

SP's



AN SP GUIDE PUBLICATION



₹55.00 (INDIA-BASED BUYER ONLY)

SP's

ONLY FORTNIGHTLY ON

MILITARY

AEROSPACE

INTERNAL SECURITY

www.spsmai.com

April 16-30 • 2011

FROM THE EDITOR'S DESK 4

MILITARY 5
Updates

NCW with DRS Tactical Systems 6
[PETER BRACKETT]

India Finally Stands Up to 7
Russian Blackmail
[VISHAL THAPAR]

Surprise Tie-ups by 9
Artillery Majors
[VISHAL THAPAR]

Viewpoint 10
Strategic Impotence
[LT GENERAL (RETD) P.C. KATOCH]

AEROSPACE 11
Updates



Unmanned Vehicles 13

INTERNAL SECURITY 15
Updates

Indo-Pak Relations 16

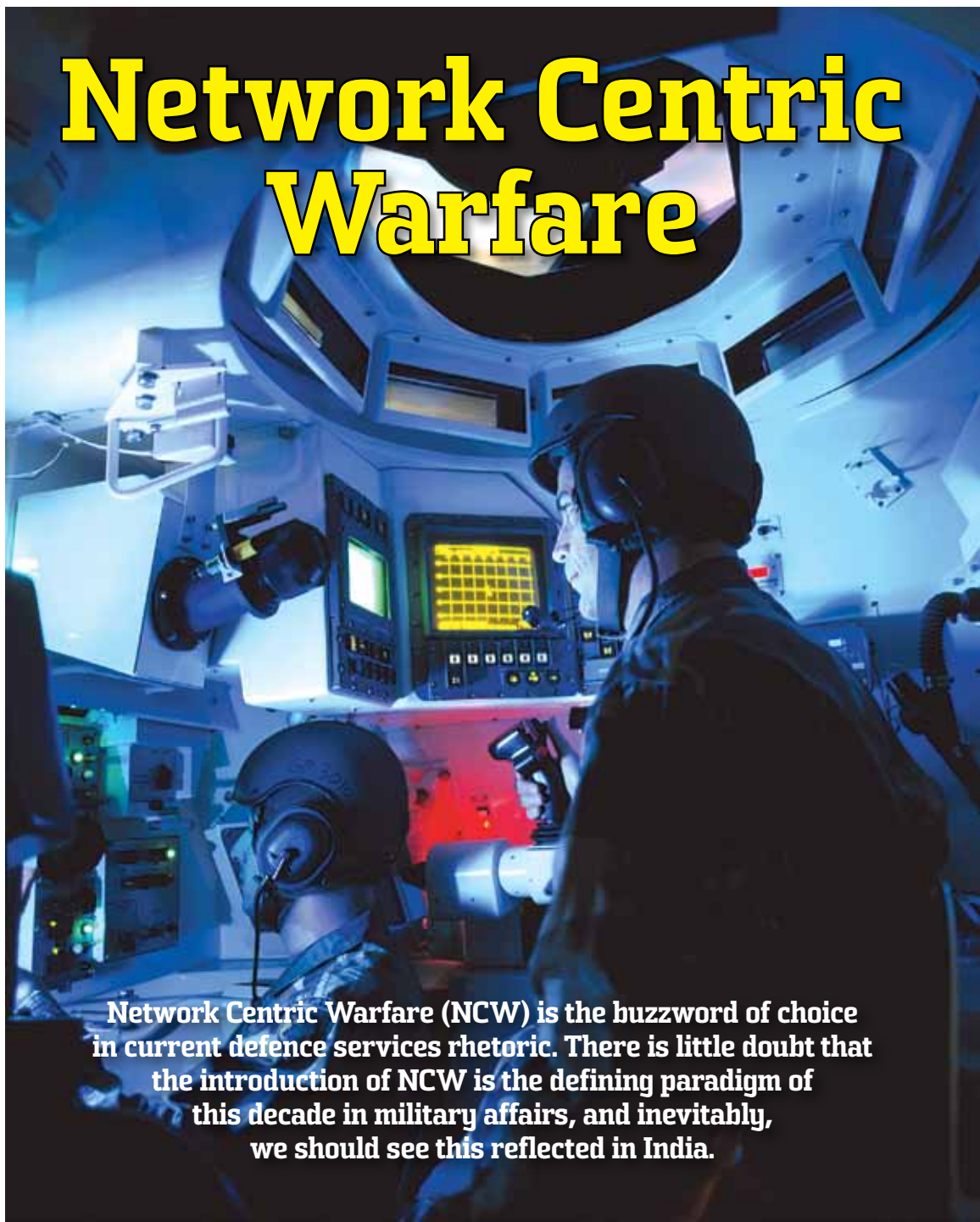
Cyber News 19

NEW PRODUCTS 20

CORPORATE 21

SECURITY BREACHES 22

Network Centric Warfare



Network Centric Warfare (NCW) is the buzzword of choice in current defence services rhetoric. There is little doubt that the introduction of NCW is the defining paradigm of this decade in military affairs, and inevitably, we should see this reflected in India.



SP GUIDE PUBLICATIONS



CLAWS

NCW *in the* INDIAN CONTEXT

Technology Partner:



SP Guide Publications & Centre for Land Warfare Studies (CLAWS)

Cordially invite you for a Seminar on

NETWORK CENTRIC WARFARE IN THE INDIAN CONTEXT

Date: 21st April 2011

Venue: Manekshaw Centre, Parade Road, New Delhi

Seminar: 10:00 AM onwards

<http://events.spguidepublications.com>

SP Guide Publications is the exclusive media partner of the seminar

SP's
**MILITARY
YEARBOOK**
S I N C E 1 9 6 5

SP's
Aviation

SP's
airBUZ
An Exclusive Magazine on Civil Aviation from India

SP's
Land Forces

SP's
Naval Forces

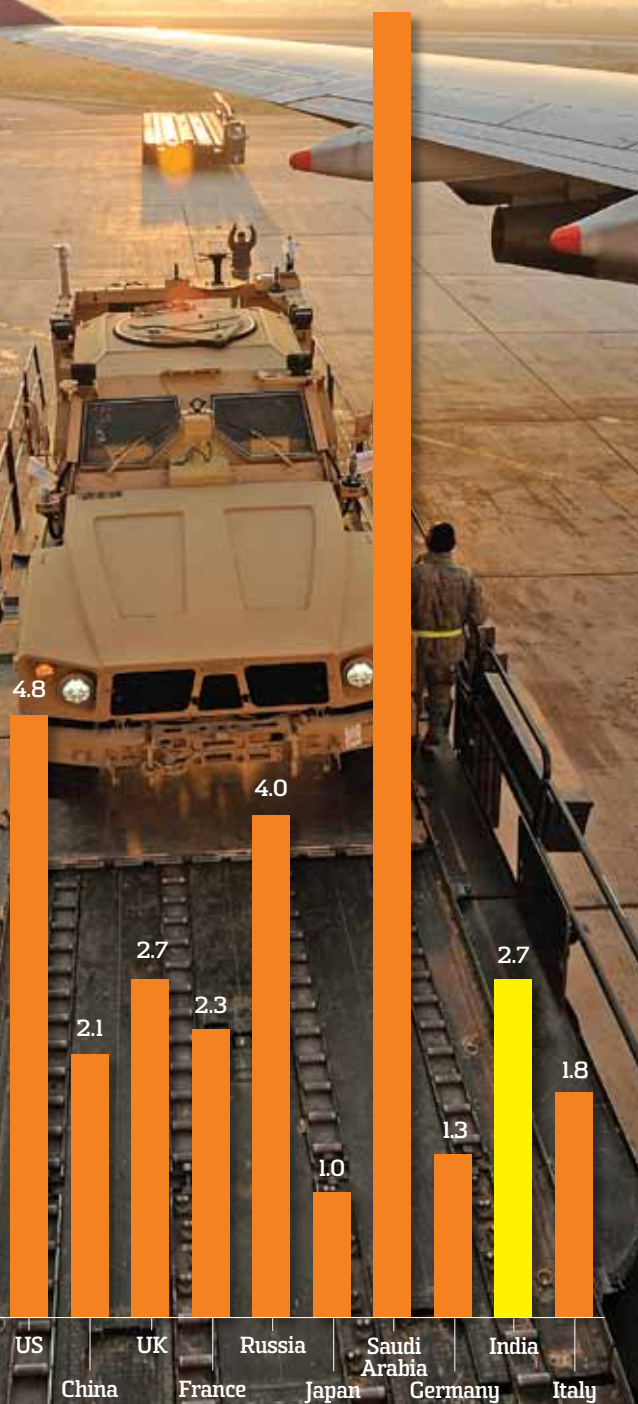
SP's
MAI
An Exclusive Magazine on Internal Security



Top 10 countries with the highest military expenditure for 2009 published in the SIPRI Yearbook 2010. Figures indicate the military budget as share of 2010 GDP (%)

World total: 2.6

10.4



Source: SIPRI Yearbook 2010



Cover:

Network Centric Warfare (NCW) is the buzzword of choice in current defence services rhetoric. There is little doubt that the introduction of NCW is the defining paradigm of this decade in military affairs, and inevitably, we should see this reflected in India.

Cover Image: Lockheed Martin

PUBLISHER AND EDITOR-IN-CHIEF

Jayant Baranwal

ASSISTANT GROUP EDITOR

R. Chandrakanth

SR TECHNICAL GROUP EDITORS

Air Marshal (Retd) B.K. Pandey

Air Marshal (Retd) V.K. Bhatia

Lt General (Retd) Naresh Chand

Lt General (Retd) V.K. Kapoor

R. Adm (Retd) S.K. Ramsay

SPECIAL CONTRIBUTOR

Lt General (Retd) P.C. Katoch

SR COPY EDITOR & CORRESPONDENT

Sucheta Das Mohapatra

CHAIRMAN & MANAGING DIRECTOR

Jayant Baranwal

ADMIN & COORDINATION

Bharti Sharma

Survi Massey

DESIGN & LAYOUT

Senior Art Director: Anoop Kamath

Designers: Vimlesh Kumar Yadav,

Sonu Bisht

DIRECTOR SALES & MARKETING

Neetu Dhulia

SALES & MARKETING

Head Vertical Sales: Rajeev Chugh

SP'S WEBSITES

Sr Web Developer: Shailendra P. Ashish

Web Developer: Ugrashen Vishwakarma

© SP Guide Publications, 2011

ANNUAL SUBSCRIPTION

Inland: ₹1,150 • Foreign: US\$ 325

E-mail: subscribe@spsmai.com

LETTERS TO THE EDITOR

editor@spsmai.com

FOR ADVERTISING DETAILS, CONTACT:

advertise@spsmai.com

guidepub@vsnl.com

neetu@spguidepublications.com

rajeev.chugh@spguidepublications.com

SP GUIDE PUBLICATIONS PVT LTD

A-133 Arjun Nagar,

(Opposite Defence Colony)

New Delhi 110 003, India.

Tel: +91 (11) 24644693,

24644763, 24620130

Fax: +91 (11) 24647093

E-mail: guidepub@vsnl.com

POSTAL ADDRESS

Post Box No 2525

New Delhi 110 005, India.

REPRESENTATIVE OFFICE

534, Jal Vayu Vihar

Kammanhalli Main Road

Bengaluru 560043, India.

Tel: +91 (80) 23682534

Owned, published and printed by Jayant Baranwal, printed at Kala Jyothi Process Pvt Ltd and published at A-133, Arjun Nagar (Opposite Defence Colony), New Delhi 110 003, India. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, photocopying, recording, electronic, or otherwise without prior written permission of the Publishers.



SP GUIDE PUBLICATIONS
www.spguidepublications.com



The power of network centric warfare

Vice Admiral (Retd) the late Arthur K. Cebrowski known as the 'father of network centric warfare' had said "We are less concerned with the combat capability of expensive weapons platforms than their ability to function on a networked, information-age battlefield. This has to do with a weapons system information processing power... It's command, control, communication, computer and intelligence, surveillance and reconnaissance (C4ISR)."

NCW or network centric warfare is redefining the future battle-space and in the information age, power is increasingly derived from information sharing, information access and speed. The Indian armed forces are moving fast in this direction. Understanding the implications of a networked force, SP Guide Publications in association with the Centre for Land Warfare Studies (CLAWS) has organised on April 21 a seminar on 'NCW in the Indian Context' in Delhi.

As India races towards becoming a major power centre, forces inimical to this ascendancy have been putting up stumbling blocks from across the borders. The urgency to quell such elements squarely needs no emphasis. In his fortnightly viewpoint Lt. Gen (Retd) P.C. Katoch mentions how the Chinese are active on the Indo-Pak border and the kind of infiltration that is happening, but the powers that be have shown 'strategic impotence'. In another article, the General wonders when the perpetrators of the 26/11 Mumbai attacks will be brought to book... or to be specific when Ajmal Qasab will be hanged. These doubts are juxtaposed with the joint statement of the Home Secretaries of the two countries reiterating their commitment to fight terrorism in all its forms and manifestations and reaffirmed the need to bring those responsible for such crimes to justice.

Meanwhile, the Defence Ministry has come out firmly opposing any move by original equipment manufacturers to insist on buying only their spares. Vishal Thapar in an exclusive piece

talks about how the defence authorities pushed to the brink by the unreliability of Russian after sales support, for the first time, has hit the international market for spares for Russian-made aircraft and missile systems. Traditionally, these vital spares are sourced from original equipment manufacturers through the Rosboronexport interface.

In another article, the author dwells on the battle lines that have been drawn for the \$4 billion (₹18,000 crore) tender for 1,580 155mm, 52 calibre towed artillery guns for the Indian Army. As the April 28 deadline for the submission of bids approaches, it appears that local partnerships could be the key to success in the competition.

SP's M.A.I. continues to capture the developments in the defence and homeland security areas and would appreciate feedback to further improve our offering. **SP**

Jayant Baranwal
Publisher and Editor-in-Chief



NCW in the Indian context

SP Guide Publications in association with the Centre for Land Warfare Studies (CLAWS) is organizing a one-day seminar on “Network Centric Warfare in the Indian context” on April 21 at Manekshaw Centre, Delhi. The seminar is being inaugurated by Dr. V.K. Saraswat, Scientific Adviser to Raksha Mantri and the Director General of Defence Research and Development Organisation (DRDO).

The session on ‘NCW and the Indian Armed Forces: Present Status and Concerns’ is being chaired by Lt. Gen N.B. Singh, Director General of Information Systems and the panelists include Maj. Gen D.V. Kalra (Retd), former ADG IS (Topic: Indian Army moving towards net centricity); Col K.P.M. Das (Retd) of Cisco; and Brig L. Chand, DACIDS (Ops) HQ IDS (Tri-Service effects based operations).

The session on ‘Future Prospects and Challenges for NCW’ is being chaired by Lt. Gen V.K. Kapoor (Retd), Editor, SP Guide Publications and the panelists are Air Vice Marshal D.N. Ganesh (Retd), former ACAS (Topic: Roadmap of the Armed Forces); Harvinder S. Rajwant of Cisco (Keeping the Networks Secure) and Wg. Cdr (Retd) Arif Khan of Ericsson (Topic: Spin-off benefits of commercial technologies).

Key developments

The seminar gains importance as the battlespace has got redefined, where reliable information is pivotal to the success of any operation. In 2009, the Indian Army inducted “Shakti” artillery combat command and control system (ACCCS), a network of

military grade tactical computers that automate and facilitate decision support for all the operational aspects of artillery functions from the corps down to a battery level.

In the information age, power is increasingly derived from information sharing, information access and speed and the Indian armed forces are on course.

Network for Spectrum

The Department of Telecommunication (DoT) started a project called ‘Network for Spectrum’ to set up a fibre optics network for the exclusive use of Indian armed forces in exchange for spectrum being released by the defence forces. It aims to facilitate the growth of teledensity, ensuring modernisation of defence communications and supporting net-centric military operations.

DoT is laying 40,000 km long optical fibre cable connecting 219 army stations, 33 navy stations and 162 points for the air force. The total cost of implementing the project is estimated to be ₹10,000 crore.

AFNET

AFNET or (Air Force Network), launched in September 2010 is part of the project and it is likely to be extended and connected to the Digital Information Grid Project under implementation for the Indian Navy and the Indian Army by 2015. AFNET has been developed at a cost of ₹1,077 crore in collaboration with Cisco Systems, HCL Infosystems and Bharat Sanchar Nigam Ltd (BSNL). SP

Harris accelerates deployment of ISR solutions

Harris Corporation, an international communications and information technology company, has combined its commercial and government full motion video initiatives into a single organisation focused entirely on supporting the intelligence, surveillance and reconnaissance (ISR) market for full motion video (FMV) products and systems.

The Harris full motion video team will focus on government customers’ needs, promote the rapid development of more advanced ISR capabilities, and accelerate the deployment of these solutions to assist analysts in the field to manage the massive amounts of sensor intelligence data being collected.

The new Harris FMV organisation will support all US Government, international military and federal law enforcement activities for the Harris full motion video asset management engine (FAME) architecture and related technologies and capabilities from across Harris. FAME is a collaborative platform that provides video, audio and metadata coding, video analytics, and archive capabilities – all within a unified digital asset management solution. Using the FAME architecture, Harris has developed additional features to provide intelligence analysts and warfighters with better access to higher-resolution full-motion video, motion imagery and visual imagery.



“We are responding to the increased demand from the ISR and federal law enforcement community for end-to-end FMV solutions across the process-exploit-disseminate workflow,” said Sheldon Fox, Group President, Harris Government Communications Systems.

Primary potential customers include branches of the military, federal law enforcement agencies and other defence companies who serve as prime contractors on large systems. In addition to supporting end-user requirements, the new organisation will target major prime contractors and offer advanced ISR solutions that reduce their time-to-market for large government programme systems. SP



Network-centric warfare with DRS Tactical Systems

[By Peter Brackett]

With their sophisticated navigation, radio, radar, sonar, database and fire control systems, naval and air forces around the globe traditionally have surpassed land forces by decades in the deployment of advanced electronic and network-centric warfare assists. Until a decade ago, the only electronic assists that land forces brought to their hands-on battle space were rugged battlefield voice radios. The appearance of hand-held electronic NAVSTAR satellite global positioning system (GPS) navigators during the First Gulf War was a small step beyond the use of battlefield voice radios towards a new era of full-scale electronic network-centric warfare.

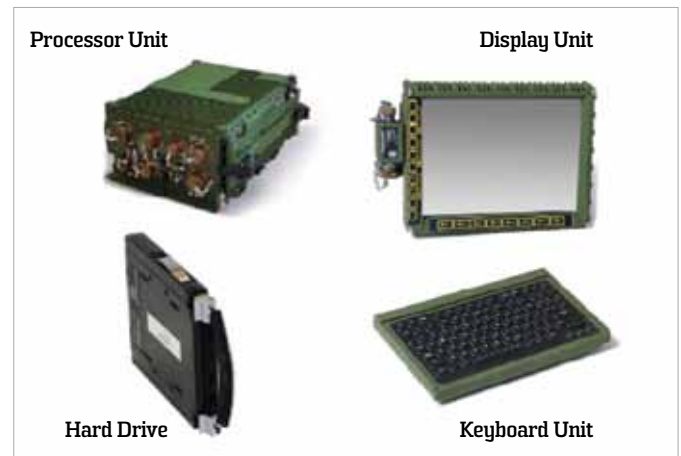
The land warrior's archaic pre-electronic age methods and tools provided a modicum of manually-created situational awareness (SA) and force tracking data (blue or friendly

The US Army currently fields the DRS Tactical Systems' RVS-330 tactical computers for its Force XXI battle command brigade and below (FBCB2) battlefield digitisation programme, and the British Army likewise is fielding DRS' ultra rugged computers to its Bowman battlefield digitisation programme. DRS is today the leading manufacturer of ultra rugged computers currently used by the US and British Armies in Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF).

Ultra rugged computers

As deployed by the world's leading armies, DRS' ultra rugged computers can be fully networked. They are regularly hooked into terrestrial line of sight (LOS) tactical internets (TI), beyond line of sight (BLOS) SATCOM nets, and the NAVSTAR-based global positioning system, which provides the deployed warfighter with timely, accurate information throughout the modern battle space.

The Figure above illustrates the four-element RVS-330 com-



force, and red or enemy force) that quickly became obsolete as the fight progressed. Unlike their sea and airborne brethren warfighters, land force warfighters were starved for timely situation, geographic and targeting information and were often lost or mired in the fog of wars.

New era in land warfare

Today, land force warfighters are no longer the military's technology-poor cousins! A new era in land warfare has arrived in which the computer data network is the weapon. DRS Tactical Systems, Inc. of Melbourne, Florida, is a leading manufacturer of tactical computing tools that electronically enable today's premiere land forces, rendering them the battlefield's dominant possessors of actionable information.

puter, as used by the US Army in Abrams main battle tanks and other land force vehicles. Depicted on the screen of the display unit of the computer is an electronic map. That electronically networked virtual map is but one element of a blue force tracking (BFT) application that runs on the DRS Tactical Systems' rugged computing hardware.

Today's soldiers claim that progress in battlefield digitisation has not only enhanced their capabilities on the battlefield, but it has saved the lives of soldiers and civilians alike. As warriors battle non-traditional, less conspicuous enemies, continued enhancements to hardware and software will improve the frequency of success in critical missions throughout the world. **SP**

Peter Brackett is Director of Advanced Technology, DRS Technologies



India finally stands up to Russian blackmail, issues global tenders for spares

[By Vishal Thapar]

Pushed to the brink by the unreliability of Russian after sales support, India, for the first time, has hit the international market for spares for Russian-made aircraft and missile systems operated by the Indian Air Force (IAF). Traditionally, these vital spares are sourced from original equipment manufacturers through the Rosboronexport interface.

The UPA Government has given the go-ahead to the IAF to approach vendors in Europe, US and Israel to urgently replenish its stocks of spares for Russian-made equipment. At last count, 47 global tenders have been floated to source equipment ranging from spares for the MiG-29 engines (R-29) to tubeless tyres for the Sukhoi-30 MKI and parts for the Pechora and Osa-AK surface-to-air missile (SAM) systems, and ground-based radars.

More tenders are on the way. The urgent spares calls extends to the AN-32 transport fleet, for which additional tenders have been floated. Global tendering for spares is being done under the Defence Procurement Procedure (DPP).

Sources in the IAF concede that serviceability rates of Russian-made platforms are “unacceptably low” due to poor availability of spares and after-sales support. “This is hurting India’s battle readiness,” rues a senior Air Force officer. The concern extends to even the frontline Su-30 MKI fleet, a showpiece of Indo-Russian defence cooperation.

The position with regard to the availability and serviceability of Il-76 heavy lifters and the Il-78 tankers is “worrying,” says the officer. “This goes beyond a quarrel over cost,” he points out gravely. The MiG-29 serviceability, too, is a problem.

The trigger, sources reveal, are fresh Russian demands for price hike and new contracts. While the problem is not new, the move to approach the inter-

national market is India’s signal that it won’t always submit to arm-twisting and blackmail. The price escalation in the Admiral Gorshkov deal, and the renegotiation of a settled contract to increase the price of refit from \$974 million to \$2.33 billion – with no penalty for a five-year delay – stands out in the public consciousness as a seminal pointer to the unreliability of India’s traditional arms supplier.

The move to bypass Russians for a reliable, uninterrupted supply of spares follows the failure of repeated assurances provided to India at the Indo-Russian Inter-Governmental Commission for Military-Technical Cooperation, the highest body governing defence trade between New Delhi and Moscow.

Russia has a history of punishing arms buyers who seek to bypass it for spares and upgrades, and there are concerns in India about possible retribution. India’s decision to stand up to Russia comes in the middle of key upgrade programmes. An over \$2 billion contract has been signed for the upgrade of 50 Su-30 MKIs. A \$1 billion programme is underway for the upgrade of 62 MiG-29s, with an additional \$250 million earmarked for engines. A \$290 million contract has been signed for the upgrade of 160 Mi-17s while that for 28 Ka-28 naval helicopters is pegged at \$189 million.

Sources close to the Russian arms industry point out that procuring spares for their equipment from external sources and third parties – and working out economies of scale – may not be easy. They warn that that such moves may boomerang on India, suggesting, instead, that “talking to sort out problems is the better option”. But with its new access to western suppliers and Israel, India is no longer willing to be taken for granted. It is demanding that its traditional arms supplier better shape up. **SP**

Note: The writer welcomes feedback from those who feel this step is not fair to Russia.

vishal.thapar@spguidepublications.com



ENOUGH IS ENOUGH: Urgent Requirements

- Su-30 tyres
- MiG-29 engine spares
- MiG-29 terminals & transponders
- Il-76/Il-78 spares
- An-32 spares
- Mi-17/Mi-8 spares
- Mi-17 vibration damper
- Pechora parts
- Osa-AK spares
- P-18 radar spares
- ST-68 radar spares



A400M contract amendment finalised with launch customer nations

EADS and Airbus have welcomed the conclusion of contract amendment negotiations with OCCAR (Organisation for Joint Armament Cooperation) and the seven A400M launch customer nations. The contract amendment was signed in Seville by Patrick Bellouard, Director of OCCAR – Executive Agency, and Airbus Military CEO Domingo Ureña, in the presence of Spanish Minister of Defence Carme Chacón. National armament directors and other representatives from customer nations also attended the ceremony.

The contract amendment now implements the changes which were agreed in principle by the participating nations with EADS and Airbus Military in the frame agreement signed on March 5, 2010.

“This is a major milestone, and EADS is proud to have the support of all governments involved in this cooperation programme that represents a strategic capacity for Europe and its defence, and for the new generation of military transport worldwide. The A400M is a fantastic new aircraft already flying with outstanding and unrivalled capabilities”, said EADS CEO Louis Gallois. **SP**



Raytheon’s small diameter bomb II programme completes review

Raytheon Company’s small diameter bomb II (SDB II) programme completed a US Air Force critical design review (CDR), clearing the way for the weapon to begin captive flight testing later this year.

“Raytheon’s SDB II features a mature tri-mode seeker and a cutting-edge warhead, and completing the CDR proves our design is producible and mature,” said Harry Schulte, Raytheon Missile Systems Vice President of Air Warfare Systems. “Raytheon has an affordable and executable plan to deliver a robust engineering and manufacturing development programme.”

SDB II is an air-launched, precision-strike standoff weapon that will enable the warfighter to defeat moving and fixed targets in adverse weather conditions. The weapon incorporates an improved seeker that features three modes of operation: millimeter-wave radar, uncooled imaging infrared and semi-active laser. **SP**



Gripen in NATO mission

Eight Gripen fighter aircraft from the Swedish Armed Forces is currently taking part in the NATO-led UN mission in Libya. In total the Swedish Armed Forces has up to 130 people deployed for this mission, including ten Gripen pilots, for a period of up to three months.

This Swedish Gripen force is designated FL 01 and is basically the Expeditionary Air Wing which is formed as a part of the EU’s Nordic Battle Group. In addition to the eight Gripen C/D aircraft, FL 01 also consists of a C-130 Hercules. The Gripen force was rapidly deployed from the Swedish Air Force F 17 Wing at Ronneby, Sweden, and all were in place at Sigonella within only two days after the Parliament decision. **SP**



With big guns set to fire, surprise tie-ups by artillery majors

[By Vishal Thapar]

Battle lines are drawn for the \$ 4 billion tender for 1,580 155mm, 52 calibre towed artillery guns for the Indian Army. As the April 28 deadline for the submission of bids approaches, it appears that local partnerships could be the key to success in the competition.

BAE Systems, or erstwhile Bofors, the frontrunner in each of the three previous tenders which were scrapped over the last decade, set the trend for the competition by announcing Mahindra as their local partner last year.

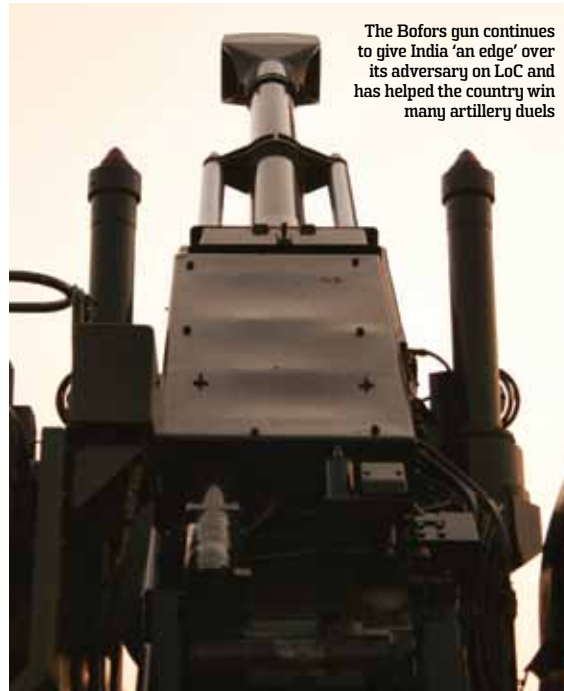
With rivals in successive abortive rounds – South African Denel, Israeli Soltam Systems and Singaporean ST Kinetics – falling by the wayside on the slippery street that is the Indian arms bazaar, competition finally seems to be emerging for BAE.

And the competition, too, is using Indian industry as handmaidens, following the lead.

French Nexter has tied up with the Larsen & Toubro as its subcontractor for the bid. And the market is abuzz with reports of Israeli Elta (a division of IAI) being in partnership with Bharat Forge. Local partners could not only emerge as the primary subcontractors to fulfil the 30 per cent offsets requirement, but they would also provide the edge to the respective bids by bringing in the local lobby factor.

The rest of the field includes South Korean Samsung Techwin, Russian Rosoboronexport and German Rheinmetall.

Because of the background of the 1980s, there are political sensitivities related to deal-making over artillery guns in India. Ever since it acquired Bofors legatee SWS Defence, BAE Systems has been working overtime to water down the origins of the FH-77 howitzer that it's likely to field for the fourth time. Despite doing well in the trials, it was unsuccessful in the last two rounds in convincing political opinion that Bofors does not exist.



The Bofors gun continues to give India 'an edge' over its adversary on LoC and has helped the country win many artillery duels

Some others may be walking over thin ice as well. Both Elta and Rheinmetall are likely to face allegations that they're a proxy for black-listed guns.

The big positive, of course, is that the Indian Army and Ministry of Defence have a much wider choice.

The project involves 'Buy' and 'Make' phases. The 'Buy' phase involves the first 400 guns, which are to be delivered within six years of the contract. And the 'Make' phase involves production of 1,180 guns by the Ordnance Factory Board (OFB) under transfer of technology. The timeline requires the first 40 guns to be delivered within two years of the contract.

The Indian Army is keeping its fingers crossed, as the process for acquiring the first new artillery gun since 1986 is set to roll for the fourth time. "The cost of acquiring these guns has more than doubled since the

time we first set about acquiring these a decade ago. The political leadership must show commitment to fulfilling this critical requirement in a definite time frame. They must share a sense of urgency and keep the process clean," a senior Army officer said.

The parallel processes to acquire 180 wheeled self-propelled guns and 146 ultra-light howitzers are also underway. In January, Army Chief General V.K. Singh had expressed the hope that the first lot of new guns would be inducted this year.

But the road ahead is slippery. Drama and arms bazaar

intrigue erupted in the evaluation process for the ultra-light howitzer, with the trial report getting leaked and reports of "threats" to the Army Chief over the deal becoming public. This has cast uncertainty over the acquisition of BAE Systems M777 through the Foreign Military Sales (FMS) route, which at one stage looked a certainty. This could be an indication that the road will be treacherous for the towed gun competition, where the stakes are much higher. With the starting gun set to go off on April 28, the ball will be set rolling and the games may well begin. **SP**

THE BIG ARTILLERY COMPETITION

On Your Marks

- BAE Systems+Mahindra
- Nexter+L&T
- Elta+Bharat Forge
- Rosoboronexport
- Samsung Techwin
- Rheinmetall

LT GENERAL (RETD)
P.C. KATOCH

Strategic impotence

After the Northern Army Commander reported presence of PLA close to the Line of Control, the Foreign Secretary has asked the Ministry of Defence (MoD) for a detailed report. End of story! Why not ask RAW what the Chinese are doing on the India-Pakistan border? But RAW may not even respond, not being under Ministry of Foreign Affairs and would in any case be engaged in how to do down the Opposition, in conjunction other intelligence agencies. Isn't that the role of intelligence agencies penned in a book authored by a former Intelligence Bureau officer?

Why bother what Chinese are up to in Pakistan occupied Kashmir (PoK)? Hopefully, *New York Times* may publish a detailed report, elaborating on their previous news item that 11,000 Chinese are doing 14 projects in PoK. That is why the comfortable smiles of the Chinaman ex-Hong Kong and Pakistani ex-Islamabad interviewed live by *Headlines Today* on April 6. The innocent façade is hydel projects and energy security.

Forget that China has usurped 38,000 square kilometres of our territory in Aksai Chin merely to give 'depth to her Western Highway.' Forget China's consistently innate aggressive behaviour right from 1948; against Manchuria, Tibet, India, USSR/Russia, Vietnam, Bhutan, blatant nuclear proliferation, Tiananmen, shooting US aircraft (2001), 'String of Pearls' around India, nibbling our territory, claim to Arunachal, assertions in South China Sea and Indian Ocean. After all what if war breaks out with China, Pakistan or both? Surely the international community fearing nuclear war will ensure early termination. Admittedly, much blood of soldiers will be shed and many medals will be awarded but what the hell? Don't these fellows after retiring take recourse to writing letters in their own blood to the Supreme Commander and keep frequenting Rashtrapati Bhavan to return their medals despite only low level staff meeting them.

Isn't economic prosperity the global mantra? What if we are focused on 'personal economic prosperity' alone? Look at it this way – if we all become corrupt without exception, will this not lead to 'collective economic prosperity'? The likes of Anna Hazare must understand this. We can even

bribe China and Pakistan not to attack us. Having achieved hundred percent corruption levels, acceding Arunachal to China could even be a strategic masterstroke of expanding our soft power of corruption across borders. Surely that is the grand strategy that ordinary citizens fail to understand. That is why there is no need for a national security strategy. No need to define national security objectives. No need to integrate foreign affairs, defence and homeland security. No need for institutionalised strategic thinking mechanism within the MoD. After all, our cupboards are overflowing with reports from advisory bodies like the National Security Council. We can always open these files after war breaks out. Why bring the military into the strategic thought process? Let them play their little



war games. Why integrate HQ Integrated Defence Staff with MoD? Why bother about cyber security? In any case, we are importing bulk of the hardware, critical software and telecommunication equipment from China and abroad. Stupid of Chinese with fake Indian pan cards trying to meet Indian insurgents. Don't they know we are so corrupt we could have arranged it for them.

How ridiculous of the Group of Ministers to recommend a Chief of Defence Staff in the euphoria of the Kargil War. They obviously forgot our very own grand strategic agenda. This will not change despite Late K. Subramanyam's dedicated lifetime efforts to inculcate strategic culture in our impotent hierarchy. Only a major catastrophic event 'may' instigate them to address this dysfunction. *Jay Ho!* **SP**

Why not ask RAW what the Chinese are doing on the India-Pakistan border?



Lockheed's second delivery of C-5M Super Galaxy



Lockheed Martin completed delivery of the second production C-5M Super Galaxy at a ceremony here with a crew from Dover Air Force Base.

The fifth C-5M to be delivered to the Air Force, this aircraft will undergo internal paint restoration at Stewart Air National Guard Base, New York before travelling to its home base at Dover.

Maj Gen James T. Rubeor, commander of the 22nd Air Force, Air Force Reserve, said in a statement: "Though it's still early, the operational accomplishments of the C-5M in such a short amount of time are extraordinary. Obviously, this is a tremendous investment for the Air Force. With this fifth Super Galaxy, we're adding a new level of capability to the equation for determining how strategic airlift is used in both present and future contingency operations."

Lockheed Martin is on contract to modernise a total of 52 C-5s, consisting of 49 B, two C and one A model aircraft

through the reliability enhancement and re-engining programme (RERP). The programme incorporates more than 70 changes and upgrades, including newer, quieter General Electric engines making the C-5M more reliable and 10 per cent more fuel efficient than legacy C-5s. Three test aircraft were delivered and flown before the modernisation programme entered full production.

The Super Galaxy is America's premier global direct delivery weapon system and the only strategic airlifter capable of linking the homeland directly to the warfighter in all theatres of combat without refuelling. The C-5M recently delivered 3,300 tonnes of helicopters to Afghanistan with a mission capable rate of nearly 90 per cent. **SP**

Eaton powering defence platforms

Diversified industrial manufacturer Eaton Corporation is excited about the opportunities that are opening up in the defence sector in India with many acquisitions happening. Eaton has announced a sales target of \$500 million in India by the end of 2015, which would triple its current revenue in the country. The business drivers would be its aerospace, electrical and automotive component segments, all having high growth potential. Considering the enormous business opportunities in the Asia-Pacific region, Eaton is increasing its presence in India. In an interview with SP's Airbus team, Eaton Chairman and Chief Executive Officer, Alexander M. Cutler outlines the road-map in India.

SP's M.A.I. (SP's): Could you tell us about your aerospace business in India and how it is growing?

Alexander Cutler (Cutler): Eaton began operations in India in 1999 through the global acquisition of Aeroquip Vickers. We are basically into four aerospace product solutions – hydraulic, pneumatic, fuel and electrical systems. A substantial number of commercial and military aircraft in India are powered by Eaton solutions.

SP's: What programmes are you associated with in the Indian defence sector?

Cutler: The defence acquisitions by India are garnering the attention of the world. The focus now is on the medium multi-role combat aircraft (MMRCA) and other programmes and Eaton will be on most of these platforms. Eaton solutions are well represented on the fighter aircraft that



are coming from the US and European contenders.

SP's: Could you spell out your expansion plans in India, any mergers and acquisitions (M&As) in the aerospace business?

Cutler: Eaton continues to grow both in an organic and inorganic way. We have always have some M&As in the pipeline. Importantly, we will expand our presence in India, both on the sales and the R&D fronts. The integrated R&D Centre in Kharadi, Pune, will add 200 employees to its engineering and other professional services work. **SP**

Earlier in the day (April 4), Cutler inaugurated the Technology Day at the Talkatora Stadium, New Delhi, showcasing leading solutions, technologies and capabilities that make electrical, hydraulic and mechanical power operate more efficiently, effectively, safely and sustainably.



IAF to have special gadgets on aircraft

The Indian Air Force has plans of equipping its fighter aircraft with special gadgets which would help in the production of oxygen in the air. This would help pilots to be airborne for a longer period.

The Defence Research and Development Organisation (DRDO) is working on the on board oxygen generation system (OBOGS) that will produce oxygen inside the aircraft, allowing the pilots to fly without the help of heavy oxygen cylinders they carry for high altitudes and long duration sorties. According to reports the Aeronautical Development Agency (ADA) has started the ground integration process of OBOGS in the Technology Demonstrator (TD) version of the LCA Mark-II. **SP**

Embraer to modernise 11 more F-5 jet fighters for the Brazilian Air Force

Embraer Defense and Security and the Brazilian Air Force (FAB) signed a contract to modernise 11 additional F-5 jet fighters and to supply one more flight simulator for these fighters as continuation of the contract signed in 2000. These additional aircraft, recently acquired by the FAB, will receive the same configuration as those from the initial 46 F-5 jets currently completing the upgrade process. The first delivery of this second batch of upgraded jets is scheduled for 2013.



"The continuation of the F-5 fleet modernisation is clearly another good example of the confidence that FAB deposits in Embraer Defense and Security to meet their needs," says Orlando José Ferreira Neto, Commercial Vice President, Embraer Defense and Security.

"The modernisation of this second group of F-5 jets consolidates our strategy for providing this type of service, positioning ourselves in a market niche that is of long-term importance to the customer."

The F-5E (single-seat) and F-5F (two-seat) fighters were incorporated into the Brazilian Air Force, starting in the 1970s. The modernisation programme is centred on providing the aircraft with state-of-the-art electronic warfare systems, new avionics, air-to-air refuelling system, and greater operational capability, thus extending the useful life of the aircraft for at least 15 more years. **SP**

Marine Corps makes aviation history with intercontinental Osprey flight

The Marine Corps completed an "aviation first," on April 8 by flying MV-22B Ospreys on the aircraft's longest movement to date.

Six Ospreys with Marine Medium Tiltrotor Squadron 266 returned to the 26th Marine Expeditionary Unit after a trek from Camp Bastion, Afghanistan, to Souda Bay, Greece, with the assistance of a pair of KC-130J Hercules from 2nd Marine aircraft wing (forward) who provided transport and aerial refuelling support.

"As far as aerial refuelling missions are concerned, this was a Marine Corps and Naval aviation



first," said Capt. Ben Grant, the executive officer for the Marine Aerial Refueler Transport Squadron 252 detachment currently deployed in support of operations in Afghanistan. "Never before has an MV-22 movement been conducted this far or on this scale. On this mission, the MV-22s travelled in excess of over 4,500 km from Camp Bastion to Souda Bay, using aerial refuelling provided by KC-130Js. We transited three continents over land and water, three combatant commands' areas of responsibility, and did it with no major issues."

The mission was conducted to return VMM-266 Marines, cargo and aircraft to the USS Kearsarge and the 26th MEU, which had been tasked to the Mediterranean region in support of operations in Libya. **SP**



Northrop Grumman Fire Scout record endurance flight

The Northrop Grumman Corporation-built MQ-8B Fire Scout vertical take-off and landing tactical unmanned aerial vehicle marked a new single-day flight record of 18 hours.

US Navy operators achieved the record using a single aircraft in a series of endurance flights from the USS Halyburton (FFG 40). Fire Scout is providing intelligence, surveillance and reconnaissance data to support anti-piracy missions while deployed on the ship for the Navy's 5th Fleet.

"We've continually worked with the Navy to enhance Fire Scout since its last deployment to meet these types of operational needs," said George Vardoulakis, Vice President for tactical unmanned systems for Northrop Grumman's Aerospace Systems sector. "These flights not only demonstrated Fire Scout's maturity, it showed how the system provides a much-needed extension for gathering crucial information during peacekeeping or wartime missions." **SP**

Fukushima gets three unmanned helicopters from France

Three unmanned helicopters were shipped to Japan on a special Nippon Airways flight from France recently to monitor the crisis at the Fukushima Daiichi nuclear power plant. The €40,000 order was received by Hélipe's American partner, Rotomotion, from General Electric, mandated by the Japanese. Each is capable of up to one hour flight time with a range of 30 kilometres on autopilot.

The helicopters are all equipped with radiation sensors, infrared thermometers and cameras. The largest, the HE300 model has a large-load carrying capacity of greater than 20 kg. It was designed to run specific kinds of missions, including those requiring items such as a photographic camera, a cooled thermal camera, various types of sensors for measuring and/or surveying work or a tank for spraying etc. **SP**



Cassidian gets further orders for DRAC air vehicles

Cassidian has been notified by the French defence procurement agency (DGA) of the confirmation of additional orders for DRAC air vehicles and systems for the French Army. The DRAC mini-UAV close-range reconnaissance system is intended to enhance the intelligence seeking and reconnaissance capabilities of front-line army units.

The short-range DRAC UAV system has been developed for the French Army by Cassidian Air Systems, in partnership with SurveyCopter, as was the tracker system from which it is derived.

Each DRAC system consists of two UAVs equipped with payloads, a compact ground station and an automatic tracking antenna. It can be



packed into two personal rucksacks, thus allowing entirely autonomous missions. Tracker is one of the mini-UAV systems that offer the best performance available on the market.

"We are very proud to have won this new order which is a pledge of the DGA's and French Army's renewed confidence in us. This contract is a demonstration of the recognised reliability and qualities of the DRAC system in service with operational Army units in Afghanistan. The feedback of experience from field operations has enabled us, thanks to the close collaboration with our customer, to continue to significantly improve the performance of this mini-UAV which is confirming its position as one of the most robust available, under the severe environmental and operating conditions encountered," declared Nicolas Chamussy, Senior Vice President of Cassidian Air Systems and head of Unmanned Aerial Systems. **SP**



RAF Reaper completes 20,000 hours over Afghanistan

The RAF's remotely piloted air system, the Predator MQ-9 Reaper, has notched up a landmark 20,000 operational flying hours over Afghanistan. Reaper force has repeatedly proven itself, both in combat and as eyes in the skies for front line troops and military commanders on the ground.

Air Officer Commanding No 2 Group, Air Vice-Marshal Phil Osborn, said: "The RAF's Reaper force has proven itself time and again in combat and is an essential element of the RAF's combat intelligence, surveillance, target acquisition and reconnaissance capability.

"The real-time, day and night video coverage of the battle space, combined with the extensive use of onboard radar, provides a unique, cost effective and sustained capability that enhances the safety of troops on the ground.

Reaper was introduced in October 2007, and, with its array of high-tech sensors and precision-guided weapons, it can carry out a wide range of missions to support forces in Afghanistan. It can gather pre-raid intelligence on target compounds, assist in countering IEDs (improvised explosive devices) and provide surveillance for routine patrols and supply convoys. **SP**



AeroVironment bags order for digital Raven retrofit kits

AeroVironment, Inc. announced that it received a firm-fixed-price contract order valued at over \$14 million under an existing contract with the US Army. The order comprises digital Raven small unmanned aircraft systems (UAS) retrofit kits. Work is scheduled to be completed by December 2011.

The Raven unmanned aircraft is a two kg, backpackable, hand-launched sensor platform that provides day and night, real-time video imagery for "over the hill" and "around the corner" reconnaissance, surveillance and target acquisition in support of tactical units. US armed forces use Raven systems extensively for missions such as base security, route reconnaissance, mission planning and force protection. Each Raven system typically consists of three aircraft, two ground control stations and spares. **SP**

Elbit Systems expands collaboration with Embraer to UAVs

Elbit Systems is expanding its collaboration with Brazilian aerospace company Embraer SA to unmanned aerial vehicles. Elbit Systems' Brazilian subsidiary AEL Sistemas SA and Embraer subsidiary Embraer Defesa e Segurança SA will set up a joint venture to develop, manufacture, market, and support unmanned aircraft systems and their avionics.

Embraer will own the majority stake in the venture. Embraer has a long-standing and successful relationship with AEL, even before Elbit Systems acquired it. AEL was one of the first suppliers of systems for Embraer's turboprop Tucano basic trainer and the subsonic fighter AMX in the 1980s and 1990s.

Currently, AEL provides the avionics for the Super Tucano light attack and advanced trainer aircraft and for the F-5M jet fighter that Embraer is modernising for the Brazilian Air Force. **SP**





>> QUICK 5

Cobham's long-term arrangement in India



Cobham is an international company engaged in the development, delivery and support of leading edge aerospace and defence technology and systems. Here in an interview, A.J. Stevens, CEO, Cobham, gives an outline of the company's India plans. Excerpts of the interview:

[By Sucheta Das Mohapatra]

SP's: Can you underline the core competencies of Cobham?

Stevens: Founded by Sir Alan Cobham, who had a great passion for flying, the company has been developing leading defence and aerospace technology for the last 76 years. Today, the company is broadly divided into three divisions—defence (marine, air, land, space), security and commercial business. Cobham has nine business units, and partners and customers in more than 100 countries across the world. Cobham is also responsible for the helicopter training of the UK armed forces—Army, Navy and Air Force, and the coastal security in Australia as well. We are looking forward to many more acquisitions.

SP's: Can you throw light on the core business interests of Cobham in India?

Stevens: We are committed to building a long-term arrangement in India. Besides strengthening our relationship with our existing partners like Hindustan Aeronautics Limited, we are also looking at partnerships with both public and private sector industries in India. Cobham has a good portfolio of land, air and sea capabilities and has the ability to plug and play with whatever system is on board. We are looking at all three areas—defence, security and commercial business. India has

great potential and we want to invest more in the country including in technology.

SP's: What products and solutions are you offering to the Indian armed forces?

Stevens: We have already supplied refuelling pods to the Indian Air Force and have refuelling solutions for any aircraft the IAF currently has and plans to acquire in the future. We also provide refuelling for unmanned aerial vehicles (UAVs). The company has responded to a request for information from the IAF for search and rescue systems. Cobham has great interest in the battlefield management systems, future infantry soldier as a system (F-INSAS) and the future infantry combat vehicle programmes for the Indian Army. Likewise, we have solutions for maritime security, shipping, search and rescue, communications, etc.

SP's: Are you looking at the homeland security market in India as well?

Stevens: Yes, we are in dialogue with various security agencies and have varied products on offer for them. We have competence in coastal security and surveillance, integrated force protection, bomb detection capabilities, SATCOM solutions, etc. We have antennas which can be placed on a truck and is an instant communications solution in areas hit by natural disasters like tsunamis, etc. SP

ManTech to provide ISR to US Army

ManTech International Corporation, a leading provider of innovative technologies and solutions for mission-critical national security programmes, announced that it received a task order under its strategic services sourcing (S3) prime contract to provide software engineering services to

the US Army communications—electronics command software engineering centre's guardrail systems. The award is valued at \$22.6 million, with an initial period of performance of 12 months plus one additional option year.

Under the contract, ManTech will provide software engineering services, including software analysis, software development, technology insertion and field software support. ManTech will also provide configuration management services and management support for tracking, analysis and corrective actions. SP



India-Pakistan

Home/Interior Secretaries decide on Hotline



The Union Home Secretary, G.K. Pillai and the Pakistani Interior Secretary, Qamar Zaman Chaudhary at the Home Secretary level talks between India and Pakistan, in New Delhi on March 28, 2011

press train blast case investigation. It was also agreed that after filing of report in the court, updated information will be shared with the concerned Pakistan authorities.

Release of prisoners

Both sides noted and welcomed the release of prisoners and fishermen and agreed to release by April 15, 2011 those civilian prisoners/fishermen who have completed their sentence, whose nationality status has been confirmed by the respective Governments and whose travel documents have been received. The complete list of prisoners in each other's custody will be exchanged by both sides on July 1, 2011.

The two countries agreed that the problem and issues of the inadvertent crossers

should be viewed sympathetically, and in a focused and sensitive manner. Accordingly, they agreed to task the Coast Guard of India and the Pakistan Maritime Security Agency to work on setting up a mechanism for release of inadvertent crossers (fishermen) and their boats on the same lines as the inadvertent crossers on land.

Both countries shared concerns of the growing menace of narcotics/drugs and agreed that cooperation between the Narcotics Control Bureau (NCB) of India and the Anti Narcotics Force (ANF) of Pakistan should be enhanced to ensure an effective control on drug trafficking. It was further agreed that talks between the two Directors General would be held annually and the Indian DG will go to Pakistan in May 2011 for talks. The memorandum of understanding on drug demand reduction and prevention of illicit trafficking in narcotic drugs/psychotropic substances and precursor chemicals will be finalised in the May talks.

It was decided that the CBI and the FIA will schedule a meeting to work out the technical details of moving forward on issues such as human trafficking, counterfeit currency, cyber crimes and Red Corner Notices (RCNs).

Both sides agreed to set up a Joint Working Group to examine the modalities for streamlining the visa procedure/modalities and for giving a final shape to revision of the bilateral visa agreement.

The Interior Secretary of Pakistan invited the Home Secretary of India for the next Home/Interior Secretary level talks in Pakistan. The invitation was accepted. They have agreed that the visit of the Interior Minister of Pakistan to India will take place on mutually convenient dates, to be decided through diplomatic channels. **SP**

India and Pakistan have agreed to remain engaged on outstanding issues and accordingly the Home/Interior Secretary level talks would now be held biannually. This and the following points were decided on March 28 at the high level talks between the Indian delegation led by Gopal K. Pillai, Home Secretary and the Pakistan delegation led by Qamar Zaman Chaudhary, Interior Secretary.

Hotline

The two countries agreed to set up a Hotline between the Home Secretary of India and the Interior Secretary of Pakistan to facilitate real time information sharing with respect to terrorist threats. Both sides reiterated their commitment to fight terrorism in all its forms and manifestations and reaffirmed the need to bring those responsible for such crimes to justice.

The Pakistani side provided updates on the ongoing trial and investigation in Pakistan on the Mumbai terror attacks. Pakistan conveyed its readiness, in principle, based upon the principle of comity and reciprocity, to entertain a Commission from India with respect to the Mumbai terror attack investigations.

Judicial Commission from Pakistan to visit

Modalities and composition in this connection will be worked out through diplomatic channels. Dates for the visit of the Judicial Commission from Pakistan in connection with the Mumbai attack trial would be conveyed by India within four to six weeks. NIA and FIA will continue to cooperate in the Mumbai terror attack investigations.

India provided information on the ongoing Samjhauta Ex-



LT GENERAL (RETD)
PC. KATOCH

Diplomatic impasse

Despite Shahid Afridi's caustic comments of Indians not being large hearted, Indo-Pak cricket bonhomie appears set for revival with a bilateral series in the offing. However, the diplomatic impasse over punishing the perpetrators of 26/11 is unlikely to be resolved for a very long time even if India gives Pakistan full insight into the Samjhauta Express train blast case. The underlying cause is the undeniable complicity of the ISI (Inter-Services Intelligence) and Pakistani military in the Mumbai terror strike. Mohammad Ajmal Qasab admits that "26/11 Mumbai attack terrorists were trained by Pakistani Marines".

More recently, David Headley and Tahawwur Hussain Rana confirmed ISI complicity in 26/11 attacks. Unfortunately, global pressure is directly linked to individual national interests. Surely, US would have had the Headley-Rana revelations of 26/11 ISI complicity with them for some time but its release was timed with the visit of ISI Chief Shuja Pasha to counter the Raymond Davis episode.

British Prime Minister, David Cameron was outspoken last year in decrying Pakistan for sponsoring terrorism in India and Afghanistan but was observed making amends this month on a visit to Pakistan. Pakistan is a weak democracy with actual power with the Military-ISI who continue a policy of hostility with India for retaining their strangle-hold over governance. LeT (Lashkar-e-Toiba) is the covert arm of ISI, its terrorist camps intact in PoK. Indians are targeted in Afghanistan courtesy ISI.

On becoming President, Asif Ali Zardari went on record to say, "Militancy and extremism were deliberately created and nurtured as a policy to achieve some short-term tactical objective." Having said this, he ordered ISI to be brought under the Interior Ministry but reversed his orders within 24 hours when pressurized by the Army Chief. At the India-Afghanistan-Pakistan Trialogue held at Kabul last year, majority civilian members of the Pakistani delegation kept stressing the need to

"strengthen the civilian government in Pakistan".

The moot question is can Pakistan ever have true democracy? Witness the recent anti-India outburst of terrorist Mullah Hafiz Saeed in an open forum, the LeT/JuD (Jamaat-ud-Dawa) having full backing of the ISI-Military combine and support of even China at the UN. Witness the full blown radicalization of Pakistan with some 32,000 *madrassas* churning out over one million radicals annually, daylight assassinations of Governor Salman Taseer and Minister Shabaz Bhatti (a Christian) providing further proof.

Pakistan, supported by China, is unlikely to change its *jihadi* strategy against India. Witness the assassination of Maulana Showkat Ahmed Shah in Srinagar engineered by the LeT on April 8 since he

backed talks for peace and opposed stone-pelting on the streets. Witness China's strategic footprints in Pakistan and PoK – advising Taliban how to fight NATO, some 11,000 (PLA) doing 14 projects in PoK and flouting their presence close to the Line of Control. While another country may not like foreign troops on its soil, Chinese presence in Pakistan and PoK should not surprise us in a country whose Prime Minister was prepared to eat grass in order to get the bomb. Pakistan

can be expected to accommodate China to any extent in the belief she will be safe from Indian air strikes in the event of more 26/11s.

How then can the 26/11 diplomatic impasse break is anybody's guess. Do you expect Pakistan to blame her own nationals and punish them concurrent to following a policy of proxy war and terrorism? Temporary lulls are mere tactical pauses, some under pressure, and this should not deceive us. But while we question when the 26/11 diplomatic impasse will break and Pakistan punishes the culprits, should we not be asking ourselves when will Qasab be hanged and what about the 1993 Mumbai train blasts accused? Does anybody have the answers? **SP**

(The views expressed in this article are the personal views of the writer)



Do you expect Pakistan to blame her own nationals and punish them concurrent to following a policy of proxy war and terrorism? Temporary lulls are mere tactical pauses, some under pressure, and this should not deceive us.



Border fencing in full steam

The Union Home Minister, P. Chidambaram has stated that the border fencing programme is being implemented at a fast pace. In the month of March, on the India-Bangladesh border, about 15 kms of fencing and 12 kms of roadworks were completed. Poles for floodlighting were erected over a distance of 30 km and cables laid on 18-km stretch.

Coastal Security: Against the target of 204 boats, 189 boats have been supplied so far. Remaining 15 boats are ready for delivery and will be dispatched shortly. Thus all 204 boats have been procured, he has informed.

Construction of Integrated Check Posts (ICPs): The Minister also mentioned that construction of ICPs at Attari, Raxaul and Jogbani had commenced and were expected to be completed in June 2011 for ICP Attari and in November 2011 for ICPs Raxaul and Jogbani.

Prisoners released: He stated that eight Pakistani prisoners and 20 Pakistani fishermen were repatriated to Pakistan on completion of their sentences.

With regard to on-line visa application system, under the mission mode project on IVFRT (immigration visa foreigners registration and tracking), with appointment scheduling, was introduced in Colombo, Kandy and Hambantota under the High Commission of India, Sri Lanka, he has informed. **SP**

Government revokes arms licences in Nagaland

The Central Government has revoked 352 arms licences which were issued by the licensing authorities of various districts of Nagaland between August 24, 1987 and January 9, 2007, as the licences were without any authority of law. An order to this effect has been published in the *Gazette of India* extraordinary on April 7, 2011. The complete order along with the licence numbers and issuing authorities is available on the website of the Ministry of Home Affairs i.e. www.mha.nic.in under "Circulars for Public".

Individuals, holding these licences which cease to be lawful need to deposit both the licences and the arms and ammunition corresponding to these licences within 15 days from the date of publication of this order i.e. by April 21, 2011, with officer in charge of the police station nearest to wherever they are residing at present. Failure to deposit the arms and ammunition is liable to punishment with such imprisonment and fine as stipulated under section 25 of the Arms Act, 1959, a release said. **SP**

PHOTOGRAPH: Indian Navy

Myanmarese poachers apprehended

The anti-poaching measures by the Andaman and Nicobar Command (ANC) of the Navy continued to bear positive results with 12 poachers being apprehended on April 10, 2011 by Indian Naval Landing Craft Unit 36 (LCU L-36).

LCU L-36, whilst on routine patrol of Sentinel Island apprehended 12 Myanmarese poachers. On sighting the warship, the poachers attempted to flee, but were intercepted by LCU L-36. The boat was towed by LCU L-36 to be handed over to Indian Naval Ship Tarasa for further investigation by the Port Blair police.

During search of the boat, diving equipment



with accessories, large quantity of diesel, drinking water, food were found which are indicative of intentions for prolonged poaching activity in Indian waters. The boat was equipped with deep sea diving, harvesting equipment and was well stocked with rations for prolonged offshore operations. The boat was carrying sea cucumbers and coral which are contraband items.

During the preliminary investigation it was revealed that the poachers had intention to undertake extraction of marine wealth that includes sea cucumber and sea shells. The incident is the latest apprehension by the ANC as a result of enhanced coastal security initiatives for the islands and has brought the tally to 180 poachers in 2011 alone. **SP**



Lui Tuck Yew, Minister of Information, Communications and the Arts, Singapore

Security nightmare for companies?

The Singapore government has expressed concern that office networks could be vulnerable to hackers. It said that when employees use the same password for their social networking sites and office network, the system becomes vulnerable to hacking.

Speaking at a cyber security event, Information, Communications and the Arts Minister Lui Tuck Yew said: 'Many have jumped on the social networking bandwagon, but not all of us realise that cyberattacks use social networking to gain access to sensitive corporate and personal information. In this regard, end-users have become a critical component in the security equation and are often our first line of defence against these malicious activities.' **SP**

National cyber security policy draft

The government has issued draft of the proposed National Cyber Security Policy (NCSP) which proposes to identify the most dangerous classes of cyber security threats to the nation, critical IT infrastructure vulnerabilities and the cyber security problems. The government has said that the findings would be used to develop and implement a coordinated R&D effort focused on the key research needs.

The draft policy also underlined the need for indigenous development of IT products essential for curbing threats from imported high-tech products. The NSCP draft said: "Indigenous research and development is an essential component of national information security measures due to various reasons – a major one being export restrictions on sophisticated products by advanced countries."

The draft has even identified proprietary technologies at risk and asked for promotion of products that are based on open standard in the country.

The Department of Information Technology (DIT) is the nodal agency for the NCS policy and it has invited comments on the draft policy by May 15. **SP**

US cyber security emergency response capability

US lawmakers have sought the creation of a cybersecurity emergency response capability to help businesses deal with major cyber attacks.

"Who do you call if your CIO is overwhelmed, if you're a local bank or utility?" Senator Sheldon Whitehouse asked and said

"How can we preposition defences for our critical infrastructure, since these attacks come at the speed of light?"

Representative James Langevin pointed out that there are 1.8 billion attacks on US Government servers every month. During 2010, researchers tracked 662 data breaches at large companies or government agencies, with 16.2 million records exposed. Cyber-attacks cost the US economy an estimated \$8 billion a year, he said.

In addition, nine million US residents are victims of identity theft each year, and cybercrime costs large businesses millions of dollars each year. Cybercriminals have stolen about \$1 trillion worth of intellectual property from US businesses, Senator Sheldon mentioned. **SP**

China edges out US in cyber spying

At least according to US investigators, China has stolen a march over the US when it comes to cyber spying. Many experts believe that China has stepped up its spying and the two countries have been known to spy on each other's activities.

Though it is difficult to ascertain the true extent of America's own capabilities and activities in this arena, a series of secret diplomatic cables as well as interviews with experts suggest that when it comes to cyber-espionage, China has leaped ahead of the United States.

US investigators said that China has stolen terabytes of sensitive data – from usernames and passwords of State Department computers to designs of multi-billion dollar weapons systems. And Chinese hackers show no signs of letting up. "The attacks coming out of China are not only continuing, they are accelerating," said Alan Paller, Director of Research at information security training group, SANS Institute in Washington, DC. **SP**



RFI/RFP/TENDERS

Indian Army

RFI: Spotter Scope with Digital Camera

Branch: Dte Gen of Infantry

Publication date: April 13

Last date: May 13

RFI: Dual Technology Mine Detectors

Branch Name: E-in-C Br

Publication date: March 21

Last date: June 30

Tender: Electro Optical Tracking System (EOTS)

Branch Name: Army AD College

Publication date: February 15

Last date: May 14

Source: www.indianarmy.nic.in

Indian Navy

RFI: Fire Resistant Overalls

Branch: Dte of Procurement, Navy

Last date: May 26

Tender: Communication Equipment HF TX/RX TR-2400

Branch: Naval Dockyard,

Visakhapatnam,

Last date: April 29

Source: www.indiannavy.nic.in

Indian Air Force

Tender: Spares for IL-78 Aircraft

Branch: Air Hqrs

Publication date: February 11

Last date: April 21

Tender: Spares for Mi-17 Helicopter

Branch: Air Hqrs

Publication date: February 14

Last date: April 28

Tender: Special Tools for AN-32 Aircraft

Branch: Air Hqrs

Publication date: February 18

Last date: April 28

Tender: Spares for MiG-23 Aircraft

Branch: Air Hqrs

Publication date: February 24

Last date: April 28

CISF

Tender: Procurement of X-Ray Baggage Inspection System (small size)

CISF

Publication date: March 9

Last date: April 28

ELTA unveils Stark ISR vehicle

ELT A Systems, an Israel Aerospace Industries' group and subsidiary (IAI/ELTA) and TAC Motors unveiled the Stark IRV (Inteligência, Reconhecimento e Vigilância) a new intelligence, surveillance and reconnaissance (ISR) vehicle, at the Latin American Aerospace and Defence Conference and Exhibition- LAAD 2011 at Rio de Janeiro, Brazil.

IAI/ELTA and TAC Motors are jointly manufacturing a day and night intelligence and surveillance system installed on a 4x4 off-road light tactical vehicle that can perform law enforcement missions in rough terrain and under all-weather conditions. The Stark IRV is designed to support activities against drug and weapon smuggling, illegal border crossing and more.

The Stark IRV sensor suite includes an advanced ground surveillance radar, a powerful day and night electro-optical system and a line-of-sight (LOS) or satellite communication (SATCOM) system. Operated by the vehicle's crew, the ISR system detects, classifies, identifies and tracks targets in the area of interest under all-weather conditions. Real-time reports are communicated directly to law enforcement forces deployed in the area. **SP**



Northrop Grumman laser defence at sea

The US Navy and Northrop Grumman Corporation have successfully demonstrated high-energy, solid-state laser defences at sea by completing a "counter-material" test of the maritime laser demonstrator (MLD) against small boats.

Northrop Grumman designed and built the MLD for the Office of Naval Research, leveraging a laser built by Northrop Grumman for the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command and the High Energy Laser Joint Technology Office. **SP**

Herstal's FN Fire Control Unit

FN Herstal, a world leader in small arms manufacture, has launched the FN Fire Control Unit (FN FCU). Successful target engagement with 40mm LV tube-launched grenades requires precise range estimation to the target and launch at the exact elevation angle, while keeping correct azimuth aiming. With FN FCU, the shooter can now rely on a light, compact and easily used device to significantly maximise first-round hit probability.

The FN FCU consists of: a laser range finder (LRF), which calculates the distance between the shooter and the target; a clinometer, which measures the difference in elevation/depression between the target and the shooter; a ballistic computer, which calculates the angle of launch required; a moving red reticle sight, which gives the correct aiming point; and a weapon cant indicator, which indicates when weapon realignment is required. **SP**

Oshkosh SandCat TPV

Oshkosh Defense, a division of Oshkosh Corporation, has launched the SandCat tactical protector vehicle (TPV) in Latin America. The SandCat TPV, part of Oshkosh's light-payload vehicle portfolio, offers Latin American countries a protected, highly manoeuvrable vehicle for use in law enforcement, border patrol and security operations, among others.

"The SandCat TPV can provide security forces with swift mobility and optimal protection, whether used in combating crime in tightly confined urban areas or patrolling borders in remote, off-road landscapes," said Serge Buchakjian, Senior Vice President and General Manager of International Programmes for Oshkosh Defense. **SP**





BEL registers ₹5,550 crore turnover

Navratna defence public sector unit Bharat Electronics Limited (BEL) has recorded a turnover of ₹5,550 crore (provisional) for the fiscal year 2010-11, registering a growth of 6.3 per cent over the turnover of ₹5,219.77 crore during 2009-10.

BEL achieved exports of \$41.69 million, which is an increase of 76 per cent over last year's figure of \$23.65 million. The turnover per employee during 2010-11 was ₹50 lakh as against last year's ₹45.2 lakh. The value added per employee is ₹20 lakh.

Prominent among the new products introduced and supplied during 2010-11 is the Akash missile system – it is the first time that BEL is executing such a system. The other new products supplied include new generation hull-mounted sonar, mobile communication terminal, hand-held thermal imager, semi-ruggedised automatic exchange, instant fire detection & suppression system, surveillance jammer vehicle, low power jammer, ATM-based Integrated ship data network, combat management system, laser seeker, HF transceiver, panoramic all-day surveillance system and gap measuring device Mk III.

BEL recently received the SCOPE (Standing Conference of Public Enterprises) Meritorious Award for Corporate Governance for 2009-10.

Ashwani Kumar Datt, Chairman & Managing Director, BEL, received the award from the President of India Pratibha Devisingh Patil. The Union Minister for Heavy Industries and Public Enterprises Praful Patel was also present. **SP**



SECURITY EVENTS

International Symposium on Air Defense 2020+

17-20 April

The Air Defense Forces Institute, Jeddah, Saudi Arabia

www.isad2020.org.sa

4th Annual Tactical Vehicles Summit

18-20 April

Hilton Alexandria Mark Center, Alexandria, Virginia, USA

www.tacticalvehiclessummit.com

Counter Terror Expo

19-20 April

Grand and National Hall, Olympia, London, UK

www.counterterrorexpocom

SPIE DSS (Defense, Security, and Sensing)

25-29 April

Orlando World Center Marriott Resort & Convention Center, Florida, USA

www.spie.org/x6765.xml

Marine South

27-28 April

Marine Corps Base, Camp Lejeune, Jacksonville, North Carolina, USA

www.marinemilitaryexpos.com

IDEF'11

10-13 May

Tuyap Fair, Convention and Congress Center in Istanbul/Turkey

www.idef11.com

International Military Helicopter

11-13 May

Olympia Conference Centre, London, UK

www.militaryhelicopterevent.com

Cyber Defence

16-17 May

Istanbul Marriott Hotel, Istanbul, Turkey.

www.smi-online.co.uk

IMDEX Asia 2011

18-20 May

Changi Exhibition Centre, Singapore

www.imdexasia.com

FLIR Systems announces dividend

FLIR Systems has announced that its Board of Directors adopted a new dividend policy under which it intends to pay a quarterly cash dividend of \$0.06 per share on its common stock. The dividend initiation is the first in FLIR's history. Future declarations of quarterly dividends and the establishment of future record and payment dates are subject to the final determination of FLIR's Board.

Also the Board approved a new share repurchase programme that authorises up to 20 million shares to be repurchased over the next two years, replacing the previous programme that expired on February 4, 2011. This authorisation represents approximately 13 per cent of FLIR's outstanding common stock as of December 31, 2010. Since 2003, FLIR has returned over \$399 million to shareholders through share repurchases. **SP**

Embraer acquires capital of Atech

Embraer Defense and Security announced the formation of a partnership with Atech Negócios em Tecnologias S.A. at LAAD 2011 in Rio de Janeiro. The synergy arising from this alliance seeks to ensure greater customer satisfaction in the long run, through broader solutions for complex systems, and it will offer genuinely Brazilian products for national and foreign defence and security markets.

"Atech has thorough and solid knowledge, as well as products and services, in the C4I area, and the company is relevant to the Brazilian Government in terms of systems that are critical to the nation. In conjunction with Embraer Defense and Security, and due to the complementary nature of the portfolios, we will be better prepared for the challenges of the integrated systems market for defence and security, command and control, air defence, and air traffic control," stated Luiz Carlos Aguiar, President of Embraer Defense and Security. **SP**



Auschwitz spectacular escape

The genocide of European Jews at the Auschwitz concentration camp will remain a blot on mankind. Over a million people were killed by the Nazis in the concentration and extermination camps built and operated in Polish areas annexed by the Germans.

In this genocide, there have been some heroic events. One of them is the most spectacular escape on June 20, 1942 by Ukrainian Eugeniusz Bendera and three Poles, Kazimierz Piechowski, Stanisław Gustaw Jaster and Józef Lempart. The foursome dressed as members of the SS-Totenkopfverbände, fully armed and in an SS staff car, drove out of the main gate in the stolen automobile, a Steyr 220 belonging to Rudolf Höss. The Germans never recaptured any of them. **SP**



Prince William cautions paparazzi

In the run-up to his wedding, Prince William has cautioned the paparazzi that he would initiate legal action if his or his fiancée Kate Middleton's privacy is breached. It may be recalled how his late mother Princess Diana was hounded by the paparazzi. Prince William has not ruled out taking criminal or civil action against the paparazzi, depending on the nature of intrusion.

Reports indicate that the North Wales Police has already deployed a unit of 15 armed officers for the security of Prince William. **SP**

PHOTOGRAPHS: Wikipedia

Passenger on aircraft with old boarding pass

In a glaring security breach, a passenger with a month-old boarding pass recently boarded a Kolkata-bound Kingfisher flight on February 10, at the Indira Gandhi International Airport in Delhi. The passenger got past the CISF security personnel and airline officials with the old boarding pass.

Once inside the aircraft, it was found that there was another claimant for the seat he had occupied. On scrutiny, it was found that he had a computerised web check-in boarding pass dated January 10. Kingfisher Airlines said that inquiry had revealed that the passenger was accepted for travel on February 10 as he held a distinct PNR number in his name which clearly indicated a valid reservation for that particular day and flight number. However, the process was incomplete leading to a security issue. **SP**

Israeli Air Force security drill

The Israeli Air Force is always testing its security and beefing up the same. In 2009, the Israeli Air Force had an embarrassing breach of security at one of its most secure facilities. During a routine inspection and readiness drill by the IDF's Information Security Unit, soldiers in civilian clothes infiltrated an airbase in the Negev and managed to steal a laptop computer, identity badges of two squadron commanders and codes granting access to even more sensitive areas. The Israeli Air Force is not known for such serious flaws and this set off further tightening of security. **SP**



47

Years of Excellence Personified

6

Aesthetically Noteworthy Publications

2.2

Million Thought-Provoking Releases

25

Million Expert Reports Voicing Industry Concerns

.... aspiring beyond excellence.



SP GUIDE PUBLICATIONS
www.spguidepublications.com



COTS TECHNOLOGY. MIL CREDIBILITY.

DRS has fielded more rugged military computers than anyone else. At the same time, we've developed the ARMOR line of rugged, highly mobile and connected tablets for a range of industries. This unique combination of military and commercial experience makes ARMOR the Commercial-Off-The-Shelf system of choice for non-combat military applications like aircraft maintenance and documentation. To learn more and schedule a live demo, call 1-888-872-1100.

Rugged And Ready. That's Go To.

drsarmor.com/military

ARMOR
RUGGED MOBILE SOLUTIONS

 **DRS**
TECHNOLOGIES

A Finmeccanica Company