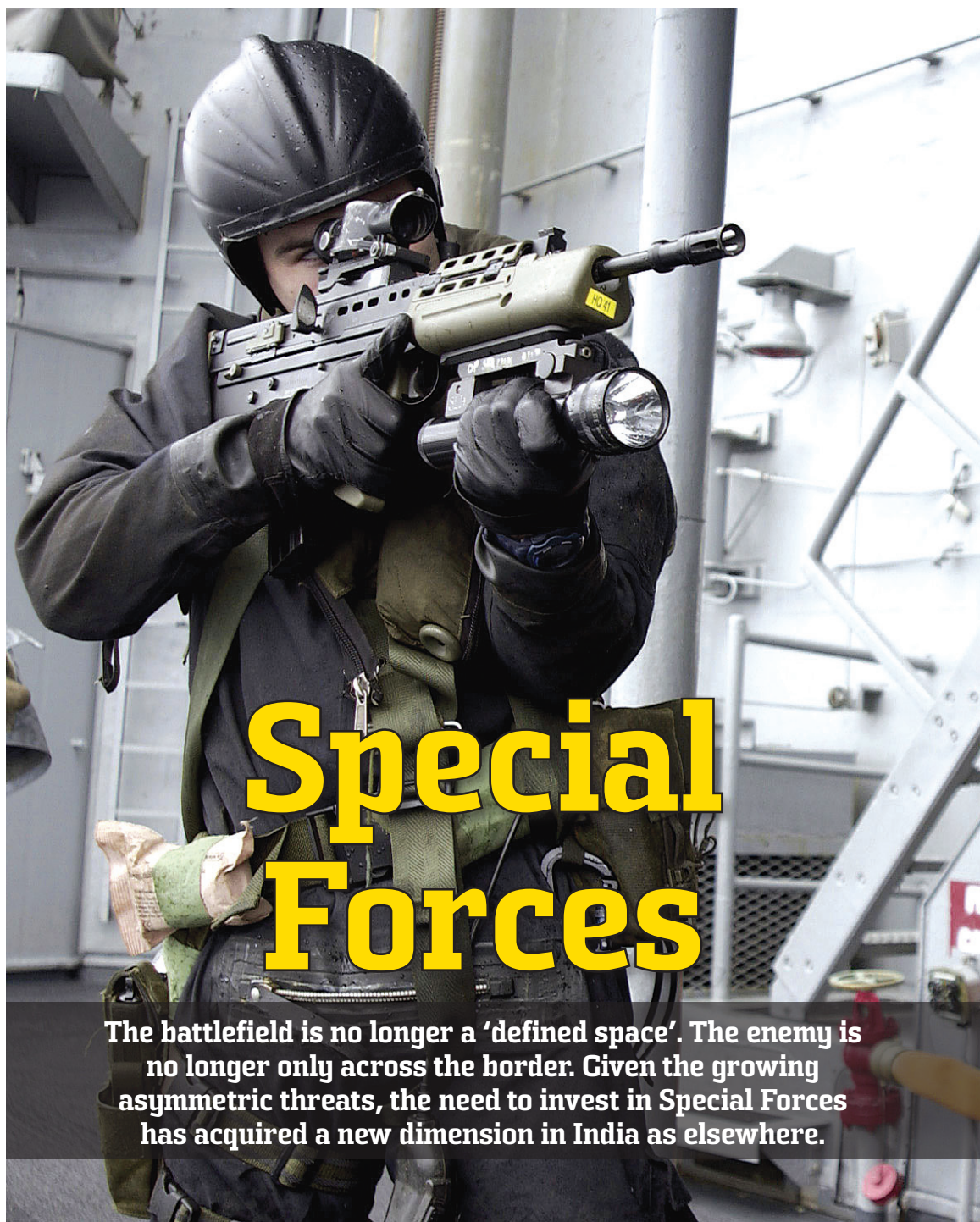


AEROSPACE 12
Unmanned Vehicles

AEROSPACE 13
Interviews

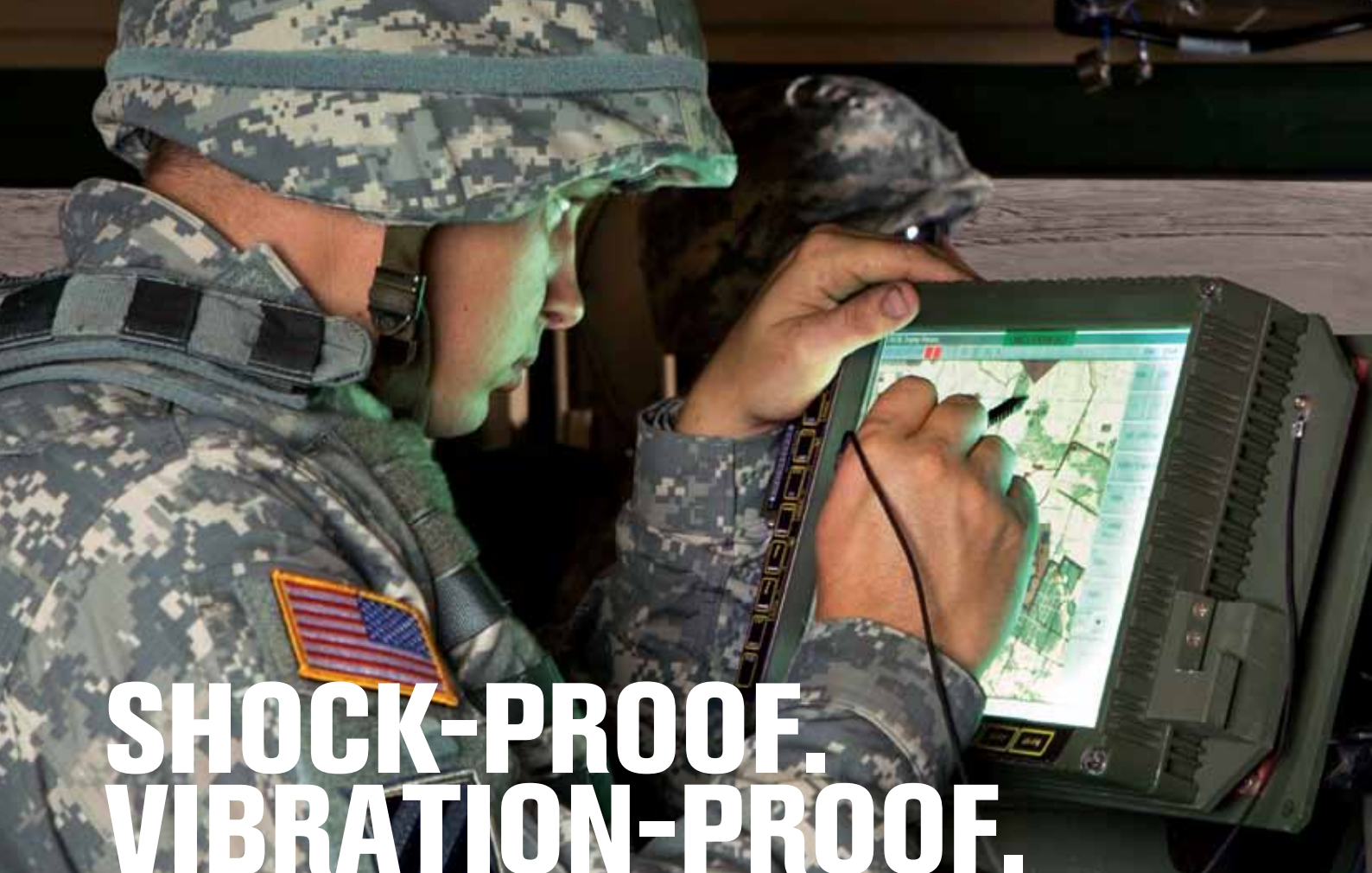
INTERNAL SECURITY 14
News Updates

INTERNAL SECURITY 19
Cyber Updates



Special Forces

The battlefield is no longer a 'defined space'. The enemy is no longer only across the border. Given the growing asymmetric threats, the need to invest in Special Forces has acquired a new dimension in India as elsewhere.



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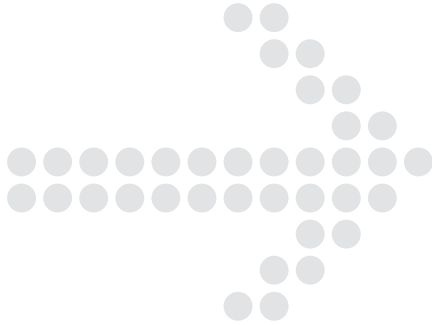
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MILITARY

- 5 | Updates
- 9 | Viewpoint

AEROSPACE

- 10 | Updates



- 12 | Unmanned Vehicles
- 13 | Interviews

INTERNAL SECURITY

- 14 | Updates
- 18 | Insight
- 19 | Cyber
- 22 | Breaches

+ DEPARTMENTS

- 4 | From the Editor's Desk
- 20 | News & Events



Cover:

The battlefield is no longer a 'defined space'. The enemy is no longer only across the border. Given the growing asymmetric threats, the need to invest in Special Forces has acquired a new dimension in India as elsewhere.

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Special Forces key in emerging security scenario

The other day at the inauguration of the liaison office of Raytheon International in New Delhi the emphasis on homeland security was pronounced. Post-26/11 terrorist attack on Mumbai, the government has accorded high priority for internal security and accordingly global defence and homeland security companies have repositioned themselves to create and capture the nascent market here.

In the budgetary allocations, Finance Minister Pranab Mukherjee understandably increased the outlays for both defence and internal security. Defence capital expenditure has been raised to ₹69,199 crore in line with major military modernisation programmes. Similarly, the Home Ministry is getting 17 per cent hike – outlay of ₹55,469 crore and some of the programmes include enhancing coastal security and border control; special infrastructure in Naxalite-affected areas; crime and criminal tracking network system, etc.

What this clearly indicates is the stress on Special Operation Forces to deal with asymmetric threats that have become the modus operandi of elements opposed to national security. Understanding the gravity of the enveloping scenarios, SP Guide Publications has associated itself with the Centre for Joint Warfare Studies (Cenjows) in organising a two-day seminar on “Employment of Special Forces: Challenges and Opportunities for the Future” in Delhi on March 10 and 11.

In this issue, we have elements focusing on Special Operation Forces and how they are involved in a wide variety of tasks. The latest being the dispatch of special forces teams to strife-torn Libya to bring back home stranded nationals. Meanwhile, homeland security, per se, is getting defined and bringing home this point is Lt General Katoch who underlines the importance of a national security strategy. Special Forces, he opines, must be continuously employed to shape the battlefield; conventional wars in nuclear backdrop to asymmetric and fourth generation wars. Their employment should be theatre specific and as force multipliers to complement tasks performed by conventional forces.

SP's M.A.I. has taken extracts of the address of Shivshankar Menon, the National Security Advisor to the Prime Minister at

the Asian Security conference recently where he explains how Asia's pattern of growth and her physical and economic security will be linked to the rest of the world. This makes Asia's connectivity critical, hence, the need to assure security of maritime communications, cyber space and outer space. Asia is witnessing latent and explicit competition and contention, a build-up of national offensive and defensive capabilities which in other areas would be called an arms race.

Talking about arms race, we have the latest report by the Stockholm International Peace Research Institute (SIPRI) which points to an increase in total arms sales of the Top 100 of the world's largest arms-producing companies to touch \$401 billion, an increase of 8 per cent. Arms sales of the Top 10 arms-producing companies approached \$228 billion, which is 56.9 per cent of the SIPRI Top 100 total arms sales in 2009.

In its third issue, SP's M.A.I. is warming up to the global homeland security scenario and would appreciate feedback from the industry to ensure effective information flow in a sensitive sector. **SP**

Jayant Baranwal
Publisher and Editor-in-Chief



SIPRI releases Top 100 arms producers

Despite the continuing global economic recession in 2009, the total arms sales of the SIPRI Top 100 of the world's largest arms-producing companies increased by \$14.8 billion from 2008 to reach \$401 billion, a net increase of 8 per cent, according to new data on international arms production released by the Stockholm International Peace Research Institute (SIPRI).

Arms sales of the Top 10 arms-producing companies approached \$228 billion, which is 56.9 per cent of the SIPRI Top 100 total arms sales in 2009.

"US government spending on military goods and services is a key factor in arms sales increases for US arms-producing and military services companies and for Western European companies with a foothold in the US arms and military services market," states SIPRI arms industry expert Dr Susan Jackson.

Major regional differences

Of the SIPRI Top 100 arms-producing companies, 78 are based in the United States and Western Europe. These companies generated \$368 billion in total arms sales, which is 91.7 per cent of the total arms sales of the SIPRI Top 100 arms producers in 2009. Excerpts:

- 45 of the SIPRI Top 100 are based in the USA. These companies generated just under \$247 billion in total arms sales, which is 61.5 per cent of the SIPRI Top 100 arms sales.
- 33 of the SIPRI Top 100 are based in nine Western European countries (Finland, France, Germany, Italy, Norway, Spain, Sweden, Switzerland and the UK). These companies generated \$120 billion in total arms sales, which is 30 per cent of the SIPRI Top 100 arms sales.
- 26 of the top Western European arms producers are based primarily in four countries: France, Germany, Italy and the UK.
- 10 of the SIPRI Top 100 are based in Asia (3 in India, 4 in Japan, 1 in Singapore, 2 in South Korea), excluding China, and 5 in the Middle East (3 in Israel, 1 in Kuwait, 1 in Turkey). The SIPRI Top 100 companies in these two regions generated \$24 billion in combined arms sales, which is 6 per cent of the SIPRI Top 100 arms sales in 2009.
- None of the companies in the SIPRI Top 100 in 2009 are based in Latin America or Africa.

Three Indian companies in 100

Hindustan Aeronautics Limited (HAL) is ranked 45th with arms sales of \$1,950 million. The other two companies are Indian Ordnance Factories (rank 49) with arms sales of \$1,700 million and Bharat Electronics (rank 70) - \$870 million. HAL has retained its ranking while Indian Ordnance Factories moved up to 49 from its previous 55 and BEL went down to 70 (from 67). **SP**

Military robot market to exceed \$8 billion in 2016: ABI study

The global market for military robotics is expected to grow from \$5.8 billion 2010 to over \$8 billion in 2016, according to a study by ABI Research.

The study points that defence robots, unmanned aerial vehicles (UAVs), unmanned ground vehicles (UGVs) and unmanned underwater vehicles (UUVs) which supplement humans in battle-field situations are increasingly being used by militaries all over the world.

Between 50 and 80 countries either already utilise defence robotic systems, or are in the process of building or acquiring the technology to incorporate them into their military programmes.

Larry Fisher, Research Director of NextGen, ABI Research's emerging technologies research incubator, said, "While the use of semi-autonomous or autonomous robots can improve military efficiency, accuracy, and operational performance, the overriding ROI for these systems is the ability to reduce the likelihood of injury or death."

The key drivers for the defence robotics market include the strong desire to reduce or prevent military casualties in the field of operations; changes in the tactics of warfare requiring new reconnaissance, combat and task machinery, and tools; the need to reduce military spending; and developments in the fields of materials science, computer programming and sensing

technology to help create more advanced robots.

Fisher added: "ABI Research projects that the market for military robots will remain healthy throughout the forecast period and beyond, with even greater opportunities opening up by the end of the decade, driven by technological advances and a growing, real-world track record of tangible benefits offered by these systems." **SP**





India, US and UK send “special forces” to Libya to evacuate its nationals

In the ongoing crisis in strife-torn Libya, special forces have been dispatched by the US, Britain, India among others to evacuate its nationals. Nearly 7,000 Indians have returned in batches from Libya on special flights of Air India.

“Arrangements have been finalised with Libya to receive three special flights daily from India at Tripoli over the next ten days. In addition, we are exploring possibilities of establishing air bridges with Sirte and Sebha in Libya. This should appreciably speed up the process of evacuating our nationals from Libya,” the Ministry of External Affairs (MEA) spokesperson said. He added that the ship *Scotia Prince*, which had docked at Benghazi set sail for Alexandria, Egypt, with an estimated 1,188 Indian nationals on board. Besides, *INS Jalashwa* and *INS Mysore* have also been pressed into the special task.

There are around 18,000 Indians in Libya. *INS Jalashwa* is the largest available ship with the Indian Navy, which can be used for carrying out humanitarian efforts of this kind. The

over 27,000 tonnes ship can carry more than 1,000 passengers and has adequate medical facilities.

INS Jalashwa and *INS Mysore* have been specially equipped for the task with full medical facilities such as operation theatre, doctors and paramedics. The ships are also carrying helicopters and a contingent of marine Special Forces personnel. The ships will evacuate Indian nationals from Libya to either Malta or Egypt, from where they will be transferred by air to India.

Similarly, UK pressed into service its Special Forces. It is reported in the *Daily Telegraph* that the Special Forces arrived in Libya on commercial airlines, disguised as business passengers. The report said the special forces retrieved the ‘Red Box’ container of weapons and other equipment from the British Embassy in Tripoli.

The extraction teams then flew into the desert oil facility of Nafora before splitting up and heading to Amal and Wafa. They then collected around 150 oil workers and escorted them towards two airfields south of the rebel held city of Benghazi.

According to unconfirmed reports, the US has sought assistance of the British Special Forces in locating chemical weapons in Libya. The US Defense Secretary Robert Gates revealed that the US military had deployed two warships and 1,200 Marines. SP



MBDA bags order to deliver systems on combat vehicles

MBDA has signed a contract with an export customer for whom it will integrate air defence system’s turrets, missile launchers and firing controls onto high mobility armoured vehicles.

The new multi-purpose combat vehicles (MPCVs) will be integrated within the customer’s existing air defence architecture which is based on already in-service systems deploying MBDA’s Mistral missile. MPCV will add a number of inherent qualities such as its fire power, reactivity, its protection of personnel as well as its operational coverage. The first series production MPCV vehicle should be delivered as of 2013.

Antoine Bouvier, Chief Executive Officer of MBDA, said, “The

MPCV programme illustrates how MBDA can optimise the investments already made by its customers. Starting from the base of a market standard such as Mistral missile of which some 17,000 have already been produced, we have devised an easy-to-use and highly automated system which significantly increases the capabilities of the missiles already in service with our customers”. SP

Thailand takes delivery of Gripen fighters

The Royal Thai Air Force (RTAF) has taken delivery of six Gripen C/D fighters, of the 12 it had ordered. The aircraft are based at Surat Thani in southern Thailand.

The six Gripen fighters are part of an intergovernmental business transaction where FMV, the Swedish Defence Material Administration, representing the Government of Sweden, supplies an integrated air-defence system based on products manufactured by Saab. The new air-defence system consist of Gripen, the airborne early warning system Saab 340 Erieye AEW and a command & control system. SP





Black Hawk programme, training in US and refit in Al Ain

Abu Dhabi Aircraft Technology (ADAT) has signed a breakthrough deal with Sikorsky Aircraft Corp., a subsidiary of United Technologies Corp., which will see ADAT jointly develop and implement the weapons system programme for the Black Hawk helicopter fleet flown by the UAE's special operations command.

ADAT announced a deal to equip 23 of the 40 strong fleet with essential weapon systems enabling the Black Hawk helicopters to conduct a wide range of operations, including search and rescue, without air assault support. The contract includes options for the remaining 17 aircraft.

The contract will see a significant number of ADAT engineers working at Sikorsky headquarters in the United States as part of the three-year research and development phase. The joint team will establish how to integrate these cutting-edge weapons systems into the Black Hawk helicopter and ultimately transfer capability to the UAE enabling potential support for other customers in the future. During the second phase, the actual refit will occur in Al Ain. **SP**

IDEX concludes on optimistic note

The record-breaking 10th International Defence Exhibition (IDEX 2011) concluded recently in Abu Dhabi on an optimistic note. IDEX spokesperson Major General Obaid Al Ketbi said that major defence deals were signed including the contract with Emirate Systems for implementing C4I command and control system at a total value of \$550 million and AED 800 million contract with Abu Dhabi Ship Building for purchasing Ram missiles.

The show saw major launches by UAE companies the Caracal H type – a high performance single action pistol aimed primarily at the sporting market and developed by Caracal International's in-house design team. Caracal also exhibited its first line of rifles with both hunting and defence applications.

NIMR Automotive, the first UAE defence manufacturer to produce a range of land vehicles specifically designed for active military applications, also showcased its vehicle range from 6x6 armoured personnel carriers and armoured patrol vehicles, to heavily and lightly armoured 4x4 command and recon vehicles – all built for high endurance in demanding desert terrain and extreme weather conditions. Their 6x6 short wheel base platform vehicle, launched by Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, is the first defence vehicle platform designed and manufactured in the UAE. **SP**

Joint US-Israel Arrow weapon system intercepts target

The joint US-Israel Arrow weapon system successfully intercepted a ballistic target missile during a flight test conducted recently. This test is part of the Arrow system improvement programme (ASIP) and was conducted jointly by the Israel Missile Defense Organization and the US Missile Defense Agency.

The target missile was launched from a mobile launch platform (MLP) off the coast of California, within the Pt. Mugu test range. The target was representative of potential ballistic missile threats facing Israel.

The radar successfully detected and tracked the target and transferred information to the Citron Tree battle management control system. The Arrow weapon system launched an interceptor missile which performed its planned trajectory and destroyed the target missile. The test represented a realistic scenario and all the elements of the weapon system performed in their operational configuration. **SP**



Cassidian to deliver 400 units of the "Future Soldier System" to the Bundeswehr

Cassidian has been commissioned by Germany's Federal office of Defence Technology and Procurement (BWB) to deliver a further 400 units of the Future Soldier System in its basic version (IdZ BS). This is part of an immediate procurement measure to meet the needs of the Bundeswehr forces deployed in Afghanistan in the context of the International Security Assistance Force (ISAF) mission. It means that another 400 Bundeswehr soldiers will be supported by the tried and tested soldier system for mission preparation and execution.

An IdZ BS system for equipping an infantry squad (ten soldiers) consists of an identical basic configuration for all soldiers (including modular bullet-proof vest in protection class I to IV, C4I equipment including NaviPad for situational awareness and transmitting messages, target data and images, night vision device, tactical radio) and various special items (such as laser range finder, camera, thermal image sighting device). **SP**



Elbit Systems awarded \$12.7 million order

Elbit Systems of America has been awarded a \$12.75 million delivery order for integrated helmet and display sight system (IHADSS) spares from the US Army tank-automotive and armaments command (TACOM).

This delivery order was issued pursuant to an indefinite delivery/indefinite quantity (IDIQ) contract awarded to Elbit Systems of America, under which a total of more than \$50 million in delivery orders have been issued to date.

The IHADSS system supports the Apache AH-64 attack helicopter mission by providing an advanced helmet mounted display and sighting system that provides heads up display and accurate line of sight to the pilot and co-pilot. Its capabilities and ease of use have resulted in a solid history of reliability, crew safety and mission success.

Elbit Systems of America President and CEO, Raanan Horowitz, commented, "Elbit Systems of America is pleased to provide continued support to the Apache helicopter team. We appreciate the confidence placed by the US Army in our quality and on-time delivery track record on the Apache IHADSS programme." **SP**

Harris Corporation receives \$14 million order from Brazil

Harris Corporation has received a \$14 million order from Brazil to provide Falcon III and Falcon II tactical radios. Brazil will deploy the radios in a range of humanitarian, security and disaster relief missions.

Harris will provide Brazil with the Falcon III RF-7800V very high frequency (VHF) hand-held combat net radio, which provides forward-deployed forces with wireless voice and high-bandwidth data communications. The RF-7800V transmits data at rates up to 192 Kbps over the 30 to 108 MHz frequency band at 50 watts of power, making it the fastest VHF combat net radio available.

Harris also will deliver its Falcon II high-frequency man-pack radio for enhanced secure beyond-line-of-site communications. HF radios are ideal for communicating in environments with restrictions on line-of-sight, such as mountainous or jungle regions. The radio covers the 1.6 Mhz to 30 Mhz frequency range. **SP**

Hawkei prototypes delivered to Australia

Thales Australia has delivered two prototypes of its groundbreaking Hawkei vehicle to Australia's Department of Defence. The vehicles are being submitted for verification and validation under the Department's LAND 121 Phase IV programme, which will replace part of the Army's fleet of Land Rovers with light protected mobility vehicles.

Chris Jenkins, Thales Australia's CEO, said "The Hawkei is an impressive vehicle that has been developed to meet the specific operational requirements of the Australian Defence Force." The



Hawkei is characterised by a large protected interior space for crew, equipment and stores, four doors for easy access, advanced technology for rapid armouring in the field; and straightforward reconfiguration between variants. **SP**

Northrop Grumman to upgrade infrared missile warning sensors

Northrop Grumman Corporation Electronic Systems will upgrade the US Navy AN/AAQ-24(V) large aircraft infrared countermeasures (LAIRCM) missile warning sensor by adding advanced threat warning capability under a \$34.9 million contract.

The AN/AAQ-24(V) LAIRCM is designed to provide missile-warning capability to protect large aircraft from infrared-guided, heat-seeking missiles—particularly those from shoulder-fired launchers like the US made Stinger Block 2 and Russian-made SA-14 missiles. The LAIRCM is a derivative of the AN/AAQ-24 Nemesis directional IR counter-measure (DIRCM) system. **SP**



LT GENERAL (RETD)
PC. KATOCH

Special Forces

meeting nation's future challenges

Absence of strategic culture in the Indian politico-bureaucratic combine has failed to capitalise on our Special Forces (SF) being employed optimally in furtherance of our national security interests. Little surprises, more than 63 years down the line from independence, we have neither defined a national security strategy nor our national security objectives despite sundry political statements that India's areas of strategic interests span the Straits of Malacca, Middle East, Commonwealth of Independent States countries, Indian Ocean Region and the like. Since incomprehension of present-day conflicts and foolhardy policies have led to total drying up of trans-border human intelligence, we rely on *New York Times* for information that some 11,000 Chinese are engaged in 14 development projects in Pakistan Occupied Kashmir (PoK).

SF have wide applications across the entire conflict spectrum. They are not mere tactical tools in conventional war as we think in India, but are most suited for controlled response along the escalatory ladder in the emerging strategic environment. With ample scope for employment in irregular conflict, terrorism, information, asymmetric and NBC warfare they should be central to asymmetric response, not necessarily engaging in direct physical attacks. The key lies in achieving strategic objectives through application of modest resources with the essential psychological component. Despite China's renewed aggressiveness, Pakistan's aggravating radicalisation and terror sponsoring, we fail to acknowledge the immense strategic value of irregular or asymmetric forces and have not created requisite deterrence to asymmetric threats. Inability to respond adequately to asymmetric approaches has earned us the label of a 'soft' state. Globally, SF are deployed abroad incognito but India waits for conventional war other than UN missions and the Indian Peace Keeping Force (IPKF) experience. Pakistan's SSG has been operating in Jammu & Kashmir, Afghanistan, Nepal, Bangladesh, acknowledging that SF do not create resistance

movements but advise, train and assist resistance movements already in existence. United States Special Forces (USSF) operates in some 200 countries today though fighting only in Afghanistan and Iraq. SF can perform diverse yet time critical missions with little or no signatures. Ideal response to asymmetric threats is adoption of a proactive strategy ensuring prevention of an attack. Indian SF number more than uniformed USSF but have only one-tenth their capabilities. Ignoring valid global norms, we have undertaken rapid expansions, diluting our capabilities. We have no national doctrine or philosophy for employment of SF, no institutionalised integration and no institutionalised synergised intelligence infrastructures.

SF must be continuously employed to shape the battlefield; conventional wars in nuclear backdrop to asymmetric and fourth generation wars. Their employment should be theatre specific and as force multipliers to complement tasks performed by conventional forces, entailing high risk and high gain missions having minimum visibility with desired effect. Shaping the battlefield is a continuous process covering the entire spectrum of conflict including in peace time as well. They must primarily look beyond our borders to nip asymmetric threats in the bud and to control the fault lines of our adversaries. Well-manned, well-equipped, well-trained, psychologically motivated SF capable of projecting a nation's power is one of the force multipliers of power play. They must be nurtured for full conflict spectrum capability. For rapid decision-making and coherent response to non-traditional challenges, we need a well worked out strategy for their employment, establishment of a unified command and control structure at the highest level, secure and seamless communication, enhanced inter-agency coordination for intelligence gathering, sharing and establishment of a national inter-agency intelligence database, etc. SF are a vital element of national power, possessing enormous freedom of action and should be fruitfully employed to successfully meet the future challenges. **SP**

We have no national doctrine or philosophy for employment of Special Forces, no institutionalised integration and no institutionalised synergised intelligence infrastructures



Boeing awarded USAF contract to build NextGen refuelling tanker

Boeing has received a contract from the US Air Force to build the next-generation aerial refuelling tanker aircraft that will replace 179 of the service's 400 KC-135 tankers. The contract calls for Boeing to design, develop, manufacture and deliver 18 initial combat-ready tankers by 2017.

In selecting the Boeing NewGen Tanker after a lengthy and rigorous proposal process, the Air Force has chosen an American-built, multi-mission tanker that is based on the proven Boeing 767 commercial airplane and meets all requirements at the lowest risk for the warfighter and the best value for taxpayers. The Boeing proposal was created by an integrated "One Boeing" team from various sites across the company, including employees from the commercial airplanes; defence, space & security; and engineering, operations and technology organisations.

The KC-46A tankers will be built using a low-risk approach to manufacturing by a trained and experienced US workforce at existing Boeing facilities. The KC-46A tanker also will fuel the economy as it supports approximately 50,000 total US jobs with Boeing and more than 800 suppliers in more than 40 states.

Based on the proven Boeing 767 commercial airplane, the KC-46A Tanker is a wide body, multi-mission aircraft updated with the latest and most advanced technology and capable of meeting or exceeding the Air Force's needs for transport of fuel, cargo, passengers and patients. It includes state-of-the-art systems to meet the demanding mission requirements of the future, including a digital flight deck featuring Boeing 787 Dreamliner electronic displays and a flight control design philosophy that places aircrews in command rather than allowing computer software to limit combat manoeuvrability. The NewGen Tanker also features an advanced KC-10 boom with an expanded refuelling envelope, increased fuel offload rate and fly-by-wire control system.



Boeing has announced that the US Air Force has exercised a \$21.7 million option for the company to continue supporting the B-52 Stratofortress bomber under an Engineering Sustainment Program (ESP) contract that Boeing received in June 2009.

Under the terms of the \$750 million, 10-year ESP contract, Boeing will continue to perform engineering assignments that maintain the B-52 as a ready, reliable and viable asset to the Air Force. **SP**



New chief test pilot for Lockheed Martin F-35 programme

Alan "Al" Norman, a veteran Lockheed Martin experimental test pilot, has been recently named Chief Test Pilot for the F-35 Lightning II programme.

Norman replaces former F-35 Chief Test Pilot Jon Beesley, who retired on January 31. Prior to joining Lockheed Martin in 1999, Norman served in the US Air Force for 23 years as a fighter pilot and test pilot. In 1999, he left active duty and became an experimental test pilot for Lockheed Martin on the F-22 programme at Edwards Air Force Base, California. Norman tested all aspects of the fifth generation fighter's flight regime while in the Combined Test Force at Edwards. In addition to flight test and production work on the F-22, he performs production and test work on all models of the F-16. He is also Lockheed Martin's Chief Pilot for the T-50 programme. Norman has over 6,000 hours of flying time in more than 70 different aircraft. **SP**



C-130 Hercules in Libyan operation

The UK Ministry of Defence has confirmed that a Royal Air Force C-130 Hercules transport aircraft has left Libya with 64 passengers and a dog.

The MOD said that the RAF C-130 Hercules departed Tripoli with 52 British passengers on board (including one dog), and 13 other entitled passport holders, bound for Malta. A second C-130 has been deployed to Malta and stands ready to assist if required.

HMS Cumberland has docked at the Libyan port of Benghazi and is currently preparing to carry out the evacuation of British nationals. **SP**

Northrop Grumman's E-2D Advanced Hawkeye completes landing aboard USS Truman



The Northrop Grumman Corporation-built E-2D Advanced Hawkeye, the U.S. Navy's newest airborne early warning and command and control aircraft, has landed on the USS Harry S. Truman (CVN 75) and begun carrier suitability testing.

With 99 per cent of radar testing complete, the purpose of this phase of testing is to assess the aircraft's effectiveness in an operational environment. While onboard the Truman, all aspects of aviation/ship integration will be addressed, including logistics, manpower and interoperability, as well as catapult and arrested landing structural tests.

"This first landing of an E-2D Advanced Hawkeye on a carrier deck is a very proud moment for the entire Hawkeye team," said Jim Culmo, Vice President, Airborne Early Warning & Battle Management Command and Control Programmes, Northrop Grumman. "We're one step closer to delivering this revolutionary weapon system to the warfighter, a milestone the team has been working towards since Delta One took to the skies for the first time in August 2007. As the Navy kicks off its Centennial of Naval Aviation next week, Northrop Grumman continues to be committed to providing this critical first line of defence well into the 21st century."

"This new platform features state-of-the-art radar with a two-generation leap in capability and upgraded aircraft systems," said U.S. Navy Capt. Shane Gahagan, Hawkeye, Advanced Hawkeye and Greyhound Programme Office. "The E-2D continues the Navy's integrated war fighting legacy by providing broad area coverage resulting in increased range capabilities. With the E-2D's enhanced ability to work in the littoral areas and over land, the platform provides a critical capability to protect our nation's interests." **SP**



GA-ASI and ICG sign agreement to meet UAE surveillance needs

General Atomics Aeronautical Systems, Inc. (GA-ASI), a leading manufacturer of Unmanned Aircraft Systems (UAS), tactical reconnaissance radars, and surveillance systems, has signed a Memorandum of Understanding (MoU) with International Golden Group (IGG), a leading supplier of integrated defence systems in the Middle East, to offer the Predator XP UAS to meet the surveillance needs of United Arab Emirates (UAE).

"GA-ASI's establishment of a working relationship with IGG represents a strategic commitment by both companies to help the UAE strengthen



its national security and protect critical infrastructure," said J. Neal Blue, Chairman and CEO, GA-ASI. "IGG's proven expertise in providing comprehensive defence equipment solutions to the UAE marketplace is a strong complement to GA-ASI's leadership in intelligence, surveillance, and reconnaissance (ISR) technologies." Fadel Al Kaabi, CEO, IGG, said, "IGG recognises that the search for excellence is the key to our success and this drives us to achieve more—not only on behalf of our customers, but also on behalf of our international partners." Khalifa Al Baloushi, Deputy CEO, IGG, added, "We are looking forward to expanding in the region and continuously improving systems to meet the requirements of different end-users." **SP**



Schiebel delivers Camcopter S-100 UAS to Jordan

Following contract award in July 2010, Schiebel has delivered two Camcopter S-100 Unmanned Air Systems (UAS) to the King Abdullah Design and Development Bureau (KADDB) of Jordan. The UAS will form a key part of the Jordanian Armed Forces (JAF) Reconnaissance Squadron, as KADDB is an independent governmental military-civilian agency existing within the JAF tasked with operating to best commercial practices with predetermined performance targets. The unrivalled helicopter UAS will be primarily used for surveillance, intelligence and reconnaissance missions, as all will be equipped with L-3 Wescam MX-10 EO/IR payloads, offering a new dimension in capability for the Jordanian Armed Forces. **SP**

World UAV market over \$94 billion

Unmaned Aerial Vehicles (UAVs) have been the most dynamic growth sector of the world aerospace industry this decade, report Teal Group analysts in their latest integrated market analysis. Teal Group's 2011 market study estimates that UAV spending will almost double over the next decade from current worldwide UAV expenditures of \$5.9 billion annually to \$11.3 billion, totalling just over \$94 billion in the next ten years.

"The UAV market will continue to be strong despite cuts in defence spending," said Philip Finnegan, Teal Group's Director of corporate analysis and an author of the study. "UAVs have proved their value in Iraq and Afghanistan and will be a high priority for militaries in the United States and worldwide."

The study suggests that the US will account for 77 per cent of the worldwide RDT&E spending on UAV technology over the next decade, and about 69 per cent of the procurement. "We expect that the sales of UAVs will follow recent patterns of high-tech arms procurement worldwide, with the Asia-Pacific representing the second largest market, followed very closely by Europe," said Teal Group senior analyst Steve Zaloga, another author of the 458-page study. "Africa and Latin America are expected to continue to be very modest markets for UAVs." **SP**

Flying UAVs for one million hours

Rockwell Collins' Athena family of flight control and navigation systems recently exceeded one million flight hours on several unmanned aerial vehicles (UAVs) performing surveillance operations primarily in the Middle East.

"Due to the high quality of these guidance systems, Rockwell Collins' control and navigation solutions are on more UAV platforms than any other, enabling coalition forces to successfully fly reconnaissance missions in theater," said David Vos, Senior Director of UAS and Rockwell Collins Control Technologies. "When in redundant configurations, and using add-on software such as damage tolerance control, these systems ensure UAVs are reliable enough to fly in shared airspace," he added. **SP**



AASPL generators for LCA, T-72 tank

[By Sucheta Das Mohapatra]

Aero Accessories and Systems Private Limited (AASPL) designs and develops generators, motors, electrical propulsion system, actuators (hydraulics and electro-mechanical), and at Aero India 2011 the company showcased its airborne electrical power generators both DC and AC types. The original equipment manufacturer (OEM) has developed the main and nose landing gear hydraulic actuator for the Saras civil aircraft, a 20 kW generator for the T-72 tank of Indian Army and 5 kW generators for the light combat aircraft (LCA). "We are working in collaboration with the Defence Research and Development Organisation (DRDO)," said S.K.B. Parekh, Managing Director, AASPL.

Started by former general managers of Hindustan Aeronautics Limited, S.K.B. Parekh, K.V. Sreevatsan and E.S. Francis, AASPL has recently partnered with real estate major Sattva Group and aims at reaching out to the international market as well. "Our products are of use on any defence application including aerospace and are as good as the products manufactured by Thales and Goodrich," said Parekh. "We have just started but we are all experts in our field and slowly and steadily we plan to reach out to the market abroad," he added.



N.V. Maslekar
MD, Sattva eTech AASPL



Mr. Parekh
MD, Sattva AASPL



Bijay Agarwal
MD, Salarpuria Sattva group, AASPL

The products displayed by AASPL at the show included 5 kW DC Brushless Autonomous 3 stage Generator developed to satisfy the unique load requirements of the LCA for emergency operations; electro mechanical linear actuator (EMLA) is a position controlled linear actuator to operate the control surface of a vehicle or gun position control; armature for starter motor; dual ignition coil, which is a part of artouse engine used in Cheetah and Chetak helicopters; 4 kW generator unit, electrical rotary actuator; 20 kW DC generator unit, developed for the electrical power requirement of an armoured tank; motor and brake assembly; main and nose landing gear actuators, etc. **SP**

VTI enters India with its ATE solutions

[By Sucheta Das Mohapatra]

The cost of testing is high, but the cost of failure is even higher. This is true with all equipment in the defence and aerospace sector globally. With the aim to reach out to the growing defence and internal security market in India, US-based VTI Instruments, a leading provider of automated test equipment (ATE), has set up a facility centre in India recently. The company is also pushing the services to start indigenous test centres in the country.

"We want to see a change in the culture of dependency in India. Indigenous test centres should be set up in the country. The US and UK have their own test centres. We want to educate the services to build their own centre," said Venugopal Jandhyala, Operations Manager, India Sales and Support-Asia/Europe, VTI Instruments.

All avionics systems on the Lockheed Martin C-130J have been tested on VTI hardware. VTI provides solutions in avionics display units, weapons/launch systems, guidance control units, radar/antenna subassemblies, auxiliary power units, stores systems, torpedo electrical subassemblies, wiring/cable harnesses, oil exploration drill heads, automotive electronic control modules, telecommunications/cellular, etc.

The company has joined hands with Axis Aerospace and Technologies to set up the centre in India. "We are working with all major companies US companies including Lockheed Martin, Honeywell, Rockwell Collins, etc. Hence, as and when their products

come to India, they will need our solutions," said Jandhyala.

Competing with National Instruments in India, the company claims that its strength lies in precision instrumentation, which gives it an edge over others. "We have started talking to Indian companies and working towards entering the internal security market as well. The Indian Air Force has also shown interest in our ATE. India is known for good engineering and so we have started our second largest design and support system in Bengaluru. Some of our products are manufactured in India and as the volume starts increasing, we will start designing and building complete solutions," said Jandhyala.

VTI Instruments which provides functional testing of complex systems through automated test systems is now working on automated test equipment (ATE) based on a 'common core' of instrumentation to be reused on all product lines to reduce spares inventory and leverage development time and costs.

The company cites examples of common ATE systems in Lockheed Martin LMSTAR, the common tester for developing and maintaining avionics for the F-35 Lightning II platform, the F-16 Block 60, F-22, and AH-64D; the integrated family of test equipment (IFTE) for the US Army, VDATS with the US Air Force, Indra GPATE System is the maintenance solution at level two (ML2) for avionics units of Eurofighter Typhoon aircraft, Selex EFA-DASS, Honeywell common core, BAE Systems universal test systems, etc, which are a great success. **SP**



India assists in Seychelles Special Forces training



Indian Navy has deployed one Dornier to Seychelles under a government-to-government memorandum of understanding. The aircraft is stationed at Victoria, capital of Seychelles and will be operated for Exclusive Economic Zone surveillance and anti-piracy patrol.

The aircraft will be operated by Indian aircrew till such time a new Dornier under manufacture at the Hindustan Aeronautics Limited (HAL) is handed over to the Seychelles government. Recently, Defence Minister A.K. Antony on a trip to Seychelles had mentioned the cooperation between the two countries to deal with piracy in the Indian Ocean Region (IOR). Subsequently, India has made available one Dornier and two Chetak helicopters from HAL for maritime surveillance.

Antony had said: "The Indian Ocean links us all and is critical for our economic interests. We must cooperate to ensure peace and stability in this region". Earlier, the Prime Minister, Dr Manmohan Singh had assured that India will intensify its maritime surveillance in the Indian Ocean and support Seychelles in its efforts to ensure the maritime security of its waters. India is now helping Seychelles with military training and capacity building, the fight against piracy and developing an information technology training centre.

Seychelles and India have also signed a military cooperation agreement to give the Special Forces Unit of the Seychelles People's Defence Forces concentrated training in special forces operations, VIP protection duties, commando operations and deep-sea diving.

India has also pledged a defence grant worth \$5 million to boost Seychelles' capability to defend its territory against pirate attacks. **SP**

CISF increases vehicle checking at IGI Airport

The Central Industrial Security Force (CISF) has started random-check of vehicles driving into Delhi's Indira Gandhi International Airport. The random-checks are happening at both the domestic and international departure/arrival terminals. In due course, CISF plans to do this at Mumbai, Chennai, Kolkata, Bengaluru and Hyderabad airports.

Following the terrorist attack at a Moscow airport recently, the Indian government has strengthened security measures at airports as the footfalls have increased. The government also has directed all airports to install CCTVs to monitor all movements. **SP**

Airports to get full-body scanners?

The Ministry of Civil Aviation has directed all airports to install high security equipment at a cost of ₹616 crore. The Minister for Civil Aviation Vayalar Ravi has informed the Parliament that the government was keen on securing all airports in the country and had directed the airport operators to install modern and high-tech security equipments. These would include full body scanners, security cameras and many more electronic gadgets to map approach areas at airports.

The amount will be spent on upgrading security at airports under the jurisdiction of the Airports Authority of India. Private airports such as Mumbai and Delhi are likely to get body

scanners for which approvals have to come from the Ministry. A high-level meeting between officials of the ministry, Central Industrial Security Force and the Bureau of Civil Aviation Security was held recently to review the security scenario. **SP**

Issue of identity cards to villagers in coastal areas

The Government has chalked out a plan for issue of identity cards to the inhabitants of coastal villages and is creating a National Population Register (NPR) for the 3,331 coastal villages in all the nine maritime States of Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Orissa and West Bengal and the four Union Territories of Daman & Diu, Lakshadweep, Andaman & Nicobar Islands and Puducherry.

Smart cards would be issued to the 'usual residents' of these villages who are of age 18 years and above. As on date, the biographic details of over 120 lakh persons and biometric details of more than 70 lakh persons have been collected. **SP**

Counter-insurgency and anti-terrorist schools

The government has said that of the 20 counter-insurgency and anti-terrorist schools (CIATs) proposed in the states of Assam, Bihar, Chhattisgarh, Jharkhand, Orissa, Manipur, Nagaland, West Bengal and Tripura, 13 of them were already operational. The government had sanctioned ₹52.40 crore for the scheme. **SP**



Navy and Coast Guard apprehend pirates off Lakshadweep

Sustained and relentless anti-piracy operations by the Indian Navy and Coast Guard bore fruit once again, when a batch of 28 more pirates were forced to surrender on February 6, about 100 nautical miles off Kavaratti in Lakshadweep.

INS Tir of Southern Naval Command (SNC), deployed off Kavaratti was asked to locate the pirates who had carried out an aborted attack on MT Chios. The SNC then deployed a Dornier aircraft which located the skiffs and their mother vessel – Prantalay 11. The Coast Guard vessel CGS Samar joined the operations. The pirates opened fire and the Navy and the Coast Guard retaliated, upon which the pirates hoisted a white flag. The pirates and also 24 Thai fishermen who had been held hostage were handed over to the Mumbai Police. **SP**

Special Force to tackle crime in Orissa

Orissa Chief Minister Naveen Patnaik has said that a special task force would be established to tackle organised crime and economic offences. Addressing a police officers' conference, the Chief Minister said that the state was determined in curbing left-wing extremism and was making efforts to "qualitatively and quantitatively" improve police training and equipment.

"There has been a distinct improvement in the situation with decline in quantum of left-wing extremist violence in 2010 in comparison to 2009. In the past three months, security forces have conducted 214 special operations and achieved considerable success," Patnaik said, adding, "90 Maoists have been arrested, 24 Maoists died in police action and 54 weapons have been recovered."

He expressed the hope that adoption of unified command, which had improved the operational coordination between state police and central police forces deployed in the state, would strengthen anti-Naxalite operations. "The enormous opportunity that technology offers in crime control and crime investigation is being harnessed." **SP**



Coastal states get interceptor boats

The Ministry of Home Affairs has signed an agreement with Goa Shipyard Ltd and Garden Reach Shipbuilders and Engineers Kolkata for supply of interceptor boats required for implementing coastal security scheme in the country. A contract has been signed with these vendors for supply of 84 five-tonne boats and 110 units of 12-tonne boats for nine coastal states and three coastal Union Territories (Puducherry, Lakshadweep and Daman & Diu).

The Minister of State for Home, M. Ramachandran has said that till January 2011, 187 boats have been delivered by the shipyards (110 by the Goa Shipyard and 77 by Garden Reach Shipbuilders) to the States/Union Territories. All the 204 boats are expected to be delivered by the end of March 2011.

As per the contract, about ₹173 crore has been paid to Goa Shipyard and ₹91 crore to Garden Reach Shipbuilders. A separate provision of ₹4.18 crore has been made for arms and ammunition which is being procured through the Ordnance Factory Board.

The Minister said that the coastal police stations were being strengthened. The coastal security scheme has been extended till March 2011, with an additional non-recurring outlay of ₹95 crore. As per the scheme, 71 of the 73 coastal police stations have been set up, equipped with 204 boats, 153 jeeps and 312 motorcycles for mobility on the coast and in close coastal waters.

He also informed that the phase II of the scheme had been approved for implementation for a period of five years from April 1, 2011. A total of 131 coastal police stations have been approved, to be equipped with 180 boats, 131 four-wheelers and 242 motorcycles. The police stations also will get a lump-sum assistance of ₹15 lakh each for equipment, computers and furniture. **SP**

Maplecroft rates security as concern for investors in 'high risk' growth economies of India, Russia

The important growth economies of India, Indonesia, Nigeria, the Philippines and Russia are all rated 'high risk' in a ranking of 175 countries that evaluates the key strategic, operational and reputational risks for business.

The Global Risks Atlas 2011, released by risk analysis and mapping firm Maplecroft, evaluates the impact of 32 'global risks,' which are risks outside the control of an individual government or business that have the ability to affect multiple regions and industry sectors. The Atlas focuses on seven key 'global risk' areas: macroeconomic risk; security risk; governance risk and illicit economies; resource security; climate change; pandemics; and societal resilience, including human rights.

Four countries have been rated 'extreme risk' and top the ranking – Somalia (1), Sudan (2), Afghanistan (3) and DR Congo (4), all of which are characterised by weak governance, internal conflicts and regional instability.

However, it is the strategically important growth economies of Nigeria (12), India (15), the Philippines (17), Russia (21) and Indonesia (32), which hold the most interest and pose the most challenges for business. These are among the countries driving most of the positive momentum behind the world economy, but all are rated 'high risk.'

Each of these countries face unique challenges, but, with the Philippines (8), Russia (10) and India (11) rated 'extreme risk' and Nigeria (12) and Indonesia (28) considered 'high risk' in the 'security risk' category, politically motivated violence and terrorism must now be a primary concern for investors in these territories.

India is rated 'extreme risk' for security, as it faces simultaneous threats of terrorist attacks from Islamic extremists and naxalite Maoist insurgents. However, its poor ranking also reflects a lack of societal resilience. Despite robust growth, the country has a poor human rights record and large sections of the population lack access to basic social infrastructure such as education, healthcare and sanitation. This reduces the country's resilience to 'global risks' by creating a less productive workforce, a population susceptible to the spread of disease, and potential instability due to risk of social unrest. **SP**



Automatic grenade launcher

Central and state police forces to get modern weapons

The Union Government has provided state-of-the-art equipment and weapons to the state governments and the central para-military forces to deal with terrorism/Maoist activities and for improving the law and order situation in the country.

Under the scheme of modernisation of police forces (MPF), the Centre is providing financial assistance to all the states for procurement of weapons such as AK-47 rifles; MP 5 carbines; Glock pistols; modern assault rifles; under barrel grenade launchers (UBGLs); multi-grenade launchers (MGLs); automatic grenade launchers (AGLs); rocket launchers; modern carbines; 9mm pistols; SLRs; 5.56mm INSAS rifles/LMGs; tear gas guns; sniper rifles; 51mm mortars; anti-riot guns and equipment such as bullet-proof jackets; night vision devices; night sights for weapon; communication equipment; bomb detection and disposal equipments; explosive detectors; bullet-proof/mine protected vehicles; protective gears; door frame metal detectors; closed circuit TV and motion sensors; X-ray baggage scanners; video cameras; mine sweepers; blasting machines; jamming devices; dragon lights; GPS; SAT phones etc. **SP**

India keen on fencing borders

The Director General of Border Security Force (BSF), Raman Srivastava has stated that the relations between the border forces personnel of India and Bangladesh were improving. However, he maintained that India's main demand would be fencing the entire border stretch between India and Bangladesh.

The BSF chief said this in Agartala where he was meeting officials to discuss security issues in Tripura which has influx of Bangladeshi population. Similarly, some banned militant organisations from Tripura is said to be operating from across the border and this issue would be discussed threadbare at a meeting which is slated for in New Delhi soon.

Srivastava said: "We will be discussing these things, giving him the names, giving him the lists, locations of the camps. They have been very cooperative." He mentioned that the BSF has been taking several initiatives, first to secure the border area and two to ensure that border intrusions are dealt properly. The BSF would use less lethal weapons here so that in case of any firing, the intruder will be injured, but not get killed. **SP**



Pranab Mukherjee arrives at Parliament House to present the General Budget 2011-12, in New Delhi on February 28, 2011

Home Ministry gets 17 per cent enhanced budget

The Ministry of Home Affairs has got a budgetary allocation of ₹55,469 crore, an increase of 17 per cent over 2010 when it was ₹47,520 crore.

The budgetary allocations include among other things ₹384 crore for the crime and criminal tracking network system (CCTNS) project, up from ₹135 crore last year. The Intelligence Bureau gets ₹909 crore while the National Investigation Agency (NIA), the premier body probing terrorist activities, has been allocated ₹55.68 crore.

Some of the other allocations in the ministry are: ₹967.69 crore for improving coastal security and border control; ₹140 crore for special infrastructure in Naxalite-affected areas; ₹39.75 crore for the National Intelligence Grid; ₹109.74 crore for criminal investigation and vigilance; ₹125 crore for immigration, visa and foreigners registration and tracking (IVFRT). **SP**

GMR Aviation Security Summit

The GMR Hyderabad International Airport Limited (GHIAL) is organising the GMR Aviation Security Summit 2011 on March 25 and 26 at Hotel Novotel located within the Rajiv Gandhi International Airport premises, Hyderabad.

The summit which has invited eminent speakers including the Secretary of Civil Aviation, Dr. Syed Nasim Ahmed Zaidi; Dr. Rajshekar Reddy, Director, Security and Finance, Civil Aviation; Gurjot Singh Mahli of COSCA; Ajay Bhatnagar, Inspector General, Central Industrial Security Force; Rajendra Dhoke, Additional Commissioner, Bureau of Civil Aviation Security; Gyaneshwar Singh, Director, Security, Airports Authority of India among others.

The summit will deliberate upon the challenges of the aviation sector, security trends, integrated approach to security management, passenger facilitation versus security procedures and other issues.

GHIAL is the first airport in the South Asian region to seamlessly commission the 04-level inline baggage screening system, perimeter intrusion detection system, electronic surveillance system, etc. **SP**



Heckler & Koch new rifle hits market

After more than two years of development work, Heckler & Koch showed off production versions of the new AR-style MR556A1 rifles at the Shot Show, the firearms industry's major trade exhibition in Las Vegas. The MR556A1 is a premium grade semi-automatic arm with match rifle features.

The new rifle is inspired and influenced by the HK416, HK's selective fire rifle used by leading US and foreign military and law enforcement customers. The HK416 is widely viewed as a leading candidate in a possible competition to replace the US military's current M4 carbine and M16 rifle.

The 5.56mm MR556A1 is a major product improvement over conventional AR-type carbines and rifles. The MR556A1 uses an HK proprietary gas piston operating system, employing a piston and a solid operating "pusher" rod in place of the gas tube normally found in AR15/M16/M4-style firearms. This method of operation virtually eliminates malfunctions that are common to direct impingement gas systems since hot carbon fouling and waste gases do not enter the receiver area. This is the same key feature critical to the success of the HK416 rifles used by military and law enforcement customers. **SP**

SHIVSHANKAR
MENON

Towards a New Asian Order

Here is an extract of the closing address of Ambassador Shivshankar Menon, the National Security Advisor to the Prime Minister of India, given at the 13th Asian Security Conference, organised by the Institute for Defence Studies and Analyses. Excerpts:

There is no question that the rise of Asia, with China as the most prominent example, is the major geopolitical fact of our times. What Asia has achieved in the last three decades in terms of the rapid accretion of wealth to begin with, and now power, has never been done so fast in history by any other region.

The Asian achievement has several unique characteristics.

- Within Asia itself, on China's immediate periphery, other powers like South Korea, Vietnam, Indonesia and India are also developing rapidly. We see increasing defence budgets throughout the region.
- These growing Asian powers increasingly owe more and more of their economic growth to the links and interdependence among themselves. The new equilibrium in Asia is likely to be as much a result of production chains and regional and global market integration as of purely security driven alliances or structures.
- Asia's geopolitics are complicated by the presence of several global and extra-regional powers who are now integral to Asian security. Powers such as the USA, Russia and Japan are present and have long established interests of their own in Asia. An Asian order which ignores their interests is unlikely to be stable.
- Asia as a whole is and will remain dependent upon the rest of the world for its own continued growth and security. Asia will continue to rise over the medium term. Our preference is that the new architecture be open, inclusive and flexible. But this still is a work in progress.

The Issues

The three challenges which stand out are:

- Connectivity domains like maritime security, cyber space and outer space;


- The increasing security divide within Asia; and,
- The institutionalisation of security cooperation in Asia.

Asia's pattern of growth and her physical and economic security will be linked to that of the rest of the world make her connectivity critical, hence, the need to assure security of maritime communications, cyber space and outer space. Asia is witnessing latent and explicit competition and contention, a build-up of national offensive and defensive capabilities which in other areas would be called an arms race.

Asia was successful in tackling piracy around the Straits of Malacca but the international community has been much less so off the Horn of Africa. This is largely because there are parts of Asia which have not been transformed or changed. In those parts of Asia which are not developing as rapidly, traditional security issues now affect Asian security differently. There is a growing security deficit or divide within Asia.

There is also an increasing danger of terrorism spreading from Pakistan and Afghanistan, which have not been part of the Asian economic miracle. The security of nuclear materials and weapons here is another example of the sort of problems that we face, an indicator of the security divide within Asia.

The New Asian Order

- It should be inclusive, given the diversity in Asia. And it must include all relevant powers, including those geographically external but intrinsic to Asia's security in practice and presence.
- It should be extensive, from Suez to the Pacific and including the entire Eurasian landmass. If not it will not be able to address the security consequences of the growing security divide within Asia.
- It should be plural. No one-size solution or simplistic prescription will work.
- Its institutions should be consultative, respecting the Asian cultural bias towards consensual solutions. Centring the institutions on ASEAN would be logical and practical, and the ASEAN Defence Ministers' plus Eight Meeting offers a potentially very useful way forward. 

The New Asian Order should be inclusive, given the diversity in Asia. And it must include all relevant powers, including those geographically external but intrinsic to Asia's security in practice and presence





India plans to set up an advanced institute to combat cybercrime

The Indian government has decided to set up an advanced institute to combat cybercrime and also develop advanced technologies to tackle cybercrime. The institute will be set up at a cost of ₹100 crore on a public-private partnership model. The cost will be jointly borne by the Central government, concerned state governments depending upon the location of the institute and the industry. The Indian Institute of Information Technology, Allahabad (IIIT-A) will finalise the concept and details of the proposed institute.

India has witnessed frequent attacks on computer systems and websites. The Director of IIIT-A, M.D. Tiwari has stated that as per a Ministry of Human Resource estimate, India requires 2.5 lakh cyber specialists to deal with the menace of cybercrime.

IIIT-A has been chosen for designing the concept and finalising the details for the proposed institute as the former has expertise on cyber law and also offers a post-graduate programme on cyber law. IIIT-A has an IT forensic lab. **SP**

Government tightening cyber café rules

The Ministry of Communications and Information Technology has issued draft guidelines for cyber cafés across India to ensure that Internet is not used for illegal activity.

The guidelines are expected to tighten Internet security as there are concerns that the web is being used for illegal activities including planning terrorist attacks. Besides that the government intends to tighten controls over viewing pornography in public.

The guidelines include that cyber cafés allow only persons with photo identity and enter the user details in a log book. Also it mentions the various operational procedures for the cyber cafés. The ministry has sought feedback from the users to refine the draft proposal. **SP**

Over a lakh e-mail addresses stolen

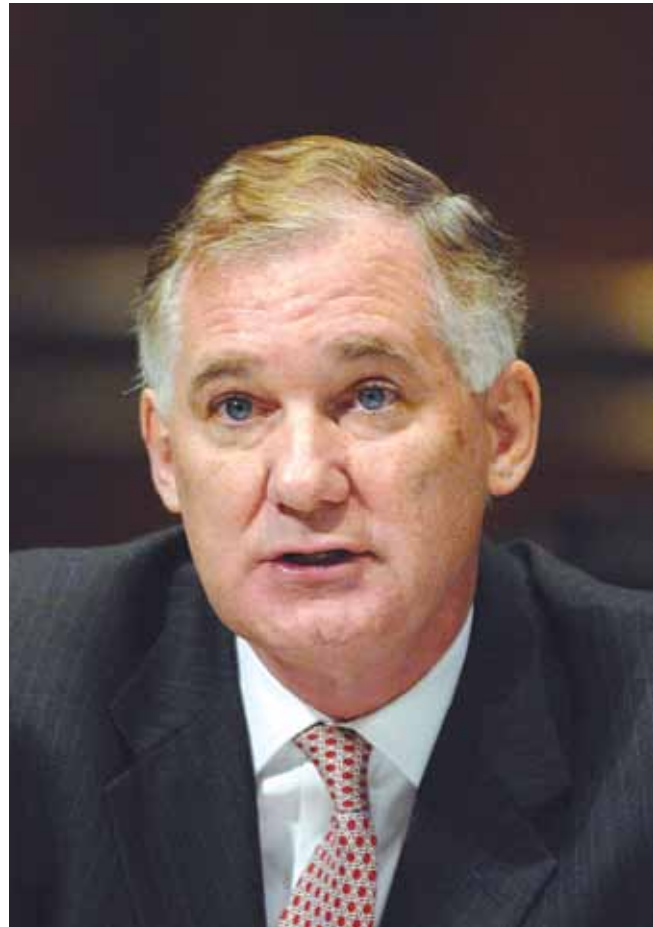
US prosecutors have charged Daniel Spitler and Andrew Auernheimer for allegedly hacking AT&T servers last June. The duo was part of a group called Goatse Security.

Authorities state they been charged for stealing the e-mail addresses and other personal data of over 1.10 lakh iPad 3G customers. The e-mail addresses included government officials, celebrities and other high-profile media professionals, including the former White House chief of staff, Rahm Emanuel. **SP**

Develop defences against cyber attacks

The US National Security Agency (NSA) and Cyber Command Director General Keith Alexander has called for strengthening the cyber defence systems as inevitable destructive cyber attacks would continue.

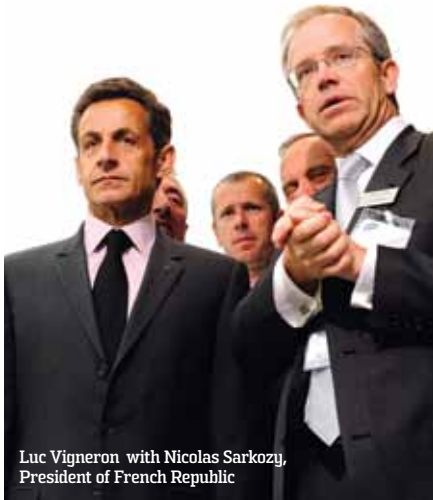
Addressing a conference in San Francisco, the General said that cyber attacks had increased and were coming from unknown quarters, aimed among other things at critical infrastructure. "Most of the destructive tools being developed haven't been used; we need to use this window of opportunity to develop defences." **SP**



Pentagon claims flash drive that led to military breach

A formerly classified 2008 cyberattack, said to be a significant breach of US military computers, began with an infected thumb drive, according to US Deputy Defense Secretary William Lynn.

The official said the attack began when an infected flash drive was inserted into a US military laptop at a base in the Middle East. The drive had been infected with malware that was placed there by a foreign spy agency and that the malicious code uploaded itself onto a US Central Command network, subsequently spread undetected on classified and unclassified systems, allowing attackers to transfer data out of the network to servers under foreign control. He said that the incident was a turning point in US cyber defense strategy, leading to a Pentagon operation to counter the attack, known as Operation Buckshot Yankee. **SP**



Luc Vigneron with Nicolas Sarkozy,
President of French Republic

Thales order book over €25 billion

Thales Group has reported that its business on solid footing though the orders booked in 2010 amounted to over €13 billion, down by six per cent from 2009. The consolidated order book stood at over €25 billion with defence and security at €6 billion.

Thales Chairman and CEO Luc Vigneron said "As the pressure on European defence markets was confirmed, order intake exceeded our expectations in 2010. With an order book worth more than €25 billion, the Group's business is on a solid footing. Although our results have been impacted by significant charges on certain pre-2009 contracts, the operational uncertainties on these programmes can be removed thanks to the increased visibility that we now enjoy. We are confident that Thales will swiftly return to profitability, underpinned by the results of the Pro-basis plan and our stronger presence in growth markets."

New orders booked in the 2010 financial year amounted to €13,081 million, down by six per cent from the very high level of 2009 (Tranche 4 of the Rafale programme and national stimulus plan in France). The expected pressure on defence budgets in Europe was partially offset by very strong orders in the space segment, and the confirmation of a gradual recovery in the civil aerospace market. SP

PHOTOGRAPH: Thales Group.

Elta Systems sells stake in "Elisra" to Elbit

Elta Systems, a subsidiary of Israel Aerospace Industries, has reached an agreement with Elbit Systems with respect to the sale of Elisra Electronic Systems shares held by Elta, constituting 30 per cent of Elisra's share capital, to Elbit, in consideration for the sum of \$67.5 million. The acquisition agreement has been approved by the Board of Directors of both Elta and Elbit. SP

Global aerospace and defence M&A doubles in 2010: PwC

According to a PricewaterhouseCoopers (PwC) report, mergers and acquisitions (M&A) in the aerospace and defence sector in 2010 bounced back from the 2009 low in deal value. It said the total value of the deals increased from \$10.9 billion in 2009 to \$20.2 billion in 2010.

Neil Hampson, Global aerospace and defence leader, PwC, said, "We have seen a return of larger deals, a continuation of high deal volume and a significant increase in average deal value in 2010, which meets our previous expectations. We believe this strong recovery is a result of competitors responding to a challenging procurement environment for defence and an improving competitive environment in commercial aerospace. Additionally, this recovery has been driven by significant cash positions and capital markets that are more conducive to financing new deals."

While there has not been much activity in Asia in terms of deals with disclosed values of at least \$50 million, there has been a considerable amount of commercial aerospace deal activity for undisclosed values happening in this region. SP

Lockheed Martin nominates Rosalind G. Brewer on board

Lockheed Martin has nominated Rosalind G. Brewer to its board of directors. Ms. Brewer is Executive Vice President and President of Walmart U.S., East. The nomination will be submitted to the stockholders for approval on April 28. Lockheed Martin directors serve one-year terms.

Brewer, 48, joined Walmart in 2006 as Regional Vice President, responsible for operations in Georgia, and was promoted to President of the southeast operating division. She later led the south business unit of Walmart U.S. as Executive Vice President and President before being appointed to her current role. SP

Warranty doubles for DRASH utility support trailers

DHS Systems LLC has doubled the Warranty Schedule of its DRASH utility support trailers (USTs) in 2011, from 12 months to 24 months. The warranty will continue to protect the original purchaser and also the end-users.

USTs provide power generation and climate control support for DRASH Shelters. DHS warranties cover repair and replacement of any defective part or other covered defects in materials and workmanship.

"Due to improvements to our manufacturing techniques, we are able to produce our trailers far more quickly while keeping defects to a minimum. Because our main customer is the U.S. Military, having a longer warranty period makes a lot of sense – units may purchase equipment and not utilise it until months later. By then, the one-year warranty would be almost over. The 24-month warranty will be of great benefit to the military, as well as other emergency responders who have mission-specific reasons to use our trailers," says Jeff Jackson, Vice President of Business Development. SP



Turkey eyeing \$1.5 billion defence exports in 2011

Turkey's defence industry, a prominent maker of armoured vehicles, is seeking new businesses that will double its exports. The government is establishing a defense export support agency to help achieve this.

Turkey primarily exports defence equipment to countries in the Middle East, Central Asia, South Asia and parts of Europe. Turkey has estimated export of \$1.5 billion, an all-time for the country, doubling from \$832 million in 2009. Five years ago, defence exports stood at less than \$200 million.

"We are expecting larger payments accruing from previous contracts this year," said one senior official from the Undersecretariat for Defence Industries, or SSM. "Plus, there will be substantial receipts from contracts signed last year and to be signed this year."

"We are negotiating any potential deal that may benefit Turkish manufacturers with other countries," he said. "After the export agency has taken off, it will be tasked to facilitate and negotiate deals on behalf of the Turkish industry."

Sectors where Turkish firms may be most competitive include armored vehicles, electronic systems and software, naval platforms and aerospace. One potential top exporter is Turkish Aerospace Industries which has already sold major civilian aviation equipment under offset arrangements with US and European aircraft manufacturers, including Lockheed Martin, Boeing and Airbus.

The Turkish defence industry's most successful sector in terms of exports is armoured vehicles, with companies Otokar and FNSS both having secured contracts worth more than \$1 billion in the last couple of years, including deals worth \$850 million with Saudi Arabia alone last year. **SP**

Safran's positive outlook

Safran has said that the 2010 revenue for defence was up 17 per cent at €1,240 million, or up 12.4 per cent on an organic basis, compared to the previous year. The performance was mainly driven by 30 per cent revenue growth in the Optronics activity on the basis of a robust order backlog (Felin soldier integrated equipment suites for French Army, long-range infrared goggles for France and export markets). This trend was partly mitigated by a mild decline in Avionics revenue with lower volume in flight control systems for helicopter and regional jets.

The security activity reported full-year 2010 revenue of €1,041 million, up 15.2 per cent compared to the previous year. Revenue growth also benefited from a favourable translation currency impact from Brazilian real and Australian dollar. The smart cards activity recorded double-digit growth in volume, partly mitigated by pricing pressure.

The Group continued to develop its position in India and successfully issued the first unique and secure 12-digit UIDAI number (Unique Identification Authority of India) in summer 2010 with dual biometry. It now registered its first million and a half residents. **SP**

Latin America orders big from Rada electronics

Rada Electronic Industries has received orders worth over \$28 million during 2010, of which \$7 million were received in the fourth quarter. About 61 per cent of the orders came from Latin America, 21 per cent from Israel, 13 per cent from North America and five per cent from Asia. This is a 12 per cent increase in total new orders compared with 2009, which saw a total of \$25 million.

The ordered systems will be installed on the most advanced military aircrafts in production today. The majority of orders received during 2010 are scheduled for delivery throughout 2011.

Zvika Alon, Rada CEO, commented: "The increase in our year-end backlog will help generate continued growth in the coming years. Of particular note is the fact that over 60 per cent of our new orders came from Latin America, a highly strategic growth region for the company." **SP**

SECURITY EVENTS

Soldier Modernisation Asia

14-17 March

Amara Sanctuary Resort Sentosa, Singapore

www.soldiermodasia.com

Global Security Asia 2011

15-17 March

Sands Expo and Convention Centre, Singapore

www.globalsecasia.com

Cyber Security Conference

16-18 March

Holiday Inn Rosslyn, Arlington, VA, USA.

www.ttcus.com

Defence Logistics Europe 2011

21-23 March

Radisson Edwardian Hotel, Heathrow, London

www.defencelogistics.org/Event.aspx?id=421342

Air Surveillance and Reconnaissance 2011

21-23 March

America Square Conference Centre, London, UK

www.asarcevent.com

Future Artillery

23-25 March

Olympic Conference Centre, London

www.future-artillery.com

Network Centric Warfare 2011

29-30 March

National Convention Centre, Canberra, ACT, Australia

<http://www.networkcentricwarfare.com.au/Event.aspx?id=410802>

Adriatic Sea Defence & Aerospace

29-31 March

Split, Croatia

www.adriaticseadefense.com

Offshore Patrol Vessels Asia-Pacific

5-7 April

Grand Hyatt Singapore, Singapore.

www.offshorepatrolasia.com

SMES – Security Middle East Show

7-9 April

BIEL, Beirut, Lebanon

www.smesbeirut.com



SUV crashes into departure terminal

Never argue with your spouse en route to the airport. The probability is that either one of them may take sudden flight or crash the car into the departure terminal for a hasty "exit", if one goes by what happened in February last at the Milan Malpensa Airport (MXP) in Italy.

A Tunisian man crashed his SUV through a window into the Terminal 1 departure area. The Guardia di Finanza shot at him as he alighted the vehicle. Investigations revealed that the man lost both control of the SUV and also the heated argument with his Italian wife. The incident stalled airport operations for a while till authorities ruled out it was terror-related. **SP**

Desperate to get into Army

In 2008, Sanjeev Yadav allegedly faked his identity to join the Indian Army. His bluff was called at the Indian Military Academy (IMA). The authorities found out that he was the same candidate whom they had thrown out of the IMA in 2006 "failing to meet standards".

Desperate to rejoin the Indian Army, he is said to have used his younger brother Deepak's name to rejoin. However, the truth surfaced soon and he was handed over to the police. The academy is one of the world's finest military training institutions and questions subsequently were asked about the police verification process of candidates.

"My son did commit a fraud by using his younger brother's name but he was desperate to join the Army and prove to the world that IMA was wrong in throwing him out in the first place," Major (Retd) S.R. Yadav, his father, said. **SP**

Chemicals find their way onto flight

A consignment of hydrochloric acid, chemically hazardous material, was recently loaded onto a Doha-bound Qatar Airways aircraft till someone found out the danger at the Nedumbassery International Airport in Kochi. The police have registered a case, under the aircraft safety rules and for careless handling of hazardous material.

Authorities found that fumes were emanating from the consignment while it was being loaded onto the aircraft, which had 156 passengers and nine crew members on board.

A similar incident is said to have taken place earlier in July when a consignment containing chemicals with low inflammable intensity passed multi-level cargo security screening and reached Chennai. The Aerodrome Safety Committee, which is headed by the Collector M. Beena, is investigating into the incidents. **SP**

PHOTOGRAPH: terminalu.com

Teenager hides in plane wheel well, drops dead

A 16-year old boy Delvonte Tisdale from North Carolina died under mysterious circumstances December last. It is believed that the teenager hid inside the wheel well of a US Airways Boeing 737 and dropped dead when the plane lowered its landing gear on approach to Boston's Logan Airport.

Tisdale's body was found in Milton neighbourhood, below a flight path to Logan Airport. "It appears more likely than not that Tisdale was able to breach airport security and hide in the wheel well of a commercial jet airliner without being detected by airport security," Norfolk County District Attorney William R. Keating informed the media. **SP**



Grand carbon theft

In January this year, the European Commission realised that carbon credits worth €28 million had been stolen in the biggest ever fraud aimed at the EU's Emissions Trading Scheme (ETS). According to reports, the stolen credits were immediately cashed on the spot markets.

The Commission, on January 19, suspended trading in carbon spot markets after the disappearance of 4,75,000 European Union carbon allowances (EUAs) from the Czech national carbon registry, besides thefts in Greece, Estonia, Poland and Austria. Up to two million EUAs worth as much as €14 a tonne may have disappeared. **SP**

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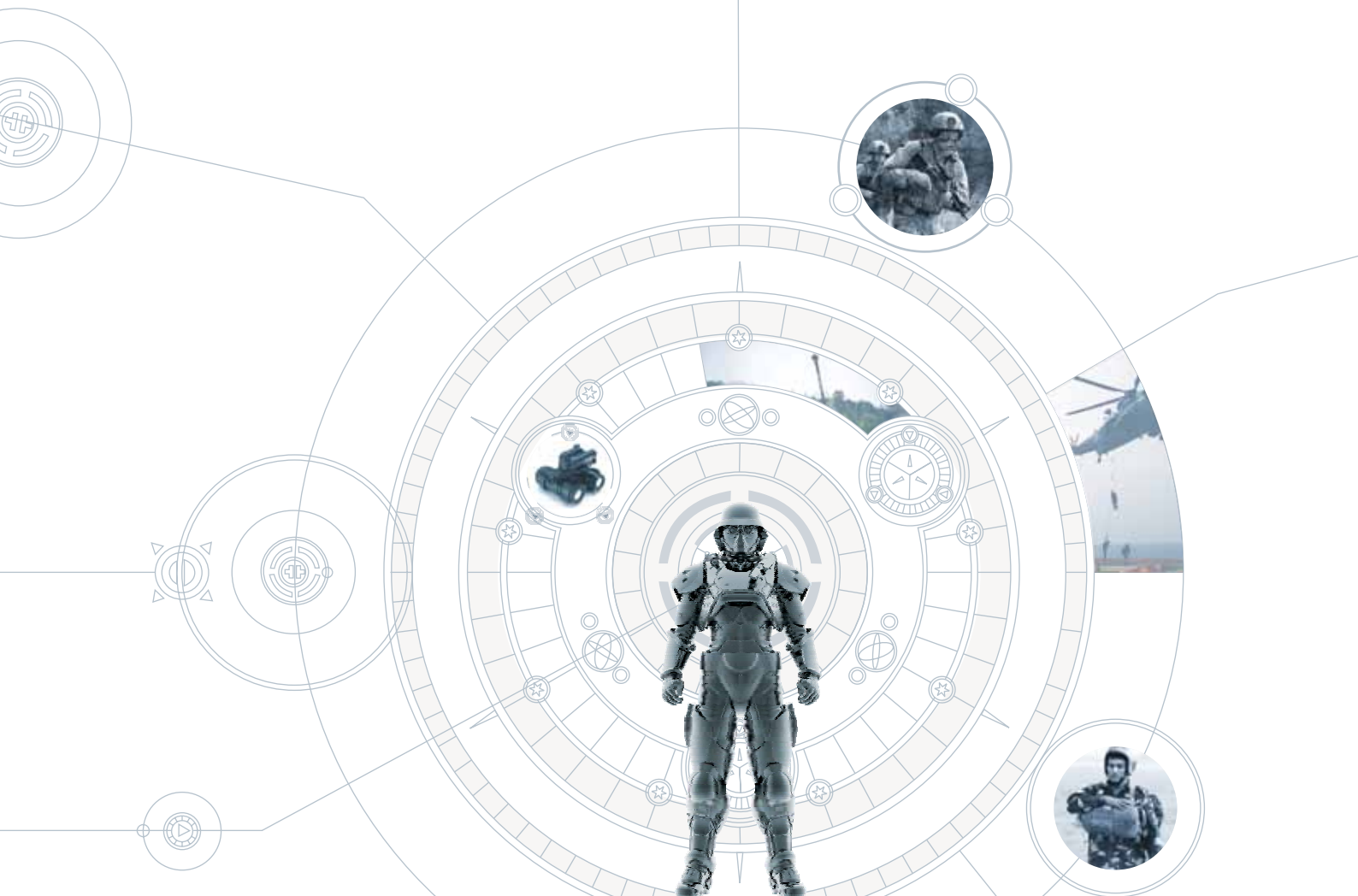
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