SP'S EXCLUSIVE : MINISTER PARRIKAR 'DEALS' A NEW MANTRA PAGE 4

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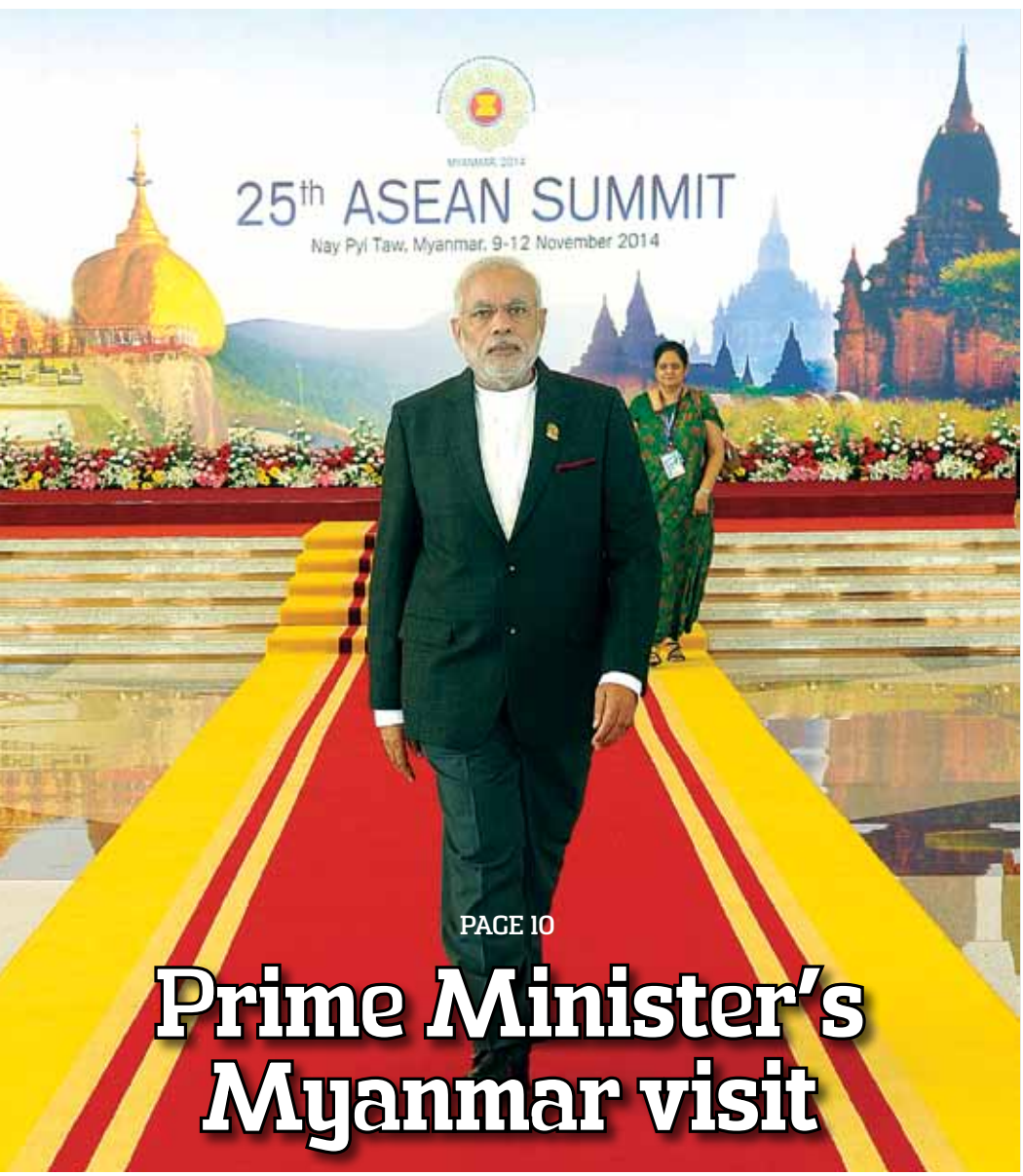

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Elbit Systems awarded a contract to supply DIRCM systems for the German Air Force's new A400M aircraft

Elbit Systems Ltd. announced recently that it was awarded a contract from DIEHL BGT Defence GmbH & Co. KG to provide J-MUSIC Multi-Spectral Directed Infrared Counter Measure (DIRCM) systems for the first phase of the German Air Force's self-protection programme for its new Airbus A400 aircraft. The contract will be performed over approximately one-year and is an amount that is not material to Elbit Systems.

Designed to protect large military and commercial aircraft against attacks by ground-to-air heat seeking man-portable missiles (MANPADS), the J-MUSIC systems, will be integrated into a multi-turret DIRCM system, ensuring 360° protection of the aircraft.

Elbit Systems has completed extensive testing of the J-MUSIC system and has already delivered systems to equip several types of aircraft to various customers.

PHOTOGRAPH: Elbit Systems

Bezhalel (Butzi) Machlis, President and CEO of Elbit Systems, commented: "We are proud of our cooperation with DIEHL Defence on DIRCM that has resulted in this initial contract for the protection of the German Air Force's A400M aircraft. Our DIRCM systems provide effective protection to the growing threat of MANPADS, and we hope that additional customers will follow and select our systems as their preferred solution".

The C-MUSIC DIRCM system, another member of Elbit Systems DIRCM family, was developed for the Israeli National "Sky Shield" programme, for the protection of the Israeli large commercial aircraft fleet.

Elbit Systems Ltd. is an international defence electronics company engaged in a wide range of programmes throughout the world. The company, which includes Elbit Systems and its subsidiaries, operates in the areas of aerospace, land and naval systems. SP

Cover:
Prime Minister Narendra Modi at MICC, the venue of 25th ASEAN Summit, India-ASEAN Summit & East Asia Summit, in Nay Pyi Taw, Myanmar, on November 12, 2014.

Cover images: PIB

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Mandate for the new Defence Minister

Manohar Gopalkrishna Prabhu Parrikar, who took charge as the new Defence Minister of India, has onerous tasks ahead of him considering that the armed forces are on a modernisation mode and a defence industrial base is in the process of taking off. Taking over as the 36th Defence Minister of India, Parrikar has assured to maintain the fast pace of defence acquisitions, while ensuring transparency at every stage. While the recent procurement disasters are going to act as reminders, it is hoped that the pace of defence acquisitions will not be affected, on the contrary it will be accelerated.

Now that the Prime Minister Narendra Modi has set a clear agenda of 'Make in India' for the industry, defence industry included, Parrikar has to make this happen in defence manufacturing at an accelerated pace. Once this ecosystem falls in place, it has enormous potential to generate large-scale employment and contribute significantly to economic development. The Minister will have to revitalise the Indian defence and aerospace industry in the public sector, impose higher accountability and make them deliver, while the private sector must be provided a level playing field to compete shoulder-to-shoulder with the public sector undertakings (PSUs).

It is heartening to note that the government is seen to be proactive, determined and above all willing to listen to the industry/experts. Taking a cue from the leadership, Parikkar has decided to order an expert committee to evolve fresh policy changes on two specific processes that India is all too familiar with: the business of defence company agents (described as everything from 'middlemen' to 'representatives' to 'lobbyists'), and the act of blacklisting companies under a cloud of corruption charges.

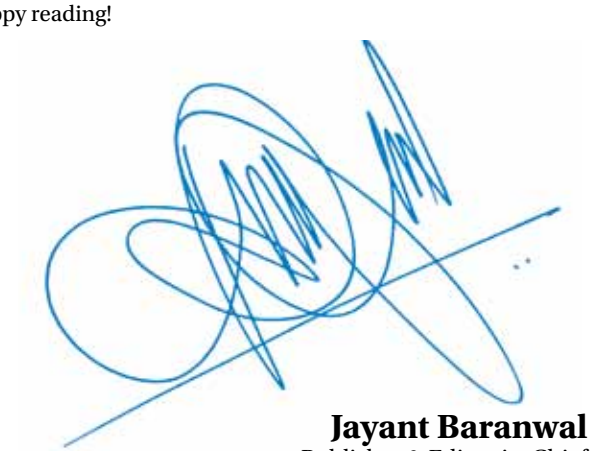
One of the foremost aspects that the Defence Minister has to look at is how to make Modi's vision of 'Make in India' come true. Relaxation of foreign direct investment in defence beyond 49 per cent for state-of-the-art technology is a welcome step, but concurrently the Defence Procurement Procedure (DPP) needs to be further simplified to attract investors, both Indian and overseas. Such a policy will have two-pronged benefits, defence preparedness of the country, while the defence industrial base will propel economic development.

Security of the country is core and that does not just mean safeguarding the borders, but also within considering how there have been terror strikes. Notwithstanding the Prime Minister's global outreach programme, starting with the immediate neighbourhood, and his mantra of development, the nation needs to be secured.

The Prime Minister's visit to Myanmar was yet another hallmark converting India's 'Look East' policy to that of 'Act East'. Myanmar is becoming increasingly important in strategic terms with its location in the arch of Bay of Bengal and the enhanced geopolitical focus on the Indian Ocean region (IOR) in this 21st century.

In this issue, we have a report by Lt General P.C. Katoch (Retd) on China's new strategy for information warfare. The Chinese President Xi Jinping wants China to establish a new military doctrine, institutions, equipment systems, strategies and tactics and management modes for information warfare. Can India stay behind? It cannot and it can leverage its stupendous IT capabilities.

Happy reading!



Jayant Baranwal
Publisher & Editor-in-Chief

Minister Parrikar 'deals' a new mantra

Transparency, efficiency and accountability are the stated touchstones for defence procurement under India's new Defence Minister Manohar Parrikar. But those are not new paradigms. Virtually every Raksha Mantri over the years has spoken out about the need to overhaul the unpredictable, complex and mostly opaque manner in which India contracts for new weapons. But there is reason to believe that the Parrikar MoD (Ministry of Defence) could be in a position to put its money where its mouth is on dusting off the debris from procurement disasters of the past and formulating a fresh, practical and most importantly contemporary set of policies that will make weapons contracting in India simple, swift and disaster-proof. If that's a tall order, word on Raisina Hill is that Parrikar already has his mission profile.

To get things rolling, the new Defence Minister has decided to order an expert committee that will draw from within the MoD and other departments to evolve fresh policy changes on two specific processes that India is all too familiar with: the business of defence company agents (described as everything from 'middlemen' to 'representatives' to 'lobbyists'), and the act of blacklisting companies under a cloud of corruption charges. It is an irony missed by few that India's approach to both so far has an effect opposite to the intended one: it has done nothing to eradicate or dissuade the payment of illegal commissions to swing lucrative armament contracts. Top sources tell **SP's** that Parrikar will be revisiting India's blacklisting protocol, continuing from where his predecessor Arun Jaitley left off.

Jaitley, who divided his time between Defence and Finance, had set the ball rolling on evolving a more practical approach by deciding not to blacklist Finmeccanica or AgustaWestland in the aftermath of the cancelled VVIP helicopter contract, instead issuing a set of fresh guidelines that permitted the firms to continue in competitions they already were part of, but limiting India's future exposure to them, pending resolution of attendant legal processes. Parrikar will be looking to take that process forward by refining the parameters and modalities of punitive action by the MoD against companies found to be indulging in illegal practices. Significantly, the modalities will include a definitive and specific flow-chart of when a yet-to-be-decided graduated series of punitive measures kick in, and what recourse the government can take to impose them. These guidelines will dovetail with the existing Defence Procurement Procedure, but also be part of powers the MoD can exercise in emergent circumstances.

On the issue of agents or lobbyists, the Parrikar MoD is likely to invite views from industry and experts, including from the Law Ministry. Exercises of this nature have been conducted before, but the Minister has already spoken his mind, providing indications of where the problems lie. The Minister recently stated that defence deals had been hamstrung due to lobbying, kickbacks and commissions, and that he planned to clear pending deals based on a priority list to be provided to him by the Integrated Defence Staff (IDS) via the Chairman of the Chiefs of Staff Committee (COSC). While Arun Jaitley is known to have begun the process of defining company representation and differentiating it from the murky world of 'agents', Parrikar plans to take such documents forward to making them more specific on the roles of company representatives, what they can and cannot engage in (beyond the obvious, of course), the standard operating procedure in terms of interfacing with government officials, and a manual of sorts of company representatives.

The end result, a top MoD official tells **SP's,** is to wind up the unseen, unheard, murky world of defence agents, and legitimise the presence of representatives and intermediaries who actually serve a purpose in the complex conversation that takes place between acquisition managers, armed forces and original equipment manufacturers (OEMs) over the course of an acquisition process. These two, however, will only be a fraction of what the intended scope of the 'cleanup' is intended to be. Parrikar, sources say, wishes to revisit stuck deals on a war-footing and get them moving as soon as possible.

Deals on the table at present waiting for forward movement include, of course, the 126 medium multi-role combat aircraft (MMRCA) deal, but also a plethora of procurements of helicopters, transport aircraft, submarines, mine countermeasure vessels (the floundering deal with South Korea could be the first real test for Parrikar), infantry and special forces modernisation.

The Modi Government already has two former armymen in its council of Ministers: former Army Chief General V.K. Singh (Retd), and Olympic silver medallist Colonel Rajyavardhan Singh Rathore (Retd). While neither of them is in any way associated with the Defence Ministry, their inclusion in government perhaps demonstrates that Prime Minister Modi recognises the capabilities and acumen of armed forces men and women. With Parrikar hitting the ground running by speaking openly about how defence deals have been derailed as a result of corruption, and these have directly affected the armed forces, he has spoken perhaps in the voice of his boss, the Prime Minister. The armed forces will also be looking for Parrikar to bite the bullet on delivering quick decisions, sans the red tape and ad hocism that has plagued decision-making for many years at South Block.

"Whatever will be there will be transparent and fast-processed," Parrikar told journalists minutes after taking over as Defence Minister at his first flood office in South Block. A country that has seen the business of war preparedness endlessly politicised and sacrificed at the altar of anti-corruption impulses awaits a brave new India that speaks clearly, transparently and powerfully on those who would seek to derail its interests. SP

PHOTOGRAPH: PIB

ADMIRAL ARUN PRAKASH (RETD)

Agenda for the new Raksha Mantri

The President of India Pranab Mukherjee administering the oath as Cabinet Minister to Manohar Parrikar, at a swearing-in ceremony, at Rashtrapati Bhavan, in New Delhi on November 9, 2014

Given understanding and synergy between the RM and the three service chiefs, it should be possible to identify the systemic flaws that have crept into our national security system and to institute enduring solutions.

PHOTOGRAPHS: PIB

If there is one lesson we should have learnt during our 67 years as a sovereign republic, it is that security shortcomings, both internal and external, have repeatedly served to distract our attention and divert scarce resources away from the pursuit of development. The history of India's post-independence conflicts has conclusively proved that the "guns vs butter" debate is futile. Development can take place only in a secure environment, and we must have both guns and butter.

The hawks amongst us loudly bemoan the steady decline in India's defence expenditure, which has hit a low of 1.74 per cent of the GDP. The common man, on the other hand, wants to know whether the ₹2,24,000 crore ($38 billion) recently voted for defence is being spent wisely enough to buy us the security we need. He questions: Are India's core national interests being safeguarded? Are our borders and territories inviolate? Are our citizens protected from the threat of terror-strikes? These are all valid questions, given China's increasingly aggressive attitude and Pakistan's relentless use of cross-border terrorism as a low-cost weapon.

The term heard most commonly in India's national security discourse is "surprise". It is used in the context of the 1947, 1962, 1965 and Kargil conflicts in 1999 as well as episodes such as the IC-814 hijacking and the 26/11 Mumbai terror strike and denotes repeated intelligence failures. A closely related phrase, heard only in whispers, is "lack of preparedness" of the armed forces.

Public memory being short, we have forgotten many of our past blunders. But to continue ignoring

The Union Minister for Defence, Manohar Parrikar, inspecting the Guard of Honour, during his visit to the Naval Air Station INS Hansa, Goa, on November 14, 2014.

dire warnings that emanate from South Block about the military's current lack of combat-readiness would be folly of the highest order.

A reality check will reveal that the reassurance we derive from our large conventional forces and expensive nuclear arsenal may be deceptive, for two reasons. First, the languid and wayward functioning of the Ministry of Defence (MoD) has, over the past decade, served to erode the qualitative and/or quantitative edge that the armed forces had over potential adversaries. Second, successive governments having refused to integrate the Service HQs with the MoD and to encourage 'jointness' amongst the three armed forces, our national security structure is not only flawed but badly outdated and likely to fail in the face of a 21st century conflict.

So far, India's political leadership, in an unfortunate display of indifference, has distanced itself from national security issues. At the same time, the armed forces have been deliberately excluded from a role in national security decision-making. The net result is a conundrum in which, India has collected, at huge expense, the trappings of a major military power without having a real idea of how to leverage them in the national interest. Further evidence of strategic naiveté is to be found in the adoption of a model—unique amongst democracies—in which the armed forces are placed under the total control of the civilian bureaucracy, with limited comprehension of complex defence and security matters; especially those related to high-tech weapon-acquisition programmes.

In the decisive, dynamic and technically-savvy Manohar Parrikar, the Prime Minister has possibly found the best person to entrust the challenging defence portfolio to. However, the unconscionable six-month delay in nomination of a Raksha Mantri (RM) must have certainly have caused damage, to this vital ministry, already suffering from a decade of lethargy, indecision and myopic vision.

The RM's first priority must be to eliminate the paranoid suspicion of our patriotic and apolitical armed forces; a lingering Nehruvian legacy which has kept them outside the edifice of the Government of India (GoI). This would logically lead to the next important step of integrating the Service HQs with MoD and constituting a single-point source of military advice to the RM/PM. This vital step, recommended by successive Standing Parliamentary Committees on Defence, as well as by government-constituted Task Forces, has remained stalled by lack of political will and entrenched bureaucratic resistance.

Concurrent with these measures, a review of the "1961 GoI Rules of Business" must be undertaken in order that the three service chiefs are nominated as functionaries of the GoI; responsible to the PM/RM for the defence of India's land, maritime and aerospace domains.

The last but most important action-point for the RM would be the radical restructuring of our ineffective and unproductive defence research and production organisations. This would be the first step to laying the foundations of a dynamic indigenous arms industry.

All these measures, while reinforcing political control of the armed forces, will bring our higher defence structures on par with other major democracies and ensure that the defence budget translates into genuine security.

Lastly, one hopes that the new RM will gather sufficient self-confidence to venture on an examination of the internal health of our armed forces. Events of the recent past, including misdemeanours at senior ranks, episodes of mass indiscipline and occurrence of serial mishaps have raised concerns amongst the public.

Given understanding and synergy between the RM and the three service chiefs, it should be possible to identify the systemic flaws that have crept into our national security system and to institute enduring solutions. SP

The author is former Chief of the Naval Staff of the Indian Navy.

LT GENERAL
P.C. KATOCH (RETD)

Agenda for Defence Minister

Relaxation of FDI in defence beyond 49 per cent for state-of-the-art technology is a welcome step but concurrently the Defence Procurement Procedure too needs to be simplified to make it unambiguously attractive to investors, both indigenous and foreign.

PHOTOGRAPH: PIB

The Union Minister for Defence, Manohar Parrikar, being briefed by Captain Theophilis, Commanding Officer INAS 303, about MiG-29K fighter aircraft, during his visit to the Naval Air Station INS Hansa, at Goa, on November 14

After a long break, India finally has a full-time Defence Minister in Manohar Parrikar. The break has actually been extraordinarily long considering that A.K. Anthony as Defence Minister from October 2006 to May 2014 was actually a non-performer, or more aptly a negative performer, who brought both the military and the military-industrial complex to such a sorry state that even former diplomats described the situation akin to 1962. From May 2014 onwards we had only a part-time Defence Minister in Arun Jaitley and though many capital expenditure projects have been cleared and indigenisation of defence equipment is being embarked upon, it will take focused effort to address and clean the system that has become hollow from within over past decades. Fortunately, the new Defence Minister has the reputation of a dynamo working 16 hours a day and his IIT background is ideal to accelerate the Indian military's capacity building for network-centric warfare – in line with the Prime Minister's wishes to see a digitised military. For too long our Ministry of Defence (MoD) has been functioning with generalist bureaucrats. The Defence Secretary, not the Defence Minister, is charged with the country's defence and the Services HQ are labeled "Attached Offices" since the British Raj. This needs a drastic overhaul. The Defence Minister needs to seriously consider replacing the MoD (like shutting the Planning Commission) with a Department of Defence (DoD) manned by military professionals (serving, on deputation or on permanent absorption) with appropriate civilian

cells under the Defence Minister instead of an MoD – akin to the Railway Board manned by railway professionals. To bridge the vital void of integration, HQ Integrated Defence Staff (IDS) should be completely merged with the MoD as recommended by many study reports, or more appropriately form part of the proposed DoD. This will also fill the absence of an institutionalised strategy formulation set up in the existing MoD and kill the civil-military divide that is officially not acknowledged but actually has been growing drastically. A Chief of Defence Staff (CDS) needed on priority more to synergise the military rather than the single-point advisor to the political authority. The need for a CDS is distinct from the Prime Minister meeting service cheifs every month. All this would need the 'Rules of Business' to be amended, in addition to let the CDS speak a single voice for the military rather than generalist bureaucrats arbitrate on matters military.

Defence Ministers in the past have defined India's strategic interests extending from the Persian Gulf in the west to the Straits of Malacca in the east and from the Central Asian Republics in the North to the Equator in the south. Where we have failed is in terms of strategic transformation. A priority task should be to define a National Security Strategy (NSS) followed by a Strategic Defence Review (SDR). The foremost need is to enunciate the NSS to shape the environment in India's favour. In doing so, organisations and entities like the MoD, Ministry of Home Affairs, Military, Economic Ministries, Department of Science & Technology, Department of Atomic Energy, the Indian Space Research Organisation, etc need to be closely integrated. Threats and vulnerabilities need to be taken into account. While threats are mostly identifiable, vulnerabilities may not be clearly identifiable as latter are only indicators. Challenge of implementing NSS lies in preventing vulnerabilities transforming into threats using non-military elements of national power. The NSS should include: one, India's political goals in terms of power projection, promoting security, economic, technology, environmental and bio-diversity interests; two, India's interests in other countries and regions extending outwards from South Asia; three, interests and relationship matrix with major powers and the UN; and four, threats, challenges and competitors to India's interests in respect of above paradigms.

Like NSS of any country, there would also be a need to include following classified parts: first, strategy to deal with competition and challenges by setting time-bound objectives in diplomatic, economic, technology, and defence and security fields vis-à-vis the competitors; second, identify economic, strategic, military and technology leverages—inter-se priorities of countries; third, lay down strategic choices for entering strategic partnership in the short-, mid- and long-term context; fourth, review of internal dynamics of India, its linkages with trans border threats and challenges posed for the security forces including assessing degree of expected involvement of armed forces in the internal dynamics. SDR must immediately follow up from the NSS though work on both can progress simultaneously. The SDR should state present military strategy as derived from NSS and project into the future. The NSS could be broadly relevant up to next 15 years and the thinking into period beyond that may be termed as vision.

The SDR should comprise: analysis of present military strategy and revised goals; related emerging technologies and consequent revolution in military affairs (RMA); mesh future conflict spectrum and the battle space milieu; compare above with roles and individual responsibilities of the Army, Navy and Air Force, leading to development of joint force capabilities including for network-centric warfare (NCW). Future military perspective (short-, mid- and long-term) or joint military vision and military missions so developed would lead to formulation of LTIPP based on integrated systems dynamics and force development imperatives. The classified portion of the SDR should include: adversaries or countries that are in security competition, cooperation and friends; comparative evaluation of the nature of threats or competition; threat from competing strategic and security alliances; goals and objectives of bilateral, multilateral and international defence cooperation; policy on role of armed forces in asymmetric threats and internal conflict; strategy for protection of critical infrastructure from cyber threats; defence-related aspects of cyberspace, space and perception warfare, and; strategy for energy, water and food security. Axiomatically, appropriate core groups would need to be established working out the NSS and SDR.

There has been debate in the media about the need for a National Security Commission. We have a National Security Council that barely met under the previous government while the NSAB was also working part-time until recently. Whether a new National Security Commission is appointed or the existing National Security Council is reorganised (acronym for both being NSC), it has to be a dynamic organisation working on 24 x 7 basis. Besides being headed by the Prime Minister himself as the ex-officio Chairman, a Deputy Chairman on permanent basis, CCS and NSA as members, with full-time members and staff from all required fields would be required. Simultaneous to the NSS and SDR, we need to holistically review Comprehensive National Security, to include: personal security; community security; food security; health security; military security; economic security; energy security, political security, and; environment security. The Comprehensive National Review would also address all non-traditional threats.

Government website of Ministry of Industry and Commerce states that 50 per cent of all defence equipment held by our military is 'obsolete.' This needs to be tackled expeditiously. We should not be making the mistake of only looking at big ticket projects only. What we actually need is a revolution in military affairs (RMA) spanning the military and matters military vertically and horizontally. An RMA under the directions of the Prime Minister would be facilitated with the personal equation that Parrikar has with Prime Minister Modi. In terms of the defence-industrial complex, we also seem to be going wrong in further 'commercialising' the DRDO. This has been the problem all along. What is needed is the DRDO focusing on R&D synonymous with their name whereas the commercial part needs to be left to the civil industry under guidance of the government. Manning of decision making and management level appointments in DRDO, defence PSUs, and ordnance factories by military professionals (military being the user) is a must, which has been avoided by these organisations for vested interests. Indigenisation must be given a boost with a dynamic road map for R&D, producing state-of-the-art arms, equipment and technologies to be developed in accordance specified time lines. Relaxation of FDI in defence beyond 49 per cent for state-of-the-art technology is a welcome step but concurrently the Defence Procurement Procedure (DPP) too needs to be simplified to make it unambiguously attractive to investors, both indigenous and foreign.

India has also largely neglected 'military diplomacy' to promote national security interests that is distinct from coercive diplomacy and implies peaceful application of resources from across the spectrum of defence to achieve positive outcomes in developing the country's bilateral and multilateral relationships. Though application of national power is through domains of diplomacy, information operations, military and economic, military diplomacy can contribute in all the four. The security imperatives for India are multiple and dynamic with a volatile neighbourhood including an aggressive China and an irrational Pakistan that refuses to stop following a state policy of terrorism. The last decade has been characterised with utter neglect of the defence sector and we need to take focused corrective actions. SP

The author is former Director General of Information Systems of Indian Army.

AIR MARSHAL
B.K. PANDEY (RETD)

Mandate for the Defence Minister

The former Chief Minister of Goa Manohar Parrikar has taken over as the Minister of Defence at a time when the nation is confronted with serious and formidable challenges. The first and foremost is that the security environment especially in India's immediate neighbourhood has been deteriorating. Secondly, while both China and Pakistan continue to bolster their military power, the Indian armed forces have been severely handicapped on account of perpetual shortage of military hardware across the board resulting in serious erosion of combat potential. Efforts by the three services to modernise speedily and build up the capability not only to fight a two-front war, but also to safeguard the national security interests that transcend well beyond our borders, have so far not been successful. This, to some extent, is attributable to a tedious Defence Procurement Procedure (DPP) which has proved to be merely a clerical exercise for the Ministry of Defence and has clearly failed to address the imperatives of national security.

The indigenous defence and aerospace industry has failed to deliver and during the decade-long tenure of the UPA Government, efforts at procurement of military hardware from foreign sources have been repeatedly frustrated by scams and allegations of misdemeanour. These resulted in agonising delays in procurement, investigations that demolished well established reputations, cancellations of contracts and indiscriminate blacklisting of defence and aerospace firms of global standing.

To begin with, the new Minister of Defence will have to address the problem of not only critical shortages of equipment but also of human resource. He must work to restore the status of those in uniform and to achieve this, he would need to interact proactively with the Seventh Pay Commission to make the Indian armed forces an attractive and an honourable career option for the youth of the nation. In order to speed up the process of modernisation, the Minister must strive to enhance the budgetary allocation for defence from the current 1.75 per cent of GDP to a minimum of three per cent, a level recommended by several Parliamentary Committees on Defence in the past. The Minister would need to bear in mind that on defence, rival China spends around 7.5 per cent of its GDP and even Pakistan, a failed state, spends in excess of 5 per cent.

The Minister will have to ensure that a number of contracts for the Indian Air Force (IAF) that have been inordinately delayed are finalised without further delay. These would include the long pending contracts for the 126 Rafale medium multi-role combat aircraft from Dassault Aviation of France, 22 AH-64D Apache attack helicopters and 15 CH-47F Chinook heavy-lift helicopters, both from Boeing as well as for six Airbus A330 multi-role tanker transport aircraft from Airbus Military. Apart from these, there are a number other contracts such as for field artillery for the Indian Army, submarines for the Indian Navy and supporting weapon systems for the IAF.

But most importantly, the Minister would have to review and possibly replace the existing DPP with a system that delivers. While it will not be easy to wish away wrongdoing in defence procurement contracts, the Minister must institute a system wherein 'crime' is separated from 'contract' and handled in a manner that the former does not impinge on the latter to the detriment of national security. In the business of defence procurement as in other regimes, it is imprudent to believe that 'middlemen' can be done away with. It would be more practical to accept this reality and restructure policies to exploit its advantage rather than allow defence deals to run aground on account of a rigid and unwise policy framework.

The Minister must also examine the issue of 'blacklisting' of firms, an exercise that was a favourite pastime of the Minister of Defence during the tenure of the previous government. While this may have appeared expedient and perhaps a seemingly effective way to deal with defaulting firms, the implications of such a step on the inventories of the Indian armed forces is debilitating. As was the experience during the UPA regime, 'blacklisting' of reputed global defence and aerospace companies actually amounted to shooting oneself in the foot!

And finally, the Minister will have to revitalise the Indian defence and aerospace industry in the public sector, impose higher accountability and make them deliver. The private sector must be provided a level playing field to compete shoulder-to-shoulder with the public sector. This will be a mandate for the Minister that would be in sync with the 'Make in India' philosophy propagated by the Prime Minister. SP

The author is former Air Officer Commanding-in-Chief of Training Command of the Indian Air Force.

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LT GENERAL
P.C. KATOCH (RETD)

Prime Minister's Myanmar visit

Prime Minister Narendra Modi's visit to Myanmar was yet another hallmark converting India's 'Look East Policy' to that of 'Act East'. His first stop in his 10-day trip to Myanmar, Australia and Fiji began with his arriving in Myanmar's capital Naypydaw where he also attended the ASEAN-India Summit and the East Asia Summit, besides meeting the political hierarchy including meeting President U Thein Sein as well as opposition leader Aung San Suu Kyi, and meeting the India diaspora.

India and Myanmar cultural and civilisational relations are ancient particularly with bonds of Buddhism. Myanmar is becoming increasingly important in strategic terms with its location in the arch of Bay of Bengal and the enhanced geopolitical focus on the Indian Ocean region (IOR) in this 21st century. It was former Myanmar President U Win who had first talked of India and Burma (now Myanmar) together forming the 'Arch of Bay of Bengal'.

Myanmar is also part of the strategic outreach of China to the IOR through land with road and waterway connectivity, development of deep sea port at Kyaukphyu and gas-oil pipelines connecting Yunnan-Kunming with Myanmar to obviate the choke point of Malacca Strait, not that Myanmar would ever be a client state of another nation. In his meeting with Myanmar President U Thein Sein, Prime Minister Modi had comprehensive discussions reviewing all aspects of bilateral relations including connectivity, commercial ties and cultural bonds since India seeks deeper economic engagement with the South East Asian Nations.

On arrival in Myanmar, Prime Minister Modi had said, "Our ties with South East Asia are deep rooted. Strengthening relations with ASEAN nations is an important part of our 'Act East' policy." President Thein Sein conveyed to Prime Minister Modi that India's growth story as envisaged by him will immensely benefit Myanmar and have a salutary effect. In his speech at the ASEAN-India Summit, Modi spoke of his government's resolve to translate the 'Look East' policy into an 'Acting East' one and that he would push through with connectivity corridors with the 10-member ASEAN bloc.

India and Myanmar have a crucial role to play in strengthening ASEAN and both countries are crucial to pushing through vital connectivity issues affecting the whole region and India's North East. There already are plans to develop industrial hubs along the proposed trilateral 3,200-km highway linking India, Myanmar and Thailand connecting Moreh in India to Mae Sot in Thailand via Myanmar that is expected to be completed by 2018, connecting India and the South East Asian countries.

At the East Asia Summit, Prime Minister Modi said that this Summit is an important pillar of his government's 'Act East' policy. He praised the initiatives taken by the East Asia Summit in disaster preparedness and response, adding that no other forum brings together such large collective weight of global population, youth, economy and military strength, and no other forum is so critical for peace, stability and prosperity in Asia-Pacific and the world. He asserted that the world community must reject any linkage between religion and terrorism while formulating a genuinely international partnership to counter all forms of terror acts.

Prime Minister Modi met a whole range of world leaders attending the ASEAN-India Summit and East Asia Summit. Amongst the various meetings, Modi spoke to the India diaspora in the same vein as at Madison Square in New York. While President described Prime Minister Modi as a 'man of action, President Xi Jinping told Modi that Beijing is looking forward to his visit. President Park Geun Hye invited Modi to South Korea. In his characteristic style, Modi praised the Malaysian model of performance assessment while speaking to Premier Najib Razak.

Prime Minister Modi's visit to Myanmar and addresses at ASEAN-India Summit and East Asia Summit breathes fresh realignment to India's 'Act East' policy, also strengthening these organisations. It is apparent that Modi has been able to not only cement physical connectivity but institutional and psychological connectivity; a characteristic that has ushered a new dynamism in India's foreign policy. This visit is the inauguration of an intense and more active engagement with Myanmar, driving the focus on the need for India to have a larger economic role in the region that comprises ASEAN and East Asia member nations. SP

India and Myanmar have a crucial role to play in strengthening ASEAN and both countries are crucial to pushing through vital connectivity issues affecting the whole region and India's North East.

PHOTOGRAPH: PIB

Elbit Systems develops digitised battlefield C4I

Elbit Systems has developed expertise in digitised battlefield command, control, communication, computer and intelligence (C4I) by applying advanced technologies in combination with commercial-off-the-shelf (COTS) hardware and software packages.

Elbit employs a tactical building-block approach to link various applications and levels of command implementing a net-centric concept. Configurations comprise tactical computers, digital maps, message handling systems, border surveillance, advanced communication controllers and modems as well as various components developed for customer-specific needs. Elbit provides software infrastructure and applications for mobile and airborne platforms, for the individual soldier, and for headquarters command and control (C2) applications. Based on these core technology building blocks, it offers comprehensive integrated solutions of C4I for land forces at all levels. The systems process, manage and present massive amounts of data arriving from various sources into a user-friendly format. It also provides a full range of simulators and customisable training programmes.

Command, Control and Computers

Elbit Systems' advanced networked battle management systems deliver improved coordination and planning and rapid closure of the sensor-to-shooter loop, providing all branches of the fighting force with enhanced situational awareness and mission-critical information. Advanced C4ISR solutions provide end-to-end, innovative and integrated systems to all operational levels. Autonomous C4I arrays that improve national situation awareness enable full connectivity through highly advanced communications systems and incorporate a variety of integrated sensor and weapon systems.

Digital Army Programme (DAP)

DAP implements advanced combat concepts that increase operational effectiveness and connectivity throughout all echelons in all combat situations under a unified operational doctrine.

TORC2H: All-in-one C4I System

Covers all army branches and echelons, enabling universal situational awareness as well as in-depth collaborative mission planning and management based on real-time information and an always-updated common operational picture. TORC2H is the only C4I solution to be fully deployed and operational in a major military organisation, the Israeli Defense Force (IDF).

DTAC2: Mobile Embedded C2 Application for Tactical Dismounted Units

The DTAC2 system enables all-terrain operability and range – based on dynamic network connectivity and integrated battle command capabilities – achieving accurate and rapid reaction within the task force mission assignment. It transforms the dismounted commander/soldier to a force-multiplier within the task force operation and increases their operational effectiveness within the tactical force network warfare.

Dominator: Infantry Combat Solution

An integrated infantry combat system enabling full situational awareness from the infantry battalion level down to the individual soldier. Dominator dramatically shortens the sensor-to-shooter loop, enhancing the combat effectiveness of the dismounted soldier.

WinBMS (Weapon-Integrated BMS): Networked Integrated Battle Management Solution

Enhancing the connectivity and coordination of the tactical level manoeuvring forces, the WinBMS increases their lethality and survivability. Based on integrated sensor and weapon systems, WinBMS provides a full-scale solution both at the task force level and within the armoured combat platform, thereby increasing the combat effectiveness of the combined force within the dynamic battlefield.

Combat NG: Fully-integrated Modular Artillery Solution

Incorporates C4I systems and platform suite upgrades to establish an autonomous artillery array, achieving an effective fire support process.

Air Defence Command and Control Solution: Integrated Air Defence C4I Solutions in Pursuit of Aerial Sovereignty

A comprehensive air defence (AD) solution that provides a host of integrated tools and capabilities for real-time air space surveillance, engagement and interception control, air command and control, early warning systems and mission management. This AD solution incorporates radar surveillance arrays, ground AD units and ground air command and control centres, achieving air space sovereignty within interior and national aerial zones.

Border Defence Solution: Full-scale Border Security

The system enables complete real-time connectivity among the entire border defence array and allows optimum coordination of intelligence, surveillance and reconnaissance (ISR) efforts throughout the national territory operational zones and along the country borders.

General HQ Solution: Comprehensive C4I Solution for All Levels of the Command Chain

This provides the joint General Staff with an integrated C4I solution that supports strategic planning and joint command and control at all operational levels.

Crisis Management Solution: Strategic Organisational Management Solution for Disaster/Emergency Preparedness

It equips emergency centres with an integrated C4I solution to improve national crisis preparedness and enhance the control and management of routine, crisis and emergency situations.

FRONTS Solution: Customised C4I Solution for Mission-critical Operations

It provides first-responders and rescue units with an integrated C4I suite in support of the control and monitoring of both routine and rescue activities. SP

Information warfare and PLA

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

Speaking at the meeting of the Political Bureau of the Communist Party Central Committee in late August, President Xi Jinping called for more innovation in the country's armed forces and a new strategy for information warfare (IW) amid a global military revolution. Xi said that China should liberate ideas and concepts, and have the courage to change fixed mindsets on mechanised warfare and establish the ideological concept on information warfare. He wanted China strive to establish a new military doctrine, institutions, equipment systems, strategies and tactics and management modes for information warfare. Though China is well advanced in IW, IW being at the forefront of the revolution in military affairs (RMA) launched during the Jiang Zemin, the remarks apparently were to address the raging competition that China has with the US in the IW sphere. In May, China had said it will take action against the US for prosecuting five PLA officers for alleged cyber espionage. In an indictment unsealed on May 19, 2014, the US had charged Wang Dong, Sun Kailiang, Wen Xinyu, Huang Zhenyu and Gu Chunhui with economic espionage linked to computer hacking of American nuclear power, metals and solar companies. In May 2014, Geng Yansheng, Chinese Ministry of National Defence, had said that online attacks from a specific country had targeted Chinese companies, its military and important websites. But China has been accused of similar cyber attacks and cyber stealing over the years.

As part of RMA, the Chinese leadership has continuously stressed using asymmetric techniques to counter more powerful nations like the US and Information Operations (IO) and IW are tools that the People's Liberation Army (PLA) uses to achieve their goals. Chinese IO and IW are based on concepts and terms similar to the US but with Chinese characteristics suiting Chinese culture and the communist doctrine.

China has adopted the idea of information from the US but her method for achieving information dominance employs the ancient methods like the 'Thirty Six Stratagems' to win wars: deceive the heavens to cross the ocean; besiege Wei to rescue Zhao; kill with a borrowed sword; wait at leisure while the enemy labors; loot a burning house; make a sound in the east, then strike in the west; create something from nothing; openly repair the gallery roads but sneak through the passage of Chencang; watch the fires burning across the river; hide a knife behind a smile; sacrifice the plum tree to preserve the peach tree; take the opportunity to pilfer a goat; stomp the grass to scare the snake; borrow a corpse to resurrect the soul; entice the tiger to leave its mountain lair; in order to capture, one must let loose; tossing out a brick to get a jade gem; defeat the enemy by capturing their chief; remove the firewood from under the pot; disturb the water and catch a fish; slough off the cicada's golden shell; shut the door to catch the thief; befriend a distant state while attacking a neighbour; obtain safe passage to conquer the State of Gou; replace the beams with rotten timbers; point at the mulberry tree while cursing the locust tree; feign madness but keep your balance; remove the ladder when the enemy has ascended to the roof; deck the tree with false blossoms; make the host and the guest exchange roles; the beauty trap-honey pot; the empty fort strategy; let the enemy's own spy sow discord in the enemy camp; inflict injury on oneself to win the enemy's trust; chain stratagems, and; if all else fails, retreat. Perhaps there isn't a more complete treatise on treachery and deceit but that is what Chinese strategy is all about.

Xie Guang, then Vice Minister of Science & Technology and Industry for National Defence, defined IW in December 1999 as, "IW in military sense means overall use of various types of information technologies, equipment and systems, particularly his command systems, to shake determination of enemy's policy makers and at the same time, the use of all the means possible to ensure that that one's own systems are not damaged or disturbed." More than two decades ago, China began propounding theories, doctrines, policies and strategies for defensive and aggressive use of cyberspace. Recently, a student from the Institute of Systems Engineering of Dalian University of Technology in China published a research paper titled "Cascade-based Attack Vulnerability on the US Power Grid."

If President Xi is calling for refining the IW strategy it is because China has constantly drawn upon the experience of the US and Russia whether the conflict is in Middle East, Balkans or elsewhere. The focus always is on how to strengthen China's territorial claims and affect the course of conflicts, if and when they occur. IW has been dovetailed with psychological warfare operations electronic warfare operations, expanding the role for its legal scholars in justifying military action and territorial claims. These then go into what scholars describe as a three warfare package; media warfare, psychological warfare and legal warfare again to justify territorial claims by any which way while disregarding international treaties and norms like UNCLOS. Same is the case with China's claims with reference to India and Taiwan. China takes IW seriously with regard to her energy security including critical infrastructure and network of oil pipelines.

PLA has already developed its Integrated Network and Electronic Warfare (INEW) doctrine for gaining superiority and information dominance. INEW combines application of computer network operations (CNO) and EW encompasses coordinated and simultaneous attack on the adversaries command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) networks and other key information systems/assets to gain information dominance. A significant addition to enable the PLA successfully operate in the electromagnetic domain is formulation of a new approach termed 'Information Confrontation' establishing discreet capabilities linked together under a single command structure and fully integrated into the overall campaign plan. Multiple Blue Forces IW units are being regularly rehearsed in proactive operations and the IW militia is well organised under the PLA. India needs to monitor these developments closely in order to draw lessons from them. Interestingly, President Xi in the same meeting of the Political Bureau of the Communist Party Central Committee urged all party members to be more aware of military issues, defence and military building and military preparedness, and to give more support to the country's national defence and military reforms, which by itself is no less significant. SP

Manohar Parrikar takes over as the new Defence Minister

Manohar Gopalkrishna Prabhu Parrikar, who took charge as the new Defence Minister said, he would maintain the fast pace of acquisition set in motion by the government for the defence forces while ensuring transparency at every stage.

Taking over as the 36th Defence Minister of the country, Parrikar said, his predecessor Arun Jaitley has initiated work on many issues relating to defence despite several constraints and that he is confident of taking these steps forward with speed. Parrikar expressed his thanks to the Prime Minister Narendra Modi for reposing confidence in him and entrusting him with this important and sensitive ministry.

Referring to the 'Make in India' drive of the government, Parrikar said, the measure will not only lead to self-reliance in defence manufacturing but also generate employment and would ultimately contribute to economic development.

Parrikar expressed his anguish at the sinking of a naval vessel off the Coast of Visakhapatnam and the earlier incident of an explosion in a submarine.

Parrikar was born in Mapusa, Goa, on December 13, 1955. He studied at Loyola High School, Margao and completed his secondary education in Marathi. He graduated from the Indian Institute of Technology (IIT), Bombay, in 1978 in Metallurgical Engineering. He was awarded by the institute with Distinguished Alumnus Award in 2001.

Before being inducted into the Union Council of Ministers on November 9, 2014, he was the Chief Minister of Goa, first from 2000 to 2005 and later from March 2012 to November 2014. Manohar Parrikar is the first IIT graduate to become a Chief Minister of any Indian state.

Manohar Parrikar is credited with singlehandedly bringing the International Film Festival of India (IFFI) to Goa and creating more international quality infrastructure for the event in a short time than any other previous government. He was instrumental in initiating various social upliftment schemes like Dayanand Samajik Suraksha Yojana, which provides financial assistance to senior citizens, the Cyberage Scheme which provides computers to students, Chief Minister Rojgar Yojana, etc.

Known to be a man of action and principles, Parrikar is known as 'Mr. Clean' in Goa. SP

General Dalbir Singh conferred honorary rank of General of Nepal Army

The Indian Army Chief General Dalbir Singh was conferred the title of Honorary Rank of General of Nepal Army by Nepal President Ram Baran Yadav, at the Rastrapati Bhawan, Sheetal Niwas in Kathmandu on November 13. As part of a long-standing tradition between Nepal and India, both the countries confer the honorary title on each other's army chiefs. The President also felicitated the COAS with the insignia of the Nepal Army.

The Indian Army Chief also called on the Nepal Prime Minister Sushil Koirala at his office at Singhdurbar. They discussed Nepal-India military cooperation and matters of mutual interest. The COAS praised the contributions made by Gorkha soldiers of Nepal in the Indian military service.

The COAS visited the Mountain Warfare School and interacted with the Ex-Servicemen in Pokhara and also visited Headquarters Western Division on November 14. SP

PHOTOGRAPHS: PIB

Defence Minister Manohar Parrikar visits INS Hansa at Goa

Manohar Parrikar, Defence Minister, visited Naval Air Station INS Hansa on November 14 and he was received by Vice Admiral Anil Chopra, Flag Officer Commanding-in Chief, Western Naval Command and Rear Admiral B.S. Parhar, NM, Flag Officer Commanding Goa Area.

An impressive guard was paraded in honour of the Defence Minister. He was apprised of naval operations, progress and issues pertaining to coastal security and future development plans of Indian Navy at Goa by the Commander-in-Chief. SP

Visit of French Chief of Naval Staff

Admiral Bernard Rogel, Chief of Naval Staff, French Navy, was on an official visit to India from November 13 to 18 to discuss existing Navy to Navy cooperation, cement existing bridges of friendship as well as to explore new avenues of cooperation between the Indian and French Navies.

The Admiral was received at South Block lawns by Admiral R.K. Dhowan, Chief of the Naval Staff, Indian Navy, and was accorded a ceremonial guard of honour. During the day, the visiting dignitary met senior naval officers as well as various senior Ministry of Defence (MoD) and other government officials at Delhi. The Admiral also visited Goa where he addressed participants of the Naval War College, Goa. The dignitary then proceeded to Mumbai naval facilities as well as Mazagon Dock Ltd.

Indian Navy–French Navy cooperation covers a wide spectrum of maritime activities and includes Navy-to-Navy Staff Talks, bilateral exercise Varuna as well as regular delegation level interactions. Warships of both navies make regular port calls to each other's ports. The training interaction includes courses in high technology as well as at staff levels. SP

Visit of Chief of Staff, Royal Swedish Navy

Rear Admiral Jon Thornqvist, Chief of Staff, Royal Swedish Navy, along with his delegation visited India from November 9 to 13, to discuss existing bilateral ties and explore opportunities to enhance the Navy to Navy cooperation.

The Admiral was received at South Block lawns by Admiral R.K. Dhowan, Chief of the Naval Staff, Indian Navy, and was accorded a ceremonial guard of honour.

During the day, the visiting dignitary met senior naval authorities at IHQ/MoD (Navy) Delhi and at the Ministry of Defence. The Swedish Admiral also visited Headquarters Western and Southern Naval Commands at Mumbai and Kochi.

The cooperation between the two navies spans a wide spectrum of activities that include collaboration in shipbuilding, technology transfer and anti-piracy operations in the Gulf of Aden. The defence cooperation between both the navies received a fillip when India–Swedish memorandum of understanding on Defence Cooperation and Production was signed in 2009. SP

PHOTOGRAPHS: PIB

Successful flight-testing of LRSAM missile

The long-range surface-to-air missile (LRSAM) was successfully flight-tested against a flying target in a range in Israel, recently. Israel Aerospace Industries (IAI) carried out the test in the presence of DRDO scientists and officials of the Indian armed forces. The LRSAM system is jointly developed by DRDO and IAI Israel.

All the systems including the radar, communication launch systems and the missile system have performed as expected and hit the target directly and damaged. The system is developed for both Israel defence forces and indian armed forces. SP

Airbus D&S awarded periscope maintenance facility for India

Airbus Defence and Space's Optronics business unit and the Indian Ministry of Defence have signed a 13 million Euro contract for the delivery of a periscope maintenance facility in Delhi. The dedicated facility will be for the maintenance and repair of all of India's submarine fleet periscopes and is due to be completed in September 2016.

The maintenance facility contract demonstrates Airbus Defence and Space's commitment to not only supply systems and technologies to customers, but also to equip them with the necessary operational maintenance capability. Harald Hansen, Director Business Development Sea at Airbus Defence and Space's Optronics business unit, said: "When a product is serviced, a lot of time is lost during the transport between different facilities. Once maintenance work can be done locally, the operators can speed up this process and enhance the operational readiness of the Indian fleet."

The establishment of the periscope maintenance facility and the training of technicians from the Indian Navy in Germany and India can be seen as a first step in establishing an in-country service capability for future naval operations. For the implementation of the facility, Airbus Defence and Space is partnering with the Tata Consultancy Services and H&H Precision Pvt Ltd. SP

Manufacturing in aerospace: Taking to the skies

[By **Nalin Jain**]

As the new Indian Government tries to transform the Indian economy from services-led to a manufacturing plus services economy, we know that it's not really a question of why but how. Without the shift, the menace of growth sans job creation will stifle our economic progress within the next decade. To address the how, the 'Make in India' campaign is a significant and timely step by the new government to raise the manufacturing workforce overall, and the engineering workforce in particular. There again, while China's growth rate may be waning, there are other economies that are competing fiercely for a larger share of global manufacturing investment – from ASEAN countries like Vietnam, Indonesia, etc., to Latin America to even countries in Middle East. The landscape is very competitive as each country is trying to leverage its strengths to attract investment in manufacturing. So we're not just competing with China but also with the rest of the developing world. We all know that in a free market capital flows to places which provide best return on capital.

Why the Emphasis on Aerospace Manufacturing

The context of manufacturing in aerospace is multifold – it not only helps generate jobs but also helps countries achieve technological superiority and increase indigenous capability to become self-reliant. Since the entry barriers are so high – once the aerospace industry matures, the country's global competitiveness improves and exports grow. Besides, for a country that is projected to be the third largest aviation market by 2020, can we afford not to focus on aerospace manufacturing? China is a case in point – it has been focused on aerospace manufacturing right since the 1970s – initially as a supplier of parts to global industry but now launching its own aircraft programmes after having achieved success in civil aviation and defence aerospace.

Since the new government came to power – there has been a renewed focus on manufacturing in aerospace through policy interventions like raising FDI caps to 49 per cent and decisions of converting procurement programmes like light utility helicopter (LUH) into 'Make in India' programmes. These are welcome steps as India can only realize its dream of becoming a credible aerospace player by first relying on the large domestic modernisation demand and then on maturity pushing exports growth. However, to realise the dream, India needs to overcome significant competitive disadvantages like skilled labour, high cost of power, high cost of capital, lack of scale, infrastructure bottlenecks and lack of core technology which impacts the viability of aerospace manufacturing in India.

Growth Model

The key drivers for globalisation of aerospace industry are growth through new geographies as home market demand stagnates, increasing competiveness and strategic alignments. For growth to happen market access is critical while competitiveness is driven by lowering costs of production. As for strategic alignments, aerospace is a very technology and capital intensive industry. To manage growth and bring new programmes to life global aerospace companies typically create risk sharing partnerships and leverage each other's technology strengths as building all the capability within one company is not viable.

India, as the world's largest defence and aerospace importer, does offer significant growth opportunities to global aerospace companies combined with some cost advantages which can be realised over the long term. Given the current levels of maturity of Indian aerospace industry – risk sharing models may take some more time.

Getting the Ecosystem in Place

For success in manufacturing in aerospace in India, the industry needs to work on multiple fronts, viz. develop a strong supplier ecosystem, innovate and develop new technologies and acquire expertise by partnering with global companies. The supplier ecosystem will develop when the Indian supply base scales up its supplies of components and parts to global companies. To become Tier-1 and Tier-II suppliers to global OEMs Indian suppliers will have to compete on a global level against countries like China and Taiwan. Policy interventions like offsets are already driving growth in this area.

Further, to become programme integrators Indian companies will have to partner with global OEMs and bid for upcoming 'Make in India' defence programmes like LUH. The benefit of this model is the faster ramp up due to shorter new product introduction cycles thus improving viability of the investments. However, one key success factor for such alignments will be government's commitment to procurement both in terms of volume and timelines as well as how these investments are managed beyond the tendered procurement.

The Indian aerospace industry is going through an exciting phase of steep learning and growth. The new government's push on 'Make in India' is providing it the right tailwinds from a demand standpoint. The government policy is evolving in the right direction – but a lot needs to be done on both fiscal and infrastructure front to improve competitiveness. On the Indian industry front, things have progressed with some significant investments in recent years using some of the models discussed above. With the world keenly watching India, the opportunity is clearly ours to leverage. The key is to have a long-term vision and create a policy environment which motivates the private sector to act as a catalyst for growth. SP

The writer is President & CEO, GE Aviation & Transportation, South Asia. Views expressed are personal.

LCH TD3 makes a maiden flight

The light combat helicopter (LCH) technology demonstrator (TD-3) made the successful maiden flight here recently. "Escorted by a Dhruv helicopter, the entire flight was flawless. It will be an effective weapon platform to deliver precision strikes at high altitude and we are confident it will meet the requirements of the IAF", said Dr R.K. Tyagi, Chairman of, the Hindustan Aeronautics Ltd (HAL). "We are making all efforts to achieve the initial operational clearance (IOC) by September next year", he added.

In all HAL is expected to produce/manufacture 179 LCH for Indian defence forces. The flight was piloted by Wg Cdr Unni Pillai and co-piloted by Group Captain S.H.K. Nair. It took off at 1520 hours and flew for 20 minutes.

The scope of this project covers design and development of two technology demonstrators, one full scale mock-up, one break away fuselage (BAF) and IOC.

During development of LCH, HAL Board sanctioned LCH related projects, namely, Modified Rotor System, Manufacturing of TD-3 & TD-4 for acceleration of development flight-testing, indigenous development of integrated avionics and display system (lADS) & automatic flight control system (AFCS) in order to reduce the dependency on foreign vendors and develop indigenous technology.

Breakaway fuselage of LCH was built and limit load testing was completed successfully in October 2012. LCH-TD-1 was first flown on March 29, 2010, and LCH-TD-2 was flown on June 28, 2011. Together TD-1 & TD-2, LCH has flown for 388 flights (285:10 hours).

For better planning, execution and monitoring of the project leading to enhancement of number of flights to achieve milestones of cold weather trials, hot weather trials and weapon firing trials, HAL Board had sanctioned manufacturing of TD-3 and TD-4. SP

Tejas trainer PV6 completes first flight

The light combat aircraft (LCA) Tejas project witnessed yet another milestone with the first flight of its trainer PV6. The two-seater aircraft piloted by Gp Capt Vivart Singh along with Gp Capt Anoop Kabadwal took to the skies recently. During the 36-minute flight, all systems functioned as expected, according to a prees release from the Defence Research and Development Organisation (DRDO) office in here.

The aim of the flight was to check the twin cockpit functionality which is similar to series production two-seater aircraft. PV6 has the capability to deliver air-to-air and air-to-ground weapons as required by the Indian Air Force for the final operational clearance. The PV6 has absorbed all the major design modifications undertaken during the last 2,500-plus flights in the programme. This is the final prototype leading to series production trainer, the release stated.

Scientific adviser to the Defence Minister, Dr Avinash Chander, congratulated the Tejas team. "Having achieved success in indigenous design and development of Tejas in both its combat and trainer versions, its production and induction will add new strength to the 'Make in India' campaign," he said. SP

Honeywell to power Textron Scorpion aircraft

Honeywell Aerospace has been selected as the production aircraft engine supplier for the Textron AirLand Scorpion aircraft. Honeywell's proven TFE731-40AR-3S engine was previously selected for the development stage of the programme and this agreement has been extended to the aircraft production phase.

The Scorpion is designed to perform a wide range of diverse missions and offers one-of-a-kind intelligence, surveillance, reconnaissance and strike capabilities at an unmatched value with low operating costs. The mature, lightweight TFE731 engine complements the aircraft's multi-purpose role in the marketplace.

"Selection of Honeywell's TFE731-40 engine for the Scorpion continues the strong partnership we've had with Textron for over two decades," said Mike Madsen, President, Defense and Space, Honeywell Aerospace. "Honeywell's ability to provide a proven, reliable and high-performance engine for this platform helped Textron AirLand bring this innovative aircraft to market in a shorter time frame and cost-effective manner."

Honeywell's TFE731-40AR-3S engine will provide the required power, high reliability and reduced operator expenses due to its longer inspection intervals, low parts count and low thrust specific fuel consumption. This differentiates Scorpion from its competitors and enables it to exceed operator requirements.

The TFE731-40AR-3S engine is the latest evolution of the TFE731 family of engines that entered service in 1972. It has accumulated more than 90 million hours of operation with approximately 13,000 engines delivered, all backed by Honeywell's unmatched global customer support network. SP

PHOTOGRAPHS: HAL, ScorpionJet, ADA

Indonesia acquires 11 Airbus Helicopters AS565 MBe Panther

The mission capabilities and cost-effectiveness of Airbus Helicopters' AS565 MBe Panther has been further validated by Indonesia's order for 11 rotorcraft to be used in naval anti-submarine warfare (ASW) missions.

Scheduled for deliveries within three years, the AS565 MBe helicopters will be supplied by Airbus Helicopters to PT Dirgantara Indonesia. Through the strategic industrial agreement between these two partners, PT Dirgantara Indonesia will be outfitting these rotorcraft in Indonesia with mission equipment before delivery to the Indonesian Navy.

The mission equipment include the helicopter long-range active sonar (HELRAS) dipping sonar and torpedo launching system – providing a truly effective mission system for operations from land bases and ships.

"The Panther now becomes one of the world's most capable light/medium anti-submarine warfare platforms, with an advanced ASW suite and the capability to operate from corvettes or small frigates," said Philippe Monteux, Head of Region, South East Asia & Pacific at Airbus Helicopters. SP

Sangaris: First A400M landing at Bangui

On November 7, an A400M Atlas belonging to the 1/61 "Touraine" transport squadron landed for the first time at Bangui airport, in the Central African Republic. The aircraft landed at 9:45 on M'Poko Airport to unload 7.4 tonnes of supplies intended for the Sangaris Force. The air force's latest tactical transport aircraft was deployed on overseas operations shortly after its delivery last year.

The aircraft is perfectly suited to the current requirements of French forces deployed in Central Africa. Its payload of 20 to 30 tonnes and its strategic range allow substantial savings in terms of asset efficiency and substantial savings in flight times compared to the previous-generation aircraft it replaces.

About 2,000 French soldiers are currently deployed on Operation Sangaris, alongside 6,700 troops belonging to the United Nations Mission for Stabilization in Central African Republic (MINUSCA). Begun on Dec 5, 2013, Operation Sangaris is intended to re-establish minimal levels of security in the Central African Republic, and to assist in standing up the UN mission. SP

PHOTOGRAPHS: Marine Nationale, defense.gouv.fr

Russian Helicopters begins certification tests on Mi-38

Russian Helicopters (part of State Corporation Rostec) has launched the final stage of certification testing on the Mi-38 multi-role helicopter. Testing is being carried out on two prototype models of the helicopter fitted with Russian TV7-117V engines.

On November 3, 2014, Russian Helicopters' Mil Moscow Helicopter Plant received the fourth prototype of the Mi-38 in order to continue certification flight-testing. The helicopter is built at Kazan Helicopters, also a Russian Helicopters company. On October 20, 2014, it successfully completed a series of hover tests and low-speed ground runs, after which it was transported overland to the Mil Moscow Helicopter Plant.

For further flight-tests, the fourth Mi-38 prototype will be fitted with the full suite of onboard data acquisition systems. Starting flight tests on the forth prototype boosts progress towards the Mi-38's certification—which is scheduled for 2015. SP

Sale of C-17 Globemaster III to Australia

The US State Department has made a determination approving a possible foreign military sale to Australia for C-17 Globemaster III aircraft and associated equipment, parts and logistical support for an estimated cost of $1.609 billion. The Defense Security Cooperation Agency delivered the required certification notifying Congress of this possible sale recently.

The Government of Australia has requested a possible sale of up to 4 C-17A Globemaster III aircraft, 19 F117-PW-100 Pratt & Whitney engines, 4 AN/AAQ-24V large aircraft infrared countermeasures (LAIRCM) systems, 4 small laser transmitter assemblies, 4 system processors, 4 AN/AAR-54 missile warning sensors, 1 AN/ALE-47 countermeasure dispenser, 1 AN/AAR-47 missile warning system, 5 trimble force 524 receivers, 2 GAS-1 antenna units, 2 controlled reception pattern antennas, 1 AN-USC-43V advanced narrowband voice terminal, 16 Honeywell H-764 ACE embedded global positioning system/inertial navigation systems, spare and repair parts, supply and test equipment, personnel training and training equipment, publications and technical documentation, US Government and contractor engineering, logistics, and technical support services, and other related elements of logistics support. SP

Northrop Grumman's MQ-8C Fire Scout prepares for shipboard testing

Northrop Grumman Corporation (NOC) successfully completed precision sloped landing tests August 27 with the MQ-8C Fire Scout at Naval Base Ventura County, Point Mugu, in preparation for at-sea testing.

MQ-8C Fire Scout has been undergoing rigorous flight testing and validation, which will culminate in the actual take-off and landing on the deck of a Navy vessel at-sea. The MQ-8C is the company's latest variant of its successful Fire Scout unmanned aerial system, which performs intelligence, surveillance and reconnaissance missions for the US Navy.

"The sloped take-off and landing tests are designed to be as real as it gets to actually operating on a Navy ship," said Captain Patrick Smith, Fire Scout Program Manager at Naval Air Systems Command. "The autonomous MQ-8C Fire Scout system is able to precisely track and understand the roll and pitch of the surface which resembles at-sea conditions." SP

Heron to add to Australia's unmanned capability

Minister for Defence Senator David Johnston announced the return of a Heron remotely-piloted aircraft (RPA) to Australia as part of a plan to ensure RAAF pilots maintain the skills to operate unmanned aerial systems until the introduction of the Triton.

"The Heron is a proven capability – providing 'eyes in the sky' for our troops in the Middle East," Senator Johnston said.

"The retention the Heron following their withdrawal from Afghanistan later this year will ensure Australia remains at the forefront of this advancing technology. This is prudent planning for possible future defence scenarios."

"The retention of two Heron aircraft will help create a robust development programme to ensure RAAF is well prepared for the Government's investment in the MQ-4C Triton," Senator Johnston said.

The estimated cost of the Heron is $120 million over six years, including portable ground control stations initially based at Woomera, maintenance, logistics, training and renovations to facilities at RAAF Base Amberley. The contract extension with McDonald, Detwiler and Associates will be funded from within the existing Air Force budget, through a redistribution of tasks and priorities. SP

Triton UAS completes second transcontinental flight

The second of three MQ-4C Triton test aircraft recently made its debut at Naval Air Station Patuxent River, Maryland, October 24 after completing its inaugural cross-country flight from Northrop Grumman's Palmdale, California, facility earlier.

The third test aircraft is scheduled to arrive before the end of the year. The Triton integrated test team will continue envelope expansion and conduct sensor, communications and interoperability testing on the three aircraft in preparation for deployment 2017. SP

UK deploys Reaper to the Middle East

The Defence Secretary has announced that UK Reaper remotely-piloted aircraft systems (RPAS) will be deployed in the efforts to combat ISIL.

The deployment will see the Royal Air Force RPAS provide additional intelligence, surveillance and reconnaissance support to the Iraqi Government and coalition allies in support of our national interests and ongoing efforts to combat ISIL. Reaper operations are expected to start shortly.

Since the granting of parliamentary approval last month the UK has conducted air strikes on multiple ISIL targets in northern Iraq, operating from RAF Akrotiri in Cyprus. The deployment of RPAS complements the existing surveillance assets already in the region.

Defence Secretary Michael Fallon said: "The surveillance capability of Reaper will see it provide vital situational awareness, making it an invaluable asset to the Iraqi Government and the coalition allies in helping counter the threat from ISIL and supporting our vital interests in the area.

Reaper is the UK's only armed remotely-piloted aircraft. The deployment of Reaper to the Middle East coincides with the conclusion of the first UK training programme for Kurdish forces in Northern Iraq. SP

PHOTOGRAPHS: Northrop Grumman, UK MoD, Commonwealth of Australia/AC David Grieger

India-Israel ministerial meeting

The Union Home Minister, Rajnath Singh, had a meeting with the Israeli Defence Minister Moshe Ya'alon at the defence headquarters in Tel Aviv recently. The Home Minister was accompanied by senior officials from the Ministry of Home Affairs and the Indian Ambassador to Israel.

The Ministers emphasised the priority accorded by both sides to the bilateral relationship and agreed to continue to cooperate in various areas, in particular in the defence sector. Rajnath Singh outlined various policy changes and decisions taken by the Government of India and referred in particular to the relaxation in the foreign direct investment limits in the defence sector. He urged the Israeli defence sector to participate in the 'Make in India' programme. The Israeli Defence Minister said that Israel wanted to develop relations in the defence sector and to discuss the possibility of transferring cutting-edge technologies for manufacturing in India.

The two leaders discussed the regional scenario and the threat posed by terrorism not only to India and Israel but also the world in general. A number of areas of specific cooperation were discussed, including protection of border areas and information sharing. SP

Home Minister Rajnath Singh meets Israeli Prime Minister

The Union Home Minister, Rajnath Singh, met Israeli Prime Minister Benjamin Netanyahu, in Tel Aviv, on November 6 during his official visit to Israel. The meeting was held in an extremely cordial atmosphere and fruitful discussions were held on a wide range of issues. The two leaders discussed the regional situation and the evolving threats to the global community from terror. The Home Minister said that terror was a threat not only to countries like India and Israel but also the whole world. They reviewed existing cooperation and future possibilities in this area.

Prime Minister Netanyahu spoke about India and Israel as being two old civilisations, each with a capacity for science and innovation. He said that his uncle, who was a mathematician, always used to tell him that the best mathematicians came from India. The Home Minister commended the achievements of Israel and Israeli scientists in different fields and also referred to Indian achievements in science, including the concept of zero, decimals and algebra.

Netanyahu said that he was greatly impressed by his meeting with Prime Minister Narendra Modi in New York and believed that relations between the two countries were poised for rapid development.

Rajnath Singh has expressed satisfaction at the growth in bilateral ties in a range of areas, including defence and agriculture. He noted the signing of agreements in the area of homeland security that had opened another area of mutually beneficial cooperation. In this context, he emphasised the importance of capacity building and training. He said that the future emphasis should be to build a high-tech partnership befitting two leading knowledge economies. Both leaders agreed that the free trade agreement under discussion between the two sides should be signed early.

The Home Minister made a special reference to the 'Make in India' campaign launched by Prime Minister Modi and invited Israeli industry, including in the defence sector, to take advantage of the investment-friendly policies adopted by the new government.

Prime Minister Netanyahu briefed the Home Minister on technologies that had been developed by Israel in areas such as aviation security, border protection and water harvesting. He said Israel was ready and willing to discuss transfer and development of such technologies with India. He said that he agreed with the Indian Prime Minister that Israeli industry, including the defence industry, could 'Make in India' and thereby reduce costs of manufacturing products and systems developed by Israel. He said that a delegation from Israeli industry would be happy to visit India to explore manufacturing opportunities in different sectors. In this context, the Home Minister also mentioned the possibility of together exploring third country markets in Africa and Latin America, where Indian industry has a strong presence. SP

New Minister of State for Home Affairs

Haribhai Parthibhai Chaudhary has taken over as the Union Minister of State for Home Affairs. Chaudhary was welcomed at his North Block office recently by the Home Secretary Anil Goswami and other senior officials of the MHA.

Chaudhary called on the Home Minister Rajnath Singh and also attended an official meeting immediately after his joining.

Born in Banaskantha district of Gujarat on July 20, 1954, Chaudhary has represented his home constituency in the Lok Sabha four times. A graduate from Mumbai University, he has served as a Member of several Parliamentary Committees on different ministries. SP

PHOTOGRAPHS: PIB

Boeing, Danish defence firms identify collaboration areas

Boeing and six Danish defence companies signed agreements to jointly pursue a range of business opportunities in defence and aerospace-related manufacturing, maintenance, software and simulation integration, and other areas.

The agreements with Danish Aerotech, Falck Schmidt Defence Systems, IFAD, Multicut, Systematic and Terma are key elements of Boeing's industrial plan related to its F/A-18 Super Hornet offering to Denmark. Just as importantly, they also offer these companies the prospect to expand their businesses and access broader markets through Boeing's diverse portfolio of products, services and technology.

"We want partners who see our member companies' potential to grow, not our potential to receive handouts," said Jan Falck-Schmidt, Chairman of the Danish Defence and Security Industries Association (FAD). "Boeing is offering knowledge, technology and supply chain opportunities that can help each of our companies, and the Danish defence industry as a whole, win work now and compete for much broader business in the future."

"The areas of cooperation identified in these agreements draw upon the specialised capabilities of Danish industry to build long-term, sustainable partnerships in both Boeing's commercial and defence businesses," said Debbie Rub, Vice President and General Manager of Boeing Defense, Space & Security's Global Strike division.

A study released by the leading Danish economic consultancy DAMVAD shows that collaboration between the Danish defence industry and Boeing in areas of corresponding strengths could result in the creation of more than 10,000 jobs in Denmark and the addition of 6 billion DKK to Denmark's GDP over 20 years. SP

AQUILA selected by UK MOD

AQUILA, a joint venture between NATS and Thales, has signed a contract to deliver Marshall, the UK Ministry of Defence (MOD) programme to transform terminal air traffic management at military airfields. The contract is valued at around £1.5 billion over the course of its 22 year lifespan.

Marshall seeks to ensure a safe, efficient and sustainable air traffic management (ATM) service for the UK armed forces. It will modernise ATM at over 100 MOD locations, in the UK and overseas, including more than 60 airfields and ranges.

AQUILA will deliver a system-wide modernisation and rationalisation of the current fragmented system, and establish a flexible ATM service – one that complies with known regulatory requirements and which is future-proofed to meet any potential change in the regulatory and technological landscape. SP

Raytheon scholarships

Raytheon Company and Student Veterans of America (SVA) recently awarded three $10,000 scholarships to military veterans studying cybersecurity and engineering, and also opened applications for a new scholarship being offered to army student veterans.

The Raytheon/SVA Scholarship, now in its second year, marks the organisations' shared mission to help veterans succeed in civilian life through the study of science, technology, engineering and math. The new scholarship, called the Raytheon Patriot Scholarship, will provide $10,000 to two army student veterans pursuing graduate or under-graduate degrees at accredited universities, and who demonstrate leadership in their local communities.

The Raytheon/SVA Scholarship recipients are:

- Damien Calderon, 26, an army veteran studying mechanical engineering at the University of Texas at Austin.
- Megan Freeman, 29, a navy veteran studying computer science at the University of Nevada, Las Vegas.
- Edward Thiemann, 34, an air force veteran pursuing a PhD in remote sensing at the University of Colorado, Boulder.

"We appreciate Raytheon's ongoing support of our efforts to empower student veterans, and we've found three uniquely talented people among a field of excellent applicants," said D. Wayne Robinson, President and CEO of Student Veterans of America. "These scholarships will help them build upon the expertise and training they received while in service. SP

Thales to deliver innovative training solutions for Australian Defence Force helicopter pilots

The next generation of Australia's Army and Navy helicopter pilots will be trained using three Thales full flight simulators and a suite of other synthetic training devices. These will be supplied to prime contractor Boeing Defence Australia under the Helicopter Aircrew Training System (HATS) program.

Thales will provide three EC135 Reality H Full Flight Simulators (FFS), its high-fidelity mission-orientated training system which is already in service around the world.

This modular state-of-the-art simulator provides improved operational efficiency and high-quality training supported by a powerful image generation system, reliable instructor control, and high accuracy motion system.

Chris Jenkins, Thales Australia CEO said: "We are looking forward to working closely with Boeing Defence Australia to deliver these superb simulators and associated equipment."

Beyond the simulators, Thales will deliver training courseware and services, including ground instructors to train Navy Aviation Warfare Officers and air crew sensor operators.

In addition, Thales will supply its Meghas avionics suite for the 15 EC135 aircraft to be provided by Boeing. Thales will also provide the IT infrastructure for the training school. SP

Saab receives missile sub-systems order

Defence and security company Saab has signed a contract comprising missile sub-systems amounting to approximately MSEK 250. Deliveries will take place during 2015-22.

"This order is yet another acknowledgement of our broad competence and expertise within missiles and we will continue to develop and refine our products and systems in this area," says Görgen Johansson, Head of Saab's Business Area Dynamics.

Saab is a significant supplier of high-performing and cost-effective missile systems and components for air, land and naval operations. The strong product portfolio includes RBS 70, RBS 70 NG, NLAW and RBS15 missile systems. Furthermore, Saab also participates in a number of multinational cooperation missile development programmes.

The industry's nature is such that depending on circumstances concerning the product and customer, information regarding the customer will not be announced. SP

New technology to reduce soldier's load

Current and future developments in energy production promise to lower the soldier's combat load and reduce the logistical footprint, said an army systems expert. Current technology could allow soldiers and their vehicles and equipment to one day passively capture solar energy, which will automatically charge batteries used for network communications and other tasks, said Major Mark Owens.

Owens, a system coordinator at the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology, spoke at an Operational Energy forum, in the Pentagon.

Now in research and development is an apparatus Soldiers would wear to reduce musculoskeletal injury and increase performance. The device would also generate energy for batteries when the soldier is walking downhill and "braking," he said, much like energy-regeneration braking used in electric vehicles.

Another possible similar development in the future would use the oscillating motion of a soldier's rucksack to capture energy – up to 50 watts worth, Owens said. "You obviously wouldn't want to oscillate when going down a mountain, so it could be locked in place." A similar passive-energy collection device could be in a vehicle seat. The weight of the soldier could generate power, he said.

Someday, thermal electric devices could line soldiers' armour, producing a mild air-conditioning effect of cooling down a soldier by about five degrees Fahrenheit, he said. It would have an added benefit of reducing water intake and the associated weight of carrying a lot of water.

Smart textiles could someday route energy through the fabric of the soldier's combat uniform, reducing the need for cables and other devices connecting the battery and networking communications, he offered.

A US soldier demonstrates Lockheed Martin's Human Universal Load Carrier, designed to allow soldiers to more easily carry up to 90 kg

PHOTOGRAPH: Lockheed Martin

Why the Army's sudden increased interest in reducing weight and increasing energy efficiency?

New network communications gear worn by soldiers keeps getting heavier and heavier, he said. The army predicted that in the future, the power needed to generate these devices will increase from the current 3 to 4.5 kg to 6.3 kg for a 72-hour mission.

That doesn't seem like much, but the effect of new gear dismounted soldiers carry makes the load heavier and heavier, Owens said. At some point, the army began to ask itself "Is the juice worth the squeeze?"

Consider that during World War II and Vietnam, the average soldier hauled about 36 pounds of stuff, he pointed out on a slide. During operations in Iraq and Afghanistan, that load increased to 35 kg.

"If you have loads for dismounted infantrymen of from 30 to 60 kg, you begin to degrade their ability to manoeuvre, degrade their situational awareness and there's tremendous impact to the musculoskeletal system, with increased probability of injuries and long-term consequences," he said.

Owens was quick to point out that much of that added weight increased the chances of soldier's survivability on the battlefield in the form of increased situational awareness through better communications and more effective firepower. However, at some point, a soldier can only carry so much, so there has to be a sweet spot.

To get to that spot, the army in 2009, started looking at how technology could contribute to decreasing the soldier's load from a power perspective, since food, water and body armour were already at their limits in possible weight reduction, he said.

In 2003, 90 per cent of the batteries purchased by soldiers were non-rechargeable, he said. So, if a soldier went out on patrol, he'd come back with maybe 60 per cent of the charge still in his batteries, but toss them and get new ones for the next day's patrol, just to be on the safe side.

The army is reversing that trend today, with lithium-ion rechargeable batteries that are more powerful, weigh less and come with charging stations, he pointed out. The newer batteries also last about 25 per cent longer.

The chargers that were used in 2003 could not be run by solar or vehicle power and they were less rugged than the ones now being produced that can use alternate energy sources, and can run off AC or DC current.

Another problem is that the 2,590 batteries soldiers have been wearing, while powerful, are also a potential safety hazard when penetrated by rounds or shrapnel. They're "not something you want to have on your body when that happens," he said.

An army programme of record for 2016 through 2020, will result in better battery and charging technologies getting out to soldiers in the field, Owens said. For example, rechargeable batteries that are flattened out and flexible with charge indicators on them will be worn by soldiers to supply their network communications and other gear.

Universal charging stations are part of that programme, capable of operating off alternative energy sources or even drawing energy from partially charged batteries, he added. SP

Dairy Queen and Kmart security breached

Both Dairy Queen and Kmart are the latest stores to be plagued with computer security breaches. Dairy Queen said that its payment systems were breached by hackers who may have gained access to customer names, credit and debit card numbers and expiration dates. The ice cream and fast food chain says 395 of its stores around the country were affected. The data breach happened between August and September.

Dairy Queen says it worked with law enforcement authorities and credit card companies to investigate the breach. It says there's no evidence Social Security numbers, personal identification numbers or e-mail addresses were accessed. The Edina, Minnesota-based company, is offering customers free identity repair services.

Retailer Sears Holdings Corp said the payment data system at its Kmart unit had been breached, and that certain debit and credit card numbers could have been compromised.

The data hacking at Kmart discount stores comes after a slew of data breaches at US companies over the last two years. SP

Most wanted in the US

The United States Secret Service and the Internal Revenue Service identified James Kong as the primary suspect in an investigation of fraudulent transactions through a consumer credit card service for health consumers.

The investigation determined that Kong used his knowledge of the targeted company's customer service support centre's computer systems to steal the account numbers of 1,000 customers and 95 participating service providers. Kong made fictitious and unauthorised charges to customer accounts and posed as health service providers to redirect payments into bank accounts in Asia. On December 3, 2008, a 76 count federal indictment and arrest warrant was issued for Kong for bank, wire, access device, computer frauds, identity theft and money laundering by the Grand Jury of the District Court of Ohio.

Similarly, Dzmitry Valeryevich Burak is the subject of charges in the federal district of the Southern District of California and also the State of New York.

In California, Burak and others who were involved in an international criminal group used the Internet to traffic in stolen and counterfeit credit cards. An investigation of Burak's e-mail accounts uncovered more than 55,000 stolen credit card account numbers, which were associated with more than $21 million in actual losses.

In New York, Burak sold thousands of stolen credit card numbers and other personal identifying information online. During a five-year period, Burak accessed or sold more than 9,000 stolen credit card numbers, more than $4 million worth of stolen property and defrauded credit card companies for more than $1 million. SP

US Secret Service statement on fence jumper

Recently, Omar J. Gonzalez, W/M/42, of Copperas Cove, Texas, climbed over the fence on the north side of the White House complex and ran towards the front of the mansion. Gonzalez failed to comply with responding Secret Service Uniformed Division Officers' verbal commands, and was physically apprehended after entering the White House North Portico doors.

The First Family was not in the residence at the time of the incident and was en route to Camp David, Maryland. Every day the Secret Service is challenged to ensure security at the White House complex while still allowing public accessibility to a national historical site. The challenge of securing the White House complex from security threats is ever present. Although the officers showed tremendous restraint and discipline in dealing with this subject, the location of Gonzalez's arrest is not acceptable.

In addition to the criminal investigation of Gonzalez by the Secret Service's Washington Field Office, Director Julia Pierson immediately ordered the Secret Service's Office of Professional Responsibility to conduct a comprehensive after action review of the incident. The review findings will be submitted to the Department of Homeland Secretary, Jeh Johnson. This review began with a physical assessment of the site and personnel interviews. In addition, the Secret Service will review all operational policies and security procedures during this process. SP

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