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FROM THE EDITOR'S DESK 3

MILITARY

Updates 4

Viewpoint 7

[Lt General (Retd) P.C. Katoch]

AEROSPACE

Updates 8



Eurocopter X3

Unmanned 14

INTERNAL SECURITY

Show Report 16

[Sucheta Das Mohapatra]

Indesec 2011 18

Cyber News 19

NEW PRODUCTS 20

CORPORATE 21

SECURITY BREACHES 22

Paris Air Show 2011



France's Dassault Rafale celebrating it's 30,000 flight hours in operation at the Paris Air Show 2011. Rafale is one of the two aircraft down-selected for IAF's medium multi-role combat aircraft.



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Cover:

France's Dassault Rafale celebrating its 30,000 flight hours in operation at the Paris Air Show 2011. Rafale is one of the two aircraft down-selected for IAF's medium multi-role combat aircraft.

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Driving military and civil synergies

The 49th International Paris Air Show at Le Bourget from June 20 to 26 was swamped by orders for commercial planes, while the defence sector had to be content with interest generated by governments and others in weapons and subsystems. That some of the defence original equipment manufacturers (OEMs) have got into dual applications technologies and also diversified their products is indication of the fact that synergies can be driven.

The team from SP Guide Publications at Le Bourget got to see from close quarters the developments that have been taking place on both the civil and military fronts. In this issue, R. Chandrakanth gives a brief overview of the show and how Airbus grabbed world headlines with record orders and that every other company, particularly those from the defence, had to be content with quiet orders. One of the highlights was the debut of Eurocopter X3 (pronounced x cubed), the speedy helicopter with innovative rotary wing which can go up to 250 mph.

Even the campaigns by the two shortlisted fighter aircraft – Rafale and Eurofighter Typhoon – seemingly were quiet, though the latter proudly displayed “Indian MMRC Shortlisted” in the static area.

Back home, another team panned out at Indesec which, according to Sucheta Das Mohapatra turned out to be a gloomy affair even while the homeland security market is opening up exponentially. The good news is that a number of Indian companies have got into the homeland security business and the consensus was on indigenisation of products and solutions, while taking assistance from overseas. Indian companies such as Tata Motors; Shri Lakshmi Defence Solutions; Shyam Telecom and a host of others showcased innovative security products and solutions.

In his fortnightly viewpoint, Lt General (Retd) P.C. Katoch is critical of the government's decision in dealing with piracy on the seas. As per media reports, the Indian Navy has been asked to ‘catch them (pirates), disarm them and release them’ which he opines shows India's weak posture and how it may lead to piracy to increase. Importantly, he sees a dangerous nexus between Somali pirates and other terrorist organisations including Al-Qaeda.

The need to secure the Indian Ocean goes without saying. Around the same time, we see that the US is contemplating a permanent base in Singapore for ‘one or two’ of the new littoral combat ships (LCS) under construction in the US. This was revealed by the US Defence Secretary Robert Gates during a recent visit to Singapore and it is believed that this ‘defence posture’ in the Asia-Pacific region, could counter moves of China which is planning its first overseas naval base in Gwadar, western Pakistan.

There is also a move on the part of the Indian Army to add a Special Forces unit to the Parachute Regiment to deal with insurgency in the Northeast. While the move is welcome, India needs to look at some of the training methods adopted elsewhere. For instance, we are told that the Chinese recruits are on to online war games, sharpening their fighting skills and the Singapore Army is planning to equip its soldiers with iPads. It is good to be tech-savvy! **SP**

Jayant Baranwal
Publisher and Editor-in-Chief



MBDA's PARS 3 LR short listed for Indian Army

MBDA's PARS 3 LR guided missile system has been shortlisted for the Indian Army helicopter future air-to-ground requirement. MBDA Deutschland has delivered proposals for its PARS 3 LR multi-target, long range weapon system for HAL's advanced light helicopter (ALH Dhruv) and for two attack helicopters, the Kamov KA-52 and the MIL MI-28.

Within the framework of MBDA Deutschland's export campaign for India, three PARS 3 LR firings were carried out from a German Tiger helicopter at the Vidsel test range in Sweden in April 2011. All three missiles were equipped with live warheads and all three struck their intended targets at the optimal hit points. Two firings were carried out within one minute of each other, the first against a static target at a range of 7,000 m and the second against a moving target at a range of 700 m. The third firing was carried out with the helicopter in fast forward flight against a static target at a range of 7,000 m.

Werner Kaltenegger, Managing Director of MBDA Deutschland, said, "I am delighted that the Indian Army has shortlisted PARS 3 LR for its procurement project. This represents a further confirmation of the close partnership MBDA has developed with India over the years. The successful indus-



trial trials confirm the high level of reliability of the PARS 3 LR guided missile system. We are proud to offer the Indian Army such a powerful fire-and-forget system that can deploy precision attacks against a wide range of targets." **SP**

US Army conducts large-scale network exercise at White Sands

The US Army has been immersed in an ambitious network integration evaluation (NIE) exercise at White Sands, designed to simultaneously test programmes of record and assess a host of emerging network technologies.

The NIE is a key part of the US Army's network strategy and includes five programmes of record going through formal limited user tests, as well as a host of other technologies. The evaluation began to assess the scope and readiness of these emerging technologies the first week of June and runs through mid July.

At the heart of the exercise is an overarching effort to develop a single battlefield network able to push key information to the soldier, linking them to command posts, vehicles on-the-move and higher headquarters. The idea is to use the best available technologies to move information, voice, video, data and images faster, further and more efficiently across the force.

"The network will literally redefine how we fight," said Vice Chief of Staff of the Army General Peter W. Chiarelli. "Ultimately, the network will connect leaders, soldiers, sailors, airmen, marines at all levels, at every echelon of command, in any formation, and across the entire team, with the right information quickly and seamlessly. I am confident it will make our various formations more lethal, faster, and more survivable in today's battlefield."

Central to the NIE is the continued evaluation of non-proprietary high bandwidth waveforms such as soldier radio waveform, or SRW, and wideband networking waveform. These use a larger portion of the available spectrum than legacy waveforms to move voice, video, images and data in real-time across multiple nodes in the force.

The waveforms, and indeed many of the technologies, are designed with standards aimed at meeting the needs of all the services in order to accommodate the potential for joint service involvement in the network.

"We're working very closely with partners at office of the Secretary of Defense in laying this out," Chiarelli said. "I've invited them all [other Services] out to see what we're doing. I see this evolving very quickly into a test-bed that can be used not just by the Army but by all services." **SP**

Indian Army to raise additional Special Forces unit

The Indian Army is contemplating setting up an additional battalion of Special Forces to be deployed in the Northeast region to deal with counter-insurgency. The battalion will be the eighth Special Forces unit of the Parachute Regiment.

The battalions have been deployed in different sectors of the country with additional responsibility of dealing with terrorist attacks. The Army wants to increase the number of Special Forces troops to over 10 battalions with around 700 personnel in each and are highly trained and equipped with arms. **SP**



Mauritanian Army destroys Al-Qaeda camp

The Mauritanian Army recently destroyed a camp of the Al-Qaeda in the Islamic Maghreb (AQMI) in Mali in an assault which left four soldiers wounded, according to sources. The attack in the forest region of Wagadou in western Mali involved air strikes and that the terrorists struck back with heavy arms.

Earlier in June, Mali and Mauritania agreed to lead a joint military operation to thwart Al-Qaeda's north African offshoot. AQIM members have been regularly spotted in the region, suggesting it has become a base for the group.

Mali and Mauritania have previously expressed concerns about the activities of the group along with Nigeria and Algeria. The outfit has several bases in Mali from where it launches operations in the Sahel desert region, carrying out attacks, kidnapping foreigners and trafficking drugs. **SP**

Chinese soldiers get on to 'online war games'

The People's Liberation Army of China has developed an online war game titled 'The Glorious Mission' and is reportedly using it as part of training sessions.

The Chinese who have developed exceptional gaming skills have now put them to use in the armed forces. The new game has weaponry used by the army and also created battle scenarios which can be played by an individual or a group.

China's online gaming industry registered \$1.31 billion revenues in the first quarter indicating that it is among the largest markets for gaming. **SP**

Singapore soldiers armed with iPad

The armed forces of Singapore will be arming their recruits with iPads, along with arms and ammunition, making the forces highly tech-savvy. Singapore Government said that nearly 8,000 iPads would be issued to recruits who will be able to use the iPad's built-in camera to take photos and video clips in the field and the same can be uploaded to the Singapore Armed Forces online platform.

The Strait Times quoted Defence Chief Neo Kian Hong on the use of iPads. He said adopting the iPad would allow the Singapore Armed Forces to take advantage of the technological abilities of the city-state's youth. "By exploiting the use of popular and current information and communications technology, we are able to harness our advantage of today's technologically savvy servicemen." **SP**

US troop withdrawal from Iraq by year-end

The US Forces-Iraq Deputy Commanding General (Operations), Lt General Frank G. Helmick has said that the number of US troops in Iraq will become nil by the year-end from the present level of 47,000. The transition will be from military to civilian administration as per the 2008 security agreement between the US and Iraq.

The General said that, "Many of the tasks we do will roll into the United States Embassy and what is being formed at the Office of Security Cooperation-Iraq, so they'll have a huge responsibility. We will also transition many of the things we do to the Iraqi security forces and the remainder of task to Central Command." **SP**

PHOTOGRAPH: Kongsberg

Kongsberg's naval strike missile milestone

The Royal Norwegian Navy and Kongsberg in June performed the first live fire shot against a sea target with a series produced NSM (Naval Strike Missile). The test was conducted at the US Naval Air Warfare Center Weapons Division's Point Mugu range in California and again demonstrated the unrivalled capabilities of the missile.

The missile was launched from its canister and completed the planned route, performed a wide range of advanced manoeuvres including extreme sea skimming capabilities, before locating, engaging, hitting and destroying the sea target. International observers at the test witnessed a successful demonstration



The NSM is in series production for the Norwegian Navy, the Fridtjof Nansen class frigates and Skjold class coastal corvettes, and the Polish Navy Coastal Squadron system. Deliveries for the platforms are scheduled for 2011-14.

The NSM is the only 5th generation long range precision strike missile in existence today. It is designed as a highly discriminative anti-ship missile able to penetrate shipboard defences and operate effectively in both blue water and littoral environments. It is a stealthy and highly manoeuvrable weapon combining GPS-aided midcourse guidance with an advanced dual-band IIR seeker. **SP**



The USS Freedom belongs to a new class of warships able to operate in very shallow waters close to shore. The US plans to deploy some of them to Singapore.

US Navy to locate warships in Singapore

The US Defence Secretary Robert Gates during his recent visit to Singapore announced that the US Navy would establish a new presence in Singapore by locating 'one or two' of the new littoral combat ships (LCS) presently under construction in the US.

"We've taken a number of steps towards establishing a defence posture across the Asia-Pacific that is more geographically distributed, operationally resilient and politically sustainable," Gates said.

The 400-foot-long, high-speed warships, optimised for shallow-water operations, would be the first US military vessels to be permanently located in South East Asia, although the Navy for many years has maintained a support facility in this region.

The US Navy operates only two LCS, designed and built by different suppliers. The USS Freedom, built by Lockheed Martin and commissioned in 2008, uses a conventional monohull design. The USS Independence, designed by General Dynamics and built by Austal USA, employs a futuristic trimaran or triple-hulled design. It entered service last year.

The Littoral Combat Ships are short-range vessels compared with the destroyers, cruisers and aircraft carriers that make up the bulk of the Navy's 280-strong battle fleet. Typically, US warships on deployment in the Pacific sail from California or Japan and periodically receive supplies from supply vessels while on the move. The littoral combat ships would require far more frequent resupplying than other vessels, making forward deployment to Singapore particularly attractive for them.

This strategic move is expected to counter the Chinese move which is planning its first overseas naval base in Gwadar, western Pakistan. **SP**

Goodrich selected for Boeing BDS INVENT programme

Goodrich Corporation has been selected by Boeing Defense, Space & Security (BDS) to work on the US Air Force Research Laboratory's (AFRL) integrated vehicle energy technology programme (INVENT).

Goodrich's Actuation Systems business will design, develop and test an integrated suite of advanced actuators featuring technologies focused on improving energy, power, and thermal management. These new technologies will target

the next generation of tactical fighters and air mobility transport systems.

The Goodrich team based in Wolverhampton, UK is supporting the high performance electric actuation system (HPEAS) integrated product team within the INVENT programme.

Mike Gardiner, President of Goodrich's Actuation Systems, stated, "We are delighted to bring Goodrich's expertise and experience in developing advanced, reliable, power-optimised actuation systems to this significant programme with Boeing and the US Air Force. We are honoured to be selected and look forward to this and to future collaboration on the next generation of military aircraft." **SP**



LT GENERAL (RETD)
P.C. KATOCH

Soft on sea piracy?

A major reason why the military is out of decision-making on matters military is that our civilian arm chair warriors think they understand use of force better. Post Indian Navy nabbing some 48 Somali pirates and bringing them to Mumbai, came surprising media reports of Government of India (GoI) making a policy shift in its anti piracy operations, directing the Navy not to arrest any pirates and also not to bring them to the mainland.

Reports say GoI fears its aggressive operations including arrest of Somali pirates and holding them captive may backfire. Admittedly about 10 per cent of seafarers working for shipping companies are Indians but there are equal numbers of Pakistanis, Sri Lankans and Bangladeshis, if not more. GoI directions to the Indian Navy are "Catch Them, Disarm Them and Release Them," if media reports are to be believed.

The genesis of this policy shift is supposedly an incidence wherein Somali pirates released all prisoners from a ship but took seven Indian prisoners to Somalia. It is also reported that post these directions, the Navy did not arrest any pirates in a subsequent anti-piracy operation. One wonders what would be the reaction of Pakistan, Sri Lanka and Bangladesh in similar circumstances. Just because seven of our sailors working in merchant shipping are taken to Somalia, we are down on our knees – another feather in the softy cap! Hopefully our strategists will not apply similar policy shift for anti-terrorism on land.

Have we not noticed how Chinese are dealing with pirates both in South China Sea and off the coast of Somalia? Our policy experts would do well to do so. What ransoms GoI has been paying will never be known but why should we be scared of killing or capturing sea pirates. There is no need to publicise captures in the first place, if we are so apprehensive of the reaction. Under the circumstances, the Navy should have actually

been directed to simply "not take any prisoners" and leave it at that.

The Navy would have been happy enough to arrange seabed meeting of these fellows with Blackbeard alias Osama bin Laden and no one would have been the wiser. Instead, we continue with the naiveté of projecting ourselves as a 'soft state', messaging please continue piracy without fear – a happy situation for the pirates; catch Indians and get the ransom moolah without fear of loss of life to home side. Do you see any difference from our response to the IC-184 hijack?

Do we appreciate the enormity of the problem, sphere of Somali piracy having expanded from 105 nautical miles off the coast of Somalia in 2005 to

the present 1,300 nautical miles, leaning onto our very shores? Do we know and appreciate that even a small sized country like Maldives has declared Somali Piracy a 'national threat' and are going against these pirates aggressively, holding 37 Somali pirates captive for more than one and a half years? Do we know the base of Somali piracy lies in Al Sabaab, a terrorist organisation is holding Somalia to ransom since 2009 and is in complete sync with Al-Qaeda? Why are we playing this great game of 'appeasing' Al-Qaeda? Kowtowing to Somali

pirates implies their growing infrastructure will be exploited by both Al-Qaeda and Lashkar-e-Toiba.

Do we realise repercussions of some of the over 1,000 unoccupied islands of Maldives (just over an hour flight from Bengaluru) becoming LeT bases. Link this with the fast radicalising Kerala with existing LeT footprints and the Maoist insurgency running north of it. Even an ostrich would see the danger to South India. Should we be content with calling upon UN to do something or hope US will act without another USS Cole being hit? Why are we afraid of doing something on our own? **SP**

The views expressed herein are the personal views of the author.



Why are we playing this great game of 'appeasing' Al-Qaeda? Kowtowing to Somali pirates implies their growing infrastructure will be exploited by both Al-Qaeda and LeT



Airbus eclipses Paris Air Show

[By R. Chandrakanth]

It rained... and it rained aeroplanes for Airbus at the 49th Paris International Air Show at Le Bourget, while the military segment was put on the backburner. The record orders for Airbus, and we are not talking military over here, grabbed headlines and it appeared that the defence sector did not have much to offer on 'mega scales'.

From an Indian perspective, the two-shortlisted medium multi-role combat aircraft (MMRCA), France's own Dassault

Rafale and the four-nation consortium Eurofighter Typhoon, had campaigns running and their executives keeping their fingers crossed. Eurofighter proudly displayed "Indian MMRCA shortlisted". Lockheed Martin C-130J and Boeing's C-17 Globemaster III made their presence felt.

Lockheed Martin's F-35, said to be the only fifth generation multi-role fighter aircraft, is fighting delays, but the company had interactive presentations on the strengths of the fighter and its cost competitiveness, said to cost substantially less than a Rafale or an Eurofighter Typhoon. The ones that had flying displays were aircraft already in operation in their respective countries and elsewhere, but none of the latest fighters from the US, Russia and China was around. However, what wowed the audience was Eurocopter, the X3 (pronounced 'x-cubed'), developed by EADS. The speedy helicopter which made its debut has already flown over 260 miles per hour and is built around an existing airframe.

In the absence of the latest fighters, companies made strong pitches for weapons programmes and subsystems. Raytheon showcased capabilities of its various military systems, particularly of interest to India, including how it seeks to integrate combat-proven Paveway family of weapons on India's light combat aircraft (LCA) and not to forget how its weapons can be integrated on both the finalists of the MMRCA. The Airbus Military C-295 airborne early warning platform with an S-band radar by Elta systems, did get attention.

Not just that, some of the OEMs talked about how they were adding commercial variants to some of their defence programmes, one such being Embraer KC-390, hoping to capture the air cargo segment. The show highlighted how OEMs were increasingly looking at dual applications to prop the defence business industry. **SP**

Airbus Military and IAI to develop new C295 platform

Airbus Military and Israel Aerospace Industries (IAI) will be jointly developing and marketing a new version of the Airbus Military C295 platform fitted with an airborne early warning and control (AEW&C) system produced by ELTA Systems, a wholly owned IAI subsidiary.

The primary sensor of the AEW&C will be the IAI/ELTA fourth generation active electronically scanned array (AESA) radar with integrated IFF.

A memorandum of understanding (MoU) was signed at the Le Bourget Airshow by IAI Corp. VP and ELTA President, Nissim Hadas, and Airbus Military CEO, Domingo Ureña. With this agreement, Airbus Military will expand its mission capability to the airborne early warning & command sector, while ELTA will be expanding its AEW&C fleet to include a turboprop platform.

The C295 AEW&C has been designed to provide high quality

360 surveillance, creating in real-time an integrated air and maritime situation picture and electronic order of battle. The AEW&C situation picture is shared with friendly forces via network-centric data links.

Airbus Military CEO, Domingo Ureña, stated, "We see a growing demand emerging for medium size early warning systems and platforms at an affordable price for both air defence and homeland security. This cooperation between ELTA Systems and Airbus Military, which combines the excellent engineering skills and experience of our two companies in their respective fields, will provide the market with a highly efficient and affordable solution, the first in this market segment."

Nissim Hadas, referring to the mutual cooperation agreement, noted, "The emerging conflicts across the globe are emphasising the importance of special mission fleets. We are sure that by joining forces, we will offer the market the right solution with the right technology. Airbus Military and IAI/ELTA's superior capabilities in special mission aircraft, advanced sensors and system integration enable us to provide an effective and proven solution for these growing needs." **SP**





Apache helicopter production up

Boeing has announced the ramp up of production of Apache AH-64D helicopters. The helicopters which are being called the savior of ground soldiers for decades, and now the first of a new breed of Apache AH-64D helicopters are about to roll off Boeing's assembly line in Mesa, Arizona.

The Block III features a new power plant, new main rotor blades made of composite materials and a more powerful on-board computer system to help pilots remotely fly unmanned aircraft and streamline maintenance. With more planned upgrades and improvements on the drawing board, the Apache attack helicopter will be a force to be reckoned with well into the year 2040. **SP**

MBDA unveils Perseus multirole strike missile

MBDA unveiled at the Paris Air Show the CVS 401 Perseus concept missile system, which represents the group's vision of a multi-role strike weapon system for 2030 and beyond.

To replace the current generation of heavy anti-ship and cruise missiles, a new system will be required that is capable of launching anti-ship strikes, land attacks and engaging time-sensitive targets such as relocatable missile launchers in an ever more complex tactical environment and with the minimum risk of collateral damage. This new system will also have to be modular and deliverable from a maritime environment, namely from surface vessel, a submarine, a carrier-based platform or a maritime patrol aircraft.

Perseus features multiple operating modes against a wide land and maritime target set with the added capability of being able to overcome the most effective of enemy missile defences. It is designed to be a tactical weapon system operated through an advanced operations & mission planning system at the crossroads of naval, land and air warfare.

The advanced supersonic (up to Mach 3), agile and stealthy airframe is powered by a revolutionary ramjet motor built around a highly compact continuous detonation wave engine. This revolutionary solution, at the very edge of propulsion technology, opens up the possibility of developing a smaller airframe with more energetic efficiency. This airframe will make Perseus an unrivalled penetrator of enemy defences and an effective weapon for use against fast moving, relocatable targets that it will be able to reach in a matter of minutes even at ranges of up to 300 km. **SP**



Embraer selects Esterline for KC-390 programme

Embraer Defense and Security has chosen Esterline Control Systems from the United States to supply the autothrottle system for the KC-390 military transport jet.

"Esterline has the most modern control devices, with flexibility to adapt to the specific needs of each application, thus ensuring the efficiency, comfort, and precision of our product," said Eduardo Bonini Santos Pinto, Sr. Vice President Operations & COO, Embraer Defense and Security. "This totally integrated solution provides an optimised combination of functionalities, design, and human interface."

The autothrottle system consists of two throttles and integrated controls for actuating other systems. It transmits to the full authority digital engine control (FADEC) the thrust demands from



the flight crew or from the automatic systems of the aircraft.

"This award means a great deal to Esterline. We are committed to supporting the Brazilian aviation industry, and greatly value our strong relationship with Embraer," said Brad Lawrence, Esterline's Chief Executive Officer.

Embraer also announced the selection of Messier-Bugatti-Dowty to supply the wheels, brakes, landing gear extension and retraction system and nose wheel steering manifold for the KC-390 military transport aircraft.

"The choice of Messier-Bugatti-Dowty will provide the necessary toughness to meet the demanding requirements of the KC-390 applications," said Eduardo.

The system consists of carbon brakes, electronic brake-by-wire units and hydraulic components responsible for controlling the braking of the aircraft, including auto-brakes and anti-skid. **SP**



Lockheed Martin's F-35 Lightning pitch

The F-35 Lightning II, the world's only fifth generation multirole fighter jet, known as AF-7 which has gone through flight testing programme at Edwards Air Force base, California, was one of the focus areas the defence aerospace major Lockheed Martin at Paris.

The fifth generation jet is a key element of global security cooperation between nations. The programme provides advanced capabilities to allied forces and unique opportunities for the global defence industry. With a planned recapitalisation path to maintain air dominance over



advanced threats, the F-35 provides the defence industry with sustained growth in advanced technology development and enduring aerospace work for the next 30 years and beyond. The programme has over 1,300 suppliers.

Meanwhile, Norway has approved the purchase of four F-35 jets initially in 2016 preparing for approved by the Norwegian Parliament despite concerns voiced by the opposition parties over ongoing uncertainties surrounding the main acquisition and life-cycle costs.

Norway's Defence Minister Grete Faremo said, "I'm glad the Parliament decided to support the acquisition of four F-35 training jets." The resolution clears the final hurdle before a formal order can be placed with the US Government, planned for August. **SP**



Eurofighter completes first phase of Meteor missile tests

Eurofighter has completed a range of air-carriage trials for the MBDA Meteor beyond visual range air-to-air missile (BVRAAM), which forms part of the process of integrating the missile onto the Typhoon swing-role combat aircraft.

The first of a series of trials to ensure the safe separation of the missile across the flight envelope were carried out by Eurofighter Partner Company BAE Systems with instrumented production aircraft (IPA 1) on the Aberporth range, UK.

The introduction of the Meteor missile will ensure that the Typhoon continues as the world's most advanced swing-role combat aircraft well into the future, keeping ahead of developing air-to-air threats. Meteor is a ramjet powered next generation BVRAAM, with the largest 'no escape zone' of any air-to-air weapon resulting in a long stand-off range and high kill probability to ensure air superiority and pilot survivability. This is being developed on behalf of France, Germany, Italy, Spain, Sweden and the UK by MBDA. **SP**

Raytheon to upgrade Patriot for Saudi Arabia

Raytheon Company has received a \$1.7 billion direct commercial sales contract to upgrade Saudi Arabia's Patriot air and missile defence system to the latest configuration-3. The award includes ground system hardware, a full training package and support equipment upgrades.

"Raytheon is honoured to provide the most technologically advanced air and missile defence system in the world to Saudi Arabia," said Tom Kennedy, President of Raytheon Integrated Defense Systems (IDS). "We are pleased that, with this contract, they have shown further confidence in Raytheon and the superior air and missile defence capabilities of the Patriot system."

Patriot is the affordable, low-risk and effective air and missile defence system of choice of 12 countries around the globe. The newly redesigned Patriot protects against a full range of advanced threats, including aircraft, tactical ballistic missiles, cruise missiles and UAVs. **SP**





Eurocopter has a good show at Le Bourget

Eurocopter fared well this year at the 2011 Paris Air Show, bringing in several orders and agreements throughout the week.

Announcements included orders for three EC135s for the French Gendarmerie Police; three EC135s for the Malaysian operator Aerotree for training purposes; an AS350 B2 for the Brazilian transportation operator Helimarte Táxi Aéreo; four AS350 B3s for Air Methods Corporation for air medical transportation; four EC175s for the French offshore operator Héli-Union and one EC225 for the Norwegian offshore operator Blueway.

In addition, Eurocopter signed a contract to upgrade 12 German Armed Forces NH90 tactical transport helicopters (TTH) for intensive-care medical transport in forward air evacuation operations, and a supplementary contract with the Malaysian Ministry of Defence related to the 12 EC725s they ordered last year.

A major highlight of the seven-day show was the first-ever public performance of the hybrid helicopter-plane concept X3, which created quite the buzz at the show due to its unique concept, fast speeds and glamorous looks. The EC175 also proved to be a real entertainer with its stunning daily acrobatic shows, raising many a goose bump among aircraft enthusiasts.

Eurocopter signed with the Malaysian Ministry of Defence a cooperation contract to deliver 12 EC725 helicopters, to be operated by the Royal Malaysian Air Force in search and rescue (SAR) and utility missions.

The contract includes 13 comprehensive cooperation projects to be developed with the objective of strengthening Malaysian strategic aeronautical skills and capabilities together with specific attention in education through the development of aeronautical training capabilities in association with Malaysian universities.

"This contract opens a new chapter in Eurocopter's relationship with Malaysia and will bring high-value technology and know-how to the country in line with the Malaysian Government Vision 2020," said Dominique Maudet, Eurocopter Executive Vice President Global Business & Services. **SP**

PHOTOGRAPHS: Eurocopter, Asaf Shildesrael Sun

Italian Air Force to get DIRCM systems from Elbit

Elbit Systems announced at the Paris Air Show that it was awarded a contract valued in excess of \$15 million by Elettronica S.p.A (Elettronica) to supply the ELT/572 DIRCM (directed infrared countermeasures) system for installation on various platforms of the Italian Air Force, including the C-130J, C-27J and AW101. The contract will be performed over the next three years.

Based on Elbit Systems Electro-Optics Elop Ltd. (Elop) MUSIC system, ELT/572 was jointly funded by Elettronica and Elop under a coop-

Elettronica President Enzo Benigni and Elbit Systems CEO Joseph Ackerman



eration agreement between the companies.

MUSIC is based on advanced fibre laser technology and counters MANPADS (man portable air defence systems) by emitting a laser beam towards an approaching missile causing the missile to veer off course.

Adi Dar, Elop's General Manager, commented, "We are extremely pleased with our cooperation with Elettronica on DIRCM that has resulted in this initial contract for the Italian Air Force. The threat of MANPADS to military cargo planes, tankers and helicopters, as well as commercial aviation is increasing, and our family of DIRCM systems provides effective protection to the aircraft." **SP**



Boeing bags Australian C-17 production contract

Boeing is being awarded a \$195 million firm-fixed-price delivery order against the basic C-17 production contract to procure one C-17 aircraft. This effort supports 100 per cent foreign military sales (FMS) to the government of Australia. The location of performance is Long Beach, California.

The C-17 is a high-wing four-engine, T-tailed military transport aircraft which can carry large equipment, supplies and troops directly to small airfields in harsh terrain. **SP**



Northrop Grumman's countermeasures system clocks record operation

Northrop Grumman Corporation announced that its directional infrared countermeasures system (DIRCM), currently deployed with US and allied forces, has achieved more than one million operational hours in service.

"DIRCM continues to be the standard for military aircraft protection, a system that is most called upon to assure mission success and the safe return of our troops, as indicated by the one million operational hours milestone," said Jeff Palombo, Sector Vice President and General Manager of Northrop Grumman's Land and Self Protection Systems Division.

"Of the more than one million hours accumulated to date, the majority have been logged under deployed and combat conditions, with an operational availability of over 99 per cent for the past 13 consecutive years – performance unequalled in industry," Palombo added. **SP**

Finmeccanica's technology and integrated solutions for a safer world

Finmeccanica through its companies—AgustaWestland, Alenia Aermacchi, Alenia Aeronautica, DRS Defence Solutions, DRS Technologies, Selex Elsas, Selex Galileo, Selex Service Management, Seicos, Selex Sistemi Integrati, Telespazio and Thales Alenia Space—showcased an array of technologically advanced products at the 49th Paris International Air Show 2011 at Le Bourget on June 21-26, 2011.

The array included advanced products ranging from small, sophisticated sensors, through to highly-developed platforms and huge systems networking the entire range of solutions.

Some of the products and solutions displayed were cut-

ting-edge technologies in military aircraft, unmanned aircraft, regional aircraft, helicopters and mission, avionics and communication systems, protection of large systems and IT threats, border control, programme to digitalise the Italian armed forces and a turnkey airport system, a non-lethal deterrent system and a radar system that "sees" through walls. **SP**

L-3 bags US Navy P-3 SMIP contract

L-3 Communications announced that its platform Integration division has been awarded \$104 million contract to perform aircraft sustainment for the US Navy's fleet of P-3, EP-3 and NP-3 aircraft. This indefinite-delivery/indefinite-quantity (ID/IQ) programme follows a previous programme awarded to L-3 in 2005.

The sustainment, modification and installation programme (SMIP) provides for an intensive depot-level process for P-3 airframe and component inspection and deficiency identification. The programme corrects deficiencies to ensure safe and reliable operation, as well as to enhance the aircraft





service life expectancy to sustain inventory levels throughout the service period.

"We are pleased to be selected to continue our work keeping the P-3 mission-ready and flying safely," said Nick Farah, Executive Vice President of L-3 Platform Systems. "Our ability to accomplish airframe sustainment concurrently with system integration will return these aircraft to service rapidly and affordably." **SP**

Bell Helicopter and AgustaWestland chart new direction for BA609



Bell Helicopter announced at the Paris International Air Show that AgustaWestland has agreed to purchase Bell's ownership interest in the BA609 tiltrotor programme, a Bell-AgustaWestland joint venture.

"Both companies agree it is the best business decision for AgustaWestland to take ownership of the programme with Bell Helicopter serving as the key engineering and component supplier," said John L. Garrison, President and CEO of Bell Helicopter. "This decision will free up research and development resources allowing Bell Helicopter to increase our investment in the revolutionary V-22, to develop the next-generation tiltrotor technologies for the US Department of Defense programmes and other applications, as well as increase our investment in our innovative commercial product line," he said. **SP**

Thales Raytheon Systems celebrates 10 years of transatlantic JV

Thales Raytheon Systems, an international leader in air defence command and control systems and ground-based radars, completed a decade of the defence industry's first transatlantic joint venture.

Jack Harrington, Chief Executive officer of Thales Raytheon Systems, discussed the strategic focus of the business at a Paris Air Show briefing. "We understand the importance of continued

alignment with our customer and their mission requirements," said Harrington. "Security against a growing number of unconventional threats, particularly in the missile defense and cyber domains, will be the focus in the foreseeable future."

Through programmes, prototypes and exercises with NATO, Thales Raytheon Systems is already developing unparalleled technologies and expertise to protect NATO troops and the citizens of Europe against ballistic missiles. Through the support of its parent companies Thales Raytheon Systems is able to provide a complete Air C4I solution with fully Integrated Air and Missile Defense (IAMD). **SP**

Finmeccanica to provide logistics support to ST Aerospace

Alenia Aermacchi – a company of Finmeccanica's Aeronautics Sector led by Alenia Aeronautica – has finalised with ST Aerospace the logistics support contracts for the 12 M-346 trainers sold at the end of September 2010 in the context of the fighter wings course programme of the Republic of Singapore Air Force.

The two contracts are expected to generate total sales in the range of €170 million. The first contract (supply chain management) envisages the joint management of the M-346 suppliers by Alenia Aermacchi and ST Aerospace (after-sales support, including spare parts provisioning, repair and overhaul services) with sharing of risks, sales and profits between the two companies. The other contract (operations & support) concerns instead the supply by Alenia Aermacchi of engineering support, programme/contract management and field support services. **SP**

Hawker Beechcraft and ATK demonstrate weapons system

Hawker Beechcraft Corporation (HBC) and ATK announced an upcoming demonstration of ATK's guided advanced tactical rocket (GATR) from HBC's AT-6 light attack and armed reconnaissance (LAAR) aircraft. The demonstration is expected to take place by the year end.

"We are excited to showcase the capabilities of this weapon system on the AT-6," said Jim Maslowski, HBC President, US and International Government Business. "GATR's low-cost and very low collateral damage make it an excellent choice to prosecute the LAAR mission."

GATR is a 70mm precision system that uses a semi-active laser guidance package to achieve extreme accuracy against both stationary and moving targets. With GATR, the pilot is able to lock-on before launch to ensure that only the target of interest is engaged, providing precision strike with much less collateral damage at a significantly lower cost than current guided missiles.

GATR is deployed from a light-weight 2.75 inches/70mm modernised rocket launcher in a seven-tube configuration for fixed-wing platforms and either a seven or 19-tube configuration for rotary wing platforms. GATR can be used for air-to-ground and ground-to-ground missions, including military operations in urban terrain. **SP**



Geocopter delivers R-UAV

The Dutch rotorcraft unmanned aerial vehicle (R-UAV) manufacturer Geocopter from the Netherlands officially delivered its first light unmanned rotorcraft system, designated GC-201, to its launch customer and development partner, the National Aerospace Laboratory (NLR).

The GC-201 is a versatile unmanned system, designed and built like a normal helicopter. It has received official CS-LURS Class 1 approval from the Dutch CAA. The main system features are: twin gas turbine engine propulsion system capable of flying single engine, a very light weight innovative carbon fibre fuselage and full automatic take-off, mission and landing capability.

At the Paris Air Show, the CEO of Geocopter Roland Haarbrink handed over the title of ownership to the CEO of NLR, Michel Peters.



Michel Peters said, "This is another successful result of our mission as NLR to support the national industry and innovate for and with Dutch companies, either big or small, like Geocopter. If you have an innovative idea and we believe in it, we can bring the idea to success together. My special thanks to the Netherlands Ministry of Defence who partially supported this innovative programme. We wish Geocopter a fruitful success with the GC-201 and will continue our efforts to support the evolution of the system."

Roland Haarbrink said, "We are proud having delivered the approved GC-201 to our launching customer NLR. We are looking forward to continuing our collaboration with the NLR, and are dedicated to serve our customers with this beautiful product." SP



TAI launches unmanned armed helicopter

Turkish Aerospace Industries (TAI) has launched a small, armed, unmanned helicopter. At the Paris Air Show, the R-IHA – the Turkish acronym for rotary-wing UAS – was launched and Gorkem Bilgi, business development leader at TAI's integrated helicopter department said the prototype is expected to achieve first flight in mid-2012.

TAI launched the R-IHA programme after detecting a gap in the market for an unmanned helicopter between 300 kg (660 lb) and 500 kg, Bilgi said. The prototype design is listed with an endurance of 4 hours, a maximum take-off weight of 340 kg with a 100 kg payload, 10,000 ft (3,050 m) service ceiling and a top cruise speed of 100 kt (185 km/h).

The R-IHA joins a UAS portfolio within TAI that includes a medium-altitude long-endurance UAS called the AMKA. The first vehicle achieved first flight in December last. Two more vehicles are scheduled for delivery in 2012 to complete an initial order by the Turks. SP

First customer receives Orbiter 3 system

Aeronautics Ltd. has delivered the first Orbiter 3 small tactical unmanned aerial system (STUAS) to an undisclosed customer.

"The Orbiter 3 STUAS brings to the unmanned systems market capabilities that did not exist previously," said Ran Carmeli, head of the Aerial Division at Aeronautics. "A field deployed, 25 kg electric powered UAS, can now deliver the same ISTAR output achieved up to now only by much larger tactical UAS of a 100 kg and more."

The Orbiter 3 can stay in air for seven hours, and reach ranges of more than a 100 km. It can carry a wide range of payloads, including the TD-STAMP from Controp Precision Technologies – a state-of-the-art tri-sensor, gyro stabilised mini payload combining CCD, cooled FLIR and a laser designator.

The Orbiter 3 STUAS is the largest variant of the Orbiter family of electric powered UAS. Its smaller variants, Orbiter 1 and 2 are deployed operationally worldwide by more than a dozen customers. Practically undetectable, Orbiter UASs are used for a range of missions in land warfare including: ISTAR, artillery support and special ops. In the maritime arena, Orbiter serves as an independent ISTAR asset for naval vessels – launched and recovered from its deck. SP





Selex Galileo unveils Falco Evolution

Sexel Galileo unveiled the latest variant of its Falco tactical UAV at the Paris Air Show. Dubbed 'Evolution', the extended-wing version will improve endurance, payload and altitude parameters, according to Selex Galileo CEO Fabrizio Gualianini.

The UAV's wingspan would increase from 7.2 m to 12.5 m, allowing payload capacity to be increased from 60 kg to 100 kg plus as well as an endurance extension from 14 hours up to 18. The 'Evo' model will be able to operate up to 1,000 m higher than previous altitudes of 5,000 m. Existing Falco UAVs will also have the ability to be retrofitted with the wing extensions.

In addition, Selex Galileo revealed that it had also developed an electronic warfare (EW) payload for the Falco UAV comprising a wing-tip array for 'high accuracy' direction finding; data-sharing; and geo-location capabilities. **SP**

French OPV prepares for UAS trials

The Camcopter S-100 will begin sea trials on board the French Navy's Gowind class of offshore patrol vessel (OPV) in the next few months, according to Schiebel Managing Director Neil Hunter.

The navy's L'Adroit OPV, manufactured by DCNS, is the first European solution to be designed and built to carry both UAVs and USVs, Hunter stressed. The OPV, complete with UAVs, will be handed over to the end user by the end of the year.

Last year, Schiebel completed trials with the French DGA comprising a total of 150 flight hours. Taking place in a 'desert environment' on the French island of Levant, tests comprised surveillance in an urban and littoral locations utilising the Thales optronique agile 2 EO/IR payload. **SP**

Joint programme for next-gen drone delayed: French Minister

The French Minister, Gerard Longuet, informed journalists at the Paris Air Show that France and Britain had delayed the decision on a joint programme to develop next-generation drones.

The Minister said that the lack of an armed drone in France's military arsenal for the next three to six years meant it could need an interim solution. He said that it would take almost a year to start working together.

Meanwhile, Dassault Aviation of France and BAE Systems of Britain revealed that the joint programme dubbed Telemos (mythical Cyclops) would be ready in five years. Telemos will be a medium-altitude, long-endurance combat drones for the armed forces of both nations. The programme was formalised through a Franco-British cooperation treaty signed in November last year. BAE is the lead contractor for the project which is estimated to cost €1 billion. **SP**

Raytheon bags contract for Global Hawk ground station sustainment

Raytheon Company has been awarded a one-year subcontract worth \$24.7 million for support services of the ground station elements of the RQ-4 Global Hawk high-altitude, long-endurance unmanned aircraft system.

Work under this contract will provide field support services to the mission control and launch and recovery elements for 10 Global Hawk ground stations deployed globally and operating at multiple domestic and international locations, including Beale Air Force Base, California; Grand Forks Air Force Base, North



Dakota; Andersen Air Force Base, Guam; and Sigonella Naval Air Station, Italy.

"The Global Hawk unmanned aircraft system, supported by Raytheon's ground station, has proven its capabilities, with numerous missions to Afghanistan, Iraq and Libya as well as providing detailed high-resolution imagery from the earthquakes in Japan," said David Wilson, a Defense and Civil Mission Solutions Director within Raytheon Intelligence and Information Systems. "As the original developer and producer of the Global Hawk ground station, Raytheon is proud to be a major subcontractor, providing sustainment vital to the success of the Global Hawk system. We are committed to providing continued exceptional performance in support of warfighters." **SP**



Booming homeland security market

[By Sucheta Das Mohapatra]

The homeland security market is growing and so are the number of industry players and homemade products. Yet the fourth edition of the homeland security expo, Indesec 2011, was a gloomy affair. The expo had enough to provide visitors varied product experience, but did not attract many except government officials and industry representatives. There was a considerable rise in the number of Indian players this year whereas it is not the same with international companies.

Organised by Informa India in association with the Associated Chambers of Commerce (ASSOCHAM), and supported by the Ministry of Home Affairs and the Ministry of Micro, Small and Medium Enterprises, the three-day event brought together many original equipment manufacturers (OEMs) from India and abroad.

Inaugurating the exhibition, M. Venkaiah Naidu, Chairman, Parliamentary Standing Committee on Home Affairs, said that security is the responsibility of each and every citizen of the country and the international community should understand the agony of India. "The government and industry should collaborate to upgrade and modernise security systems and communication networks," he said.

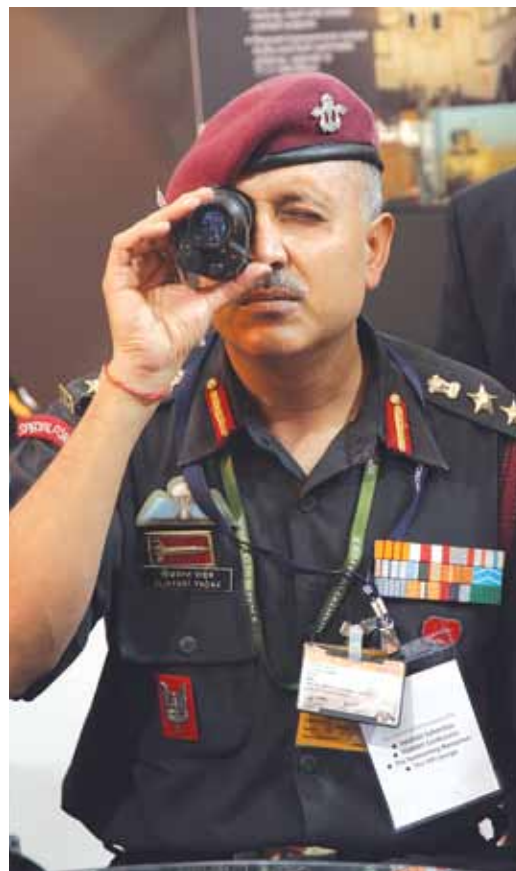
Homeland Security Assessment—India Expansion and Growth, a report on homeland security developed by ASSOCHAM and Aviatech was also released on the occasion by Naidu.

Rajiv Mehrotra, Chairman and MD, Shyam Telecom and President, Telecom Equipment Manufacturers' Association (TEMA), said, "It is in our interest to develop indigenous high-tech products and better cooperation between private and public sector can make it possible." Likewise, Dr S.D. Pradhan, ex-Chairman, Task Force on Intelligence Mechanism, Prime Minister's Office, said that closer cooperation between government agencies and corporate bodies can help enhance the capacity of the intelligence agencies, while R.F. Khan of Ericsson India said that a procurement policy like the Defence Procurement Procedure (DPP) should be made for homeland security as well. "It will make it easier for the private sector to avoid lengthy government procedures."

Although there were many international players, the participation of small and medium enterprises was noticeable. Besides industry leaders like Tata Motors, Cobham, Hawker Beechcraft, other exhibitors including Panasonic, Mistral Solutions, MKU, Streit Group, Lacroix Defence and Security, Ericsson, Getac Technology Corporation, CAE, Saab Systems GRintek, Maresco Technologies and Tenmek Optics Ltd from Israel, Trijicon, Nova Integrated Systems Limited, FLIR, etc participated in the annual event.

Conferences

A two-day-long high level conference was also organised which had sessions on "Critical Infrastructure Protection", "Scope of Homeland Security in Offset Policy", "Electronic and Digital Surveillances: Challenges and Way Forward", "Centre & States Partnering for Homeland Security", "Upgrading Technology for Effective-Border Management", "Cyber Warfare: An Extension of Foreign Policy", etc. **SP**



(From top to bottom) An army official checking a ITT solution; David Duprez of Trijicon demonstrating a gun; a senior official of the Haryana Police at the Taser pavilion

3rd SECURITY INDIA 2011

Hotel Shangri-La, New Delhi, India
7 July 2011

Theme: “Changing landscape of Security and Surveillance”

Session Topics:

- Merging Role of Physical and Digital Security
- Impact of Convergence on information security
- Panel discussion: How secure is your work place for ensuring business continuity?
- Road ahead: Integrated approach for a secured eco-system

Eminent speakers:

- Mr. Rajiv Mathur, Former Director, Intelligence Bureau
- Dr. Gulshan Rai, Director General, STQC Directorate, CERT-In, Ministry of Communications & IT, Government of India
- Dr. Nirmaljeet Singh Kalsi, Joint Secretary- Police-II, Ministry of Home Affairs, Government of India
- Dr. Kashmir Singh, Addl. Director General, CISF (Aviation), Government of India
- Mr. Ranjit Narayan, Spl. Commissioner, Delhi Police
- Mr. D.N.S. Bisht, Former IGP, AVP - Security, Select City Walk Mall, New Delhi
- Mr. Lalit Chandak, President, Spantel
- Mr. Vikas Chadha, Director - South Asia, Honeywell Security Group
- Dr. Subhash Challa, Co-Founder & CEO, Sensen Networks
- Mr. Gopal P. Choudhary, Corporate Head- Global Security Group, Wipro Limited
- Mr. Anil Dhawan, President, APSA
- Mr. Sivaraman Krishnan, Executive Director, PricewaterhouseCoopers Pvt. Ltd.
- Mr. Philip Siow, Sr. Consultant, Axis Communications and many more...



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ITT's range of homeland security products

ITT showcased its global network on the move—active distribution (GNOMAD) for an array of military and government agency vehicles. It provides a secure, affordable, modular, and expandable mobile point of presence or network extension to support critical communication needs worldwide.

Its key features include on-the move Ku-band terminal taking advantage of global satellite coverage to provide network connectivity anywhere, even in motion; secure communications supporting encryption devices in use by military and commercial users; connects soldier radios to IP networks, providing beyond the line of sight communications to radios such as AS-110; its voice over internet protocol (VoIP) users can communicate with existing infrastructure, etc.

Also was ITT's hands-free audio video capturing and transcribing transmission system (HAVCATTS) combining Taser International's Axon audio and video capabilities with the ITT SpearNet radio. The mix of technologies helps the end user focus on their mission while simultaneously capturing it in digital video and audio. HAVCATTS two-in-one system provides medics with hands-free capabilities to capture, transcribe and transmit complete wounded warrior medical treatment events. Using HAVCATTS with GNOMAD system enables dismounted medics and medical evacuation vehicles to support medics with on-the-move telemedicine support from medical staff located at combat aid stations, combat support hospitals and medical treatment facilities within the area of operations. HAVCATTS assists organisations in providing effective training from internship, cross-training, on the job crime scene investigation and incident response teams, by allowing recording of their actions. **SP**

Dafar products for border patrol

Dafar International displayed a range of products for border patrolling—land, sea, and air. On display was the DF 101 DKL lifeguard uses state-of-the-art technology to make even the toughest searches and patrols faster and safer. It can be used together with dogs, thermal imaging and other techniques to secure and patrol a building or perimeter or to speed searches and direct rescuers to areas where survivors are concentrated.

The company also displayed its DF 602 Seabob Divejet 414 and DF603 Seabob Black Shadow 703. Also on display was Dafar's portable video detector designed keeping in mind the police, military and rescue workers.

Dafar's unmanned aerial vehicle Mini DF 201 could not be displayed at Indesec as it got stuck with the customs. "We have already sold Mini DF 201 UAV in Australia, New Zealand, China, UK, Germany, etc and wanted to showcase it here too, but unfortunately we couldn't. The UAV will be of great help in India," said Robert Kuo of Dafar International. **SP**



Mistral's mobile C4ISR platforms

Mistral showcased its mobile C4ISR platforms already in service with the Karnataka and Gujarat state police. The platform is for police, paramilitary forces, Special Forces, defence and private security agencies, etc. They are easily deployable solutions targeted at requirements such as VIP security, public events, law and order control, emergency/disaster management, tactical security operations and critical infrastructure protection. The company is talking to many other state police force too.

The company showcased its mobile surveillance vehicle (MSV) equipped with IP video surveillance equipment, video management and analytics, command and control modules and monitoring stations. It is ideal for VIP security and monitoring of public events like sports, political rallies, entertainment shows, etc, and can be installed on a sports utility vehicle (SUV), if required.

Mistral's mobile war room (MWR) is a fully-featured C4ISR platform, and provides an emergency operations centre (EOC) capability on a mobile platform. It is ideal for deployment for high-intensity law and order situations, terrorist attacks and high-scale emergency/disaster management situations. **SP**



FLIR imaging for internal security

FLIR Systems showcased its thermal imaging/IR cameras for a wide variety of applications like airport security, border security, maritime and coastal security. Its state-of-the-art infrared imaging technology detects infrared radiation/heat enabling the user to see in total darkness, in almost all weather conditions. FLIR offered infrared cameras for law enforcement, surveillance and security agencies. FLIR's Guardsman handheld thermal imaging cameras lets security professionals see clearly in total darkness, providing an undeniable tactical advantage. The company's Prism 200 is lightweight, durable and highly sophisticated through-wall radar. It can provide Special Forces, police and emergency services with accurate covert intelligence of the location and movement of people in situations where it would otherwise be impossible to gain such insight. **SP**



Lockheed Martin study finds increased cloud computing adoption

Lockheed Martin and its Cyber Security Alliance partners have released a study revealing security remains the single biggest concern on the minds of government information technology decision-makers when it comes to cloud computing. Despite these security concerns, 50 per cent are now considering cloud applications for their agencies, versus only 12 per cent a year ago.

Two-thirds of participants cited security as the most important element in their evaluations. At the same time, those more familiar with cloud computing are more than twice as likely to trust it, 57 per cent versus 24 per cent. Concerns about security are not the only obstacle holding back federal agencies from moving to the cloud. **SP**

Rogue hackers disband campaign

A group of rogue hackers under the name of Lulz Security, which had recently released stolen files, has announced that it was ending its hacking campaign.

The six-member group said in a press release uploaded to the Pirate Bay file sharing website: "For the past 50 days, we have been disrupting and exposing corporation, governments, often the general population itself, and quite possibly everything in between, just because we could."

The group reportedly hacked sites of AT&T Inc., Lockheed Martin, Sony, CIA, the US Senate, etc. **SP**

Lynn outlines new cyber security effort

The US Deputy Defense Secretary William J. Lynn III has outlined a pilot programme in which the government helps the defence industry in safeguarding the information their computer systems hold.

In a keynote address at the Center for Strategic Decision Research's 28th International workshop on Global Security, Lynn described the Defense Industrial Base Cyber Pilot – called "DIB Cyber Pilot" for short – in which the Defense Department, in partnership with the Department of Homeland Security, shares classified threat information and the know-how to employ it with participating defense companies or their Internet service providers to help them in defending their computer networks from attack or exploitation.

"Our defense industrial base is critical to our military effectiveness. Their networks hold valuable information about our weapons systems and their capabilities," Lynn said. "The theft of design data and engineering information from within these networks greatly undermines the technological edge we hold over potential adversaries." **SP**

Cyber crime goes unreported

A recent study by a Gurgaon-based non-governmental organisation (NGO) – Centre for Transforming India, has revealed that while over two dozen cyber crimes are committed on a daily basis, many go unreported and very few are registered with the police. The NGO said that due to this the estimated loss was around ₹200 crore annually to the IT industry.

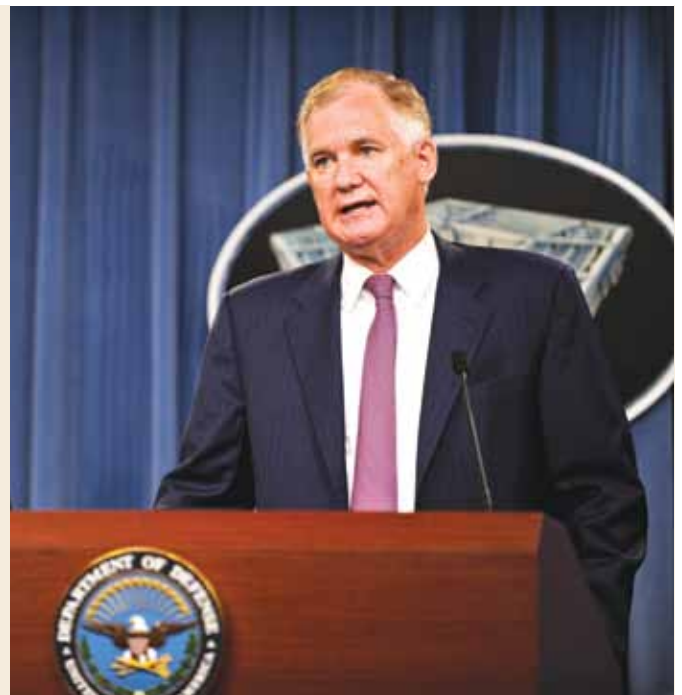
Media reports have indicated that the cyber crime rate in Gurgaon has gone up from last year. In 2010, the number was around 100 and in the first five months of 2011, the number had gone up to 128 cases, indicating either that the crime rate has gone up or the reporting of such crime. The complaints included data theft by former employees, e-mail hacking, fraudulent transfer of funds, etc. **SP**

Cyber attacks result in insurance boom

In the US, many companies are increasingly insuring themselves against cyber attacks, following a spate of attacks on various company websites, government institutions etc. According to reports the demand for insurance against cyber attacks has increased exponentially and it is reported that some companies have insured themselves up to \$ 200 million.

In the recent past, there have been cyber security breaches of major companies such as Lockheed Martin, Sony, Citibank etc.

The attack on Sony's systems resulted in loss of personal information of over 100 million users accounts, forcing Sony to shut down its popular online gaming network for over a month. Sony estimated that the attacks could cost \$172 million in administrative fees, security upgrades, compensation costs, as well as legal fees. **SP**





RFI/RFP/TENDERS

Indian Army

RFI: Spatial Disorientation Simulator

Branch name: Army Aviation

Publication date: May 20

Last date: July 20

RFI: Mine Protection Gear (MPG)

Branch name: E-in-C Br

Publication date: May 23

Last date: August 31

Source : www.indianarmy.nic.in

Indian Navy

Tender: Implementation of telepresence system

MoD (Navy)

Publication date: June 7

Last date: July 12

Source: www.indiannavy.nic.in

RFI: Multi-mission maritime aircraft

Indian Coast Guard

Publication date: June 15

Last date: July 31

Indian Air Force

Tender: Spares for MiG-29 aircraft

Air Hqrs

Publication date: May 2

Last date: July 14

Tender: Spares for MI 26 helicopter

Air Hqrs

Publication date: May 16

Last date: July 14

Tender: Aviation particle counter tester

Air Hqrs

Publication date: April 21

Last date: July 14

RFI: Supply of MR SAM

Air Hqrs

Publication date: June 15

Last date: July 15

Ministry of Home Affairs

Tender: Video surveillance system

Central Industrial Security Force

Publication date: June 23

Last date: July 19

Tender: Explosive detector

Central Industrial Security Force

Publication date: June 2

Last date: July 21



INDESEC 2011

Sherpa, an all-terrain LAV

Shri Lakshmi Defence Solutions Ltd unveiled the Sherpa, its new light armoured vehicle (LAV) during Indesec. The indigenously developed vehicle, in a joint programme with Ford India, is designed keeping in mind the operational requirements of the police and paramilitary forces.

The mid-sized 360° armoured vehicle built on monocoque capsule-based provides ample protection. The 2+6 seat vehicle with maximum speed of 160 kmph is an ideal force multiplier in war against naxals and terrorists, even in an urban scenario especially for the command vehicle operations. With its unique safety features and rigidity of frame, the vehicle can tackle any terrain and prove useful as a force multiplier for homeland security. **SP**

Cougar for tight urban combat scenarios

Armoured vehicles manufacturer, Streit Group, displayed its Cougar vehicle. Toyota's rugged chassis offers superb on and off road handling in addition to impressive acceleration and braking.

Cougar offers fighting platform with 360 degrees traversing turret (optional) and gun ports on the sides and rear of the vehicle. It is capable of returning fire in a convoy escort assault scenario and its size makes it ideal to handle in tight urban areas. **SP**

Tata armoured Safaris for VVIP safety

Tata Motors showcased its Tata Armoured Safari for VVIP protection. The vehicle can run on flat tyres and has five exit doors, plush seating, fine tuned suspension, bomb resistant plate protection for fuel tank, emergency exit on the tail gate; upgraded chassis, etc. It is the first body-in-white stage armoured technology giving enhanced ride and comfort levels for both the driver and the occupants.

Tata also highlighted the light bullet proof vehicle (LBPV) for counterinsurgency operations (defence and retaliation), patrolling and escort vehicle. **SP**



Cobham's robot for easy disposal of bombs

Cobham displayed its explosive ordnance depot (EOD) robot telemex vehicle at Indesec. It is a highly sophisticated, small and versatile EOD robot designed to be operated by bomb disposal engineers, and is best suited for operation in confined spaces like airplanes, underground trains and coaches. It can be controlled by radio link via an optional fibre optic cable or through a three-metre cable. It is the only vehicle in its class to have two tool magazines integrated in the chasis. As a result, the operator saves valuable time, permitting him to concentrate on the actual task at hand. "The robot can climb stairs, enter an airplane, locate the bomb if any, pick it up, take it to a safe place and finally diffuse it," said a Cobham spokesperson at the show. **SP**



Northrop Grumman celebrates 50 years of infrared countermeasures innovation

Northrop Grumman Corporation celebrated 50 years of infrared countermeasures (IRCM) innovation and performance during the 49th International Paris Air Show 2011.

The company dates its “50 Years of IRCM” anniversary to 1961 when a team of Northrop Grumman engineers developed the first active onboard IRCM system that defeated a Sidewinder missile. From that time, Northrop Grumman has created a litany of IRCM breakthroughs to include the development and introduction of directed infrared countermeasures (DIRCM) lamp-based systems, DIRCM laser-based systems and the Guardian system, specifically designed to protect commercial aircraft.

“Northrop Grumman’s IRCM systems have been saving lives for nearly five decades, and we are not about to stop now,” said Jeff Palombo, Sector Vice President and General Manager of Northrop Grumman’s Land and Self Protection Systems Division.

The current, fifth generation, combat-proven system is a modular open system architecture framework that functions automatically by detecting a missile launch, determining if it is a threat and activating a high-intensity laser-based countermeasures system to track and defeat the missile. ^{SP}

Lockheed Martin elects two new corporate officers

Lockheed Martin announced that its Board of Directors has elected Kenneth R. Possenriede as Vice President and Treasurer and Leo S. Mackay, Jr., as Vice President of Ethics and Business Conduct, both effective July 1, 2011.

“Leo and Ken are superb executives who have broad experience and excellent track records,” said Bob Stevens, Lockheed Martin Chairman and Chief Executive Officer.

Possenriede will succeed Vice President and Treasurer John McCarthy, who is retiring. Mackay will succeed Alice M. Eldridge, who is ending her rotation in that position to join the corporate legal staff as Vice President and Associate General Counsel, Enterprise Legal Initiatives, where she will focus on export control matters and subsidiary management.

Lockheed Martin declares dividend

Lockheed Martin Corporation has announced that its Board of Directors has authorised a third quarter 2011 dividend of \$0.75 per share. The dividend is payable on September 23, 2011. Lockheed Martin 2010 sales from continuing operations were \$45.8 billion. ^{SP}

Trijicon to establish liaison office in India

US-based Trijicon, known for its innovative applications for tritium and advanced fibre-optics, will be establishing a liaison office in India within six months. This was declared by Trijicon officials at the homeland security expo Indosec 2011.

“India is a growing market. Though business has not been as expected in India, we see business in the future,” said David Duprez of Trijicon. The company displayed a wide range of guns. On display also were weapons for non-lethal applications to tackle with riot like situations. The company is talking to Central and state government agencies on its varied products. ^{SP}



SECURITY EVENTS

BRIDEX 2011 (Brunei International Defence Exhibition)

6-9 July
Bridex International Conference Centre,
Negara Brunei, Darussalam
www.bridex2011.com/08venueMain.html

SAFE 2011 (5th International Exhibition on Internal and Homeland Security)

7-9 July
Halls 9, 10, 11A, Pragati Maidan,
New Delhi, India
www.ciionline.org

5th International Conference and Exhibition on Internal Security

12-13 July
India Habitat Centre, Lodi Road,
New Delhi, India
www.cii.in

Military Airlift: Rapid Reaction and Tanker Operations Asia Pacific

13-14 July
Grand Copthorne Waterfront Hotel,
Singapore
www.smi-online.co.uk/events/overview.asp?is=1&ref=3638

5th Counter IED Summit

25-27 July
Wyndham Tampa Westshore, Tampa,
FL, USA
www.counteriedsummit.com

6th Night Vision Systems

25-27 July
Marriott Hotel Washington, Washington
DC Metro Area, USA
www.nightvisionevent.com

Military Vehicles Exhibition & Conference

9-11 August
Cobo Convention Center, Detroit, MI, USA
www.militaryvehiclesexpo.com

Armoured Vehicles South Africa

22-24 August
Sheraton Hotel Pretoria, South Africa
www.armouredvehiclesevent.co.za

DEFTECH 2011

24-25 August
Manekshaw Centre, New Delhi
www.ciidefence.com/deftech2011.asp?id=12

2nd Annual Modeling & Simulation Summit

29-31 August
Venue to be Confirmed, Orlando,
FL, USA
www.modelingandsimulationevent.com



Brad Pitt frisked at theatre

Brad Pitt, who landed unannounced some time ago at Bruin theatre to watch his film *The Curious Case of Benjamin Button*, was in for some frisking by the security guard, with the paparazzi clicking away pictures.

The scene went something like this: Brad Pitt and a stream of photographers following him entered the Bruin theatre which was screening his film. The bouncer at the theatre tried to keep them away as he failed to recognise the star who was sporting a moustache and a hat. It was only later that the bouncer recognised the star and there was a patch-up with Pitt taking the initiative. **SP**

Schwarzenegger enacts law against paparazzi

California Governor Arnold Schwarzenegger has promulgated a law, making it a crime for paparazzi and others to follow recklessly in a vehicle in order to secure footage.

It will now also be against the law for paparazzi types to block a person's path as they try to get away. Readers might remember that Princess Diana's driver crashed the vehicle killing all but the bodyguard in an effort to escape from the paparazzi's glare in Paris. If information is obtained in an illegal manner, that information is classed as "fruit of the poisonous tree" and will be thrown out of court. **SP**



PHOTOGRAPHS: Wikipedia, US Government

Imposter stacks weapons

An Army Reserves member but never on active duty at Florida's MacDill Air Force Base sometime ago managed to procure housing on the base and illegally store weapons and munition in it.

Though ineligible for base housing, Bennett said he was on 'active duty' and dressed in a military uniform visited the base stating that he had just got off a plane with Admiral Eric Olson, who heads the clandestine US Special Operations Command.

Bennett allegedly claimed that the Admiral "had directed him to obtain government housing as quickly as possible." He lived in the accommodation for three months before he was arrested for drunk driving which led to the discovery that he was an imposter and had stacked a loaded gun, seven knives, a machete, a collapsible baton, mace, etc. **SP**

Secrets of Air Force One

Air Force One, the Presidential jet of USA has an aura of its own, but not many really know the interiors inside-out, that it is shrouded in secrecy. But in 2006, Air Force One was almost laid threadbare on a website, a major security lapse.

The diagrams showed the location of the President's suite, at the very front of the Boeing 747, which is known to include a medical facility, workout room, kitchen and office, as well as a bedroom. Another showed the location of oxygen tanks which could, in theory, be targeted by a terrorist sniper.

The revelation included that Air Force One contained 85 telephones, 19 televisions, facilities for film screenings, flares to repel missiles and shielding to protect onboard electronics from an electromagnetic pulse. **SP**



47

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