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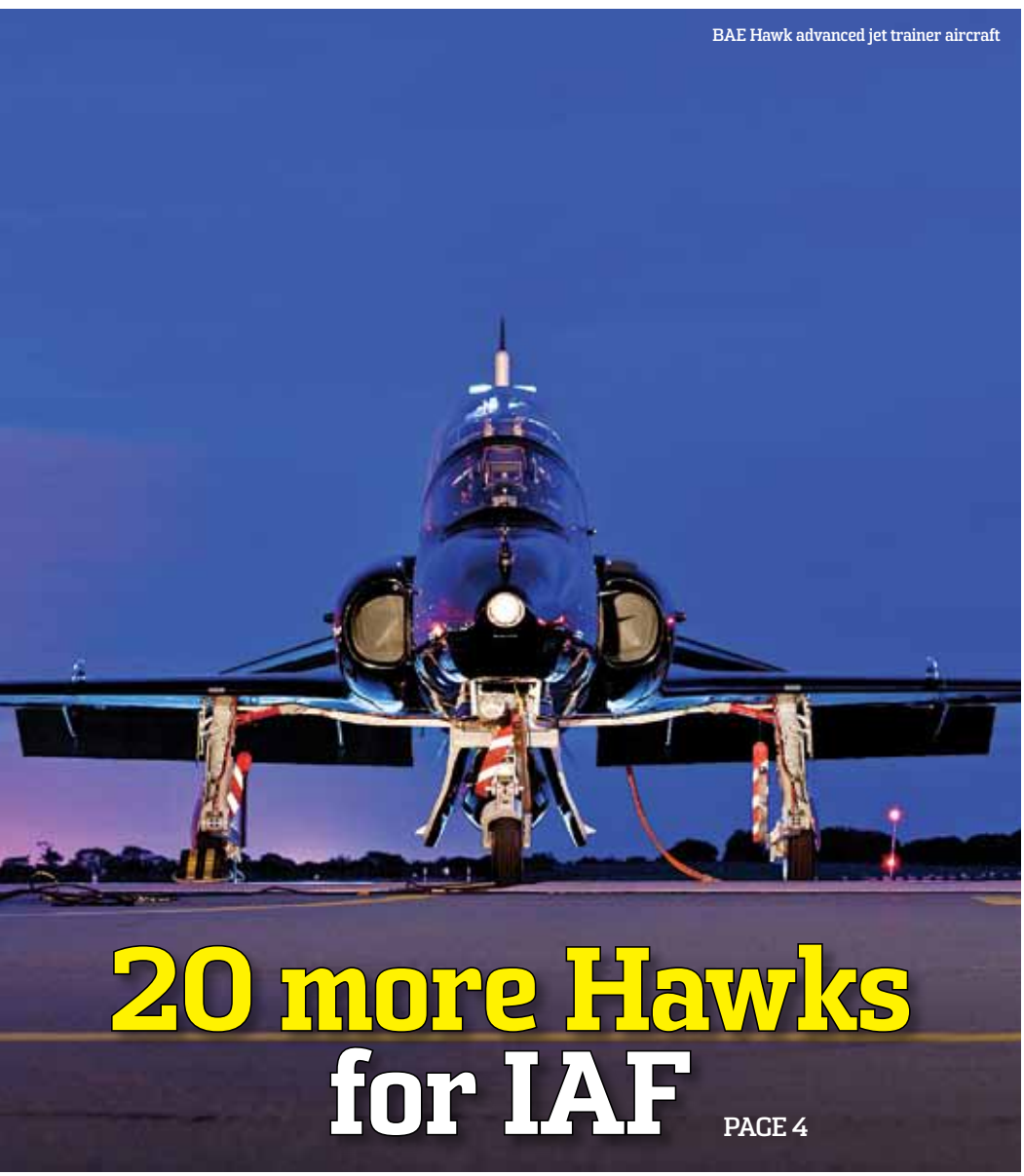

BAE Hawk advanced jet trainer aircraft

## 20 more Hawks for IAF

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## Saab launches 9Land Soldier sPad

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## EADS-BAE proposed consortium to be the biggest in Europe

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DELENG/2010/34651

# 9Land Soldier sPad – small enough for the challenge

For many years the market has had a need for a portable equivalent to a battlefield management system (BMS) for use by individual soldiers. But up to now the size and weight have made this impossible. Defence and security company Saab is now offering a solution.

"The problem has always been that soldiers cannot be given greater loads than those they already carry without becoming even heavier, slower and clumsier. If something extra is added, then something else must be taken away. It's as simple as that," says Johan Tofte, who is Product Manager for the 9Land Soldier sPad.

The 9Land Soldier sPad is a hand-held computer which has been developed in response to this precise problem. Starting specifically from the soldier, a lightweight system has been developed with a hand-held unit that weighs just 185 grams, less than half that of competitors' equivalents. The system has also been designed to be flexible and easy to use, even in stressful situations.

PHOTOGRAPH: Saab Group

The 9Land Soldier sPad has a 3.7-inch touchscreen designed to be usable with one hand. The screen is pressure-sensitive and can therefore be operated with gloves, and its illumination level adapts automatically to prevailing conditions.

"Knowing where you yourself are, where other members of the group are and being able to tell each other about the enemy's position can mean the difference between life and death," says Johan Tofte. SP


**Cover:**
*India is nearing a third order for 20 Hawk Mk 132 jet trainers in addition to the 123 it has already ordered. This last batch would be built entirely by the Hindustan Aeronautics Limited in Bangalore.*

*Cover image: BAE Systems*

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# History repeats itself

It is certainly appreciative and welcome that India and China, the two future economic superpowers, are talking about strengthening bilateral ties. Recently, Prime Minister Dr Manmohan Singh and the Chinese President Hu Jinatao jointly declared 2012 as the year of India-China friendship and cooperation.

The Prime Minister hoped that the two would work together to maintain peace and security on the borders and resolve border issues through friendly talks.

Here lies the thorn.

If we go by Indian military strategists, India not only has to be cautious by such 'friendly Chinese overtures', but also has to be well-equipped and prepared, not to be taken by any kind of surprise, which the Chinese are known to deliver. The case in point is the 1962 war between the two nations. History tells us how China, led by Chou En-lai, played a game of deceit, leading India to believe that all was well, when it was preparing for a military assault. The 1962 war is a grim reminder.

In this issue, as the nation remembers the sacrifices of Indian soldiers, we have incisive articles and viewpoints on the Chinese thinking, strategy, military might and its ambitions. General (Retd) V.P. Malik has said that deep strategic fissures between the two countries cannot be ignored. In recent years, China has been more vocal and assertive on its claim over Arunachal Pradesh. China is non-committal over nuclear arming of Pakistan and induction of PLA in Gilgit-Baltistan area of Pakistan Occupied Kashmir. By issuing stapled visas to Indian passport holders from Jammu and Kasmir, Beijing is virtually questioning the status of the State, providing support to Pakistan's position on the issue, and ensuring greater security to its occupied territory in Aksai Chin.

The General has rightly pointed out that despite several foreign aggressions in our post-independent history, we seem to lack realism. There is a sense of self-righteousness and singular faith in words, without looking for underlying falsehoods and incompetence.

Echoing similar views, Lt General (Retd) P.C. Katoch has said that the actions of Pandit Nehru, by ignoring the warnings on China given by Sardar Patel, led to India being outwitted both politically and militarily. Considering what the two Generals have said, it would be prudent on the part of the powers that be in New Delhi not to be 'naive' when it comes to dealing with China.

In SP's Exclusives, we have covered one of the major corporate developments in the defence and aerospace sectors, the probable merger of giants EADS and BAE Systems. Consolidation being key to stay competitive, it is believed that the actual trigger for the two to come together could be the loss of MMRCA deal, and also the need for them to counter competition from Boeing.

We have a report on HAL sending out an RFP to BAE Systems for a potential order to supply products and services for the manufacture of 20 Hawk advanced jet trainer (AJT) aircraft, in addition to the 123 Hawks already ordered. Once these Hawks are available, the IAF is keen on reviving the erstwhile Surya Kiran Aerobatics Team which we all would love to see them perform across the globe.

**Jayant Baranwal**
Publisher and Editor-in-Chief

# RFP to BAE Systems for 20 more Hawks for IAF aerobatics team

PHOTOGRAPH: SP's Special Correspondent

In addition to the 123 Hawks already ordered, some of which are in service with the Indian Air Force, the IAF's aerobatics display team, the erstwhile Surya Kiran Aerobatics Team (SKAT) has been non-functional since it disbanded last year, handing over its Kiran Mk2 intermediate trainers for pilot training. It had been known for a while that the Kiran would be replaced with the more powerful BAE Hawk.

The wheels have begun turning now with HAL sending out an RFP to BAE Systems for a potential order to supply products and services for the manufacture of 20 Hawk Advanced Jet Trainer (AJT) aircraft. According to a BAE statement, "The aircraft, to be built by HAL in Bengaluru, will fulfill the Indian Air Force's requirement for its prestigious aerobatic team. Upon successful conclusion, this would be the third contract placed on BAE Systems for supply of materials and equipment for the Hawk Mk132, building upon previous orders of 66 aircraft in 2004, comprising supply of 24 Hawk aircrafts in fly-away condition and 42 aircraft built under licence by HAL, and a further 57 aircraft in 2010." The IAF Hawks stationed at Bidar in Karnataka are already being used for lead-in fighter training of pilots.

Guy Griffiths, Group MD, International, said, "This is a tremendous opportunity to build on the success of Hawk in India and demonstrates the progress we are making in capturing significant opportunities to address the defence modernisation requirements of the Indian Government. Together with HAL, we look forward to giving the Indian Air Force's display team a fantastic aircraft." It is understood that the IAF's rejuvenated display team might revert to its original name, Thunderbolts, a name it had when it flew the British-built Hunter aircraft. SP

## Effort to make Tejas more 'Indian'

In a concerted effort to reduce the percentage of foreign components in the Indian LCA Tejas fighter, the Aeronautical Development Agency (ADA) has drawn up a comprehensive list of 111 aircraft line-replacable units (LRUs) that will be indigenised and built by Indian companies within the country. The ambitious list includes 21 avionics components (including gyro reference unit, tactical navigation antenna and GPS antenna), 27 environmental control components, 14 electrical components (including under-carriage display unit, integral drive generator and ground power receptacle), ejection seat, nine components in the flight control area (left and right air data sensors, angle of attack sensor, sensor assembly rate). The list also includes several key LRUs in hydraulics, landing gear, propulsion & fuel, and the aircraft's health and utility management system. In a statement announcing its interest, the ADA has said, "There are 358 LRUs (components) in the Tejas aircraft, out of which 53 per cent of total LRUs are indigenously developed within India. In view to reduce the remaining 47 per cent of the import LRUs, ADA has initiated the Indigenous development programme for indigenisation of the import LRUs." SP

## Indian micro air vehicle competition

India's National Programme on Micro Air Vehicle (NPMICAV), a Department of Science and DRDO joint effort, has announced a countrywide competition MICAV2013 organised by the National Aerospace Laboratories (NAL) and Aeronautical Development Establishment (ADE) where national labs, companies and industry, and students will build micro-air vehicles and demonstrate their capabilities. The competition seeks to "bring out the capability of vehicles and technologies being developed in the country for performing a defined mission using multiple MICAVs (fixed wing, rotary wing, flapping wing and combinations) and unmanned ground vehicles (UGVs)." It goes on to add that the objective of NPMICAV is to indigenously develop MICAV technologies at sub-system as well as system level. "These vehicles are meant to address a large number of civilian and military applications including search and rescue, disaster management, traffic monitoring and management, remote sensing, terrain mapping, etc." The focus and thrust areas for the competing MAVs will be communication, precise navigation, sensor capabilities, video transmission, multi vehicle coordination, cooperative flying and vision based manual flying through windows. SP

PHOTOGRAPHS: ADA, JF Defense, NAL

## Indian Navy for submarine rescue bell

The Indian Navy has announced interest in procuring a submarine rescue bell with a capacity for 12 men for fitment aboard one of its submarine rescue ships. The SRB needs to come fitted with a launch and recovery system, associated life support and locator system (one transducer is to be fitted on board SRB). The Navy wants its new SRB to be able to enable dry escape from a depth of 300 metres and wet escape from a depth of 120 metres in turbulence upto sea state four. The navy has stipulated that the SRB is to cater for breathing gas supply for the two crew and ten escapees in case of damage to main umbilical. The SRB should carry sufficient onboard gas in non-corrosive cylinders (working pressure 300 bars) capable of providing bottom mixture, oxygen (for oxygen make-up) and helium for the crew and escapees for up to 24 hours. Two high resolution colour video cameras are also required to be fitted on the rescue bell, one external and the other inside the working chamber. The colour video feed from external camera is to be available in working chamber of SRB as well as operator console and internal camera feed is to be available on the operator console. "The video should give a clear picture about the position of SRB w.r.t to the submarine," the navy stipulates, also demanding life-span support for the product and all its components from potential vendors. SP

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GENERAL (RETD)
V.P. MALIK

# Indo-China War 1962
## Lessons and way forward

*"Relations between great powers cannot be sustained by inertia, commerce or mere sentiments." — Aaron Freidburg in* New Republic, *August 4, 2011*

The India-China War in 1962 was independent India's most traumatic and worst ever security failure which left an indelible impression on our history and psyche. This October marks its 50th anniversary: an appropriate occasion to reflect on its strategic lessons and our current politico-military status vis-à-vis China.

### Background

It all started with China's occupation of Tibet, and their surreptitious construction of a strategic road through Aksaichin, joining Tibet with Sinkiang. The Government of India took two-and-a-half years to confirm the road construction and another one year to disclose it to the Parliament on August 31, 1959.

The uprising in Tibet caused further worsening of relations. In March 1959, Dalai Lama fled from Tibet and took shelter in India. China suspected that India was helping the Khampa rebellion and had enabled Dalai Lama's escape to India. This, alongside skirmishes on several border posts, resulted in the hardening of attitudes. India adopted a strategically flawed 'Forward Policy' of erecting isolated check posts without taking any measures to improve border infrastructure or the armed forces' capabilities. Failure of the government policy put Prime Minister Jawaharlal Nehru under intense domestic pressure. He ordered the military to throw out the Chinese from intruded Indian territory—a task that was well beyond its capability.

In October 1962, the Chinese military launched premeditated and calibrated punitive attacks in India's Northwest and Northeast sectors of Ladakh and North-East Frontier Agency (now Arunachal Pradesh). India suffered its worst ever military defeat, and a geographic surgery that continues to fester in the form of Line of Actual Control (LAC) till date.

There are many lessons. My emphasis is on strategic thinking and planning, civil-military relations and capability building to tackle potential security threats.

### Grand Strategy

According to a Pentagon historical study paper on the Sino-India Border Dispute, declassified in 2007, "Developments between late 1950 and late 1959

**India's national security framework and its antiquated civil-military relationship have not grown in step with the needs of new security challenges. We need to change our mindsets and attitudes and look beyond the narrow boundaries defined by turf and parochialism.**


Tawang War Memorial at Tawang, Arunachal Pradesh, for martyrs of the 1962 Indo-China war

PHOTOGRAPH: PIB

were marked by Chinese military superiority, which, combined with cunning and diplomatic deceit, contributed to New Delhi's reluctance to change its policy towards the Beijing regime for nine years."

The study records that the Chinese diplomatic effort was a five-year masterpiece of guile, planned and executed in a large part by Chou En-lai. The Chinese Premier deceived Nehru several times about Chinese maps and carefully concealed Beijing's long-range intentions. He played on 'Nehru's Asian, anti imperialist mental attitude, his proclivity to temporize, and his sincere desire for an amicable Sino-Indian relationship' and strung along Nehru by creating an impression through equivocal language that (a) it was a minor border dispute (b) Beijing would accept the McMahon Line, and that (c) old Kuomintang period Chinese maps would soon be revised.

The Pentagon study claims that the Chinese—even Nehru—saw the use of diplomatic channels as the safest way to exclude the Indian public, press, and Parliament. They used these channels effectively for several years till it became a military fait accompli for India due to the Chinese forces exercising actual control of the area. The study concludes that "In the context of the immediate situation on the border where Chinese troops had occupied the Aksai Plain in Ladakh, this was not an answer but rather an implicit affirmation that India did not have the military capability to dislodge the Chinese."

Many researchers have pointed out that the then raging Sino–Soviet ideological war played a role in the Chinese decision-making leading to the Sino Indian 1962 war. Chinese leaders were also concerned that the U S might use a Sino-Indian war situation to unleash Taiwan against the Mainland. They used diplomatic subterfuge to obtain reassurance on both these fronts before the war.

What can be said about India's security policy during this period?

It is evident that despite Sardar Patel's prophetic advice to Nehru on Tibet, China and Indian security issues on November 7, 1950, (contents of this letter were kept secret for 18 years),the Indian Government showed no strategic foresight or planning. When Chinese forces reached Changtu on their way to Lhasa, the Indian delegation in the United Nations blocked consideration of a proposal to censure China. In December 1950, Nehru publically supported the Chinese position on the grounds that Tibet should be handled only by the parties concerned i.e. Beijing and Lhasa. The Government even allowed Chinese food material to go through Calcutta and Gangtok to reach Chinese troops in Yatung. In September 1952, India agreed with Chinese authorities to withdraw its military-cum-diplomatic mission in Tibet.

In the decade preceding 1962, the Indian ruling elite was convinced that having woven China into the Panchsheel Agreement, it had managed to craft a sound 'China policy'. It was neither alert to the Chinese military developments in Tibet nor to the construction of Sinkiang-Tibet road which began in March 1956. Even after 1959, when China displayed its aggressive designs, Indian leaders were profoundly affected by the remoteness and difficulties of Aksai Chin and Tibetan terrain, forgetting that Zorawar Singh, Macdonald and Colonel Younghusband had led Indian troops to these very areas for strategic reasons in the past. Primarily due to ideological and emotional reasons, the Chinese geostrategic challenges and threats were either not accepted or underplayed till the Parliament and public opinion forced the government to adopt a military posture against China for which it was never prepared.

## Military Strategy

Towards the end of 1961, Mao convened a meeting of China's Central Military Commission and took personal charge of the 'struggle with India'. Mao asserted that the objective was not a local victory but to inflict a defeat so that India might be 'knocked back to the negotiating table'. By early September 1962, China started warning that if India 'played with fire'; it would be 'consumed by fire'. On September 8, 1962, 800 Chinese soldiers surrounded the Indian post at Dhola. Neither side opened fire for 12 days. The dice was cast for a showdown. The Chinese had conveyed their intention but we still thought that they were bluffing.

On October 6, 1962, Mao issued a directive to his Chief of Staff, Lou Ruiquing, laying down the broad strategy for the projected offensive. The main assault was to be in the eastern sector but forces in the western sector would 'coordinate' with the eastern sector. The Chinese Military Command appreciated that the Indian Army's main defences lay at Se La and Bomdi La. The concept of operations was to advance along different routes, encircle these two positions and then reduce them. Marshal Liu Bocheng outlined the military strategy of concerted attacks by converging columns. Indian positions were split into numerous segments and then destroyed piecemeal. Chinese troops' long outflanking of Indian defences, river crossing on the march and simultaneous road construction activity showed detailed planning and preparedness. The speed and ferocity of the attacks unhinged the Indian defences and pulverised the Indian command, resulting in panic and often contradictory decisions. Politico-military decision not to use combat air power was an unforgivable error of judgement.

Deception and surprise, emphasised in Sun Tzu's book *The Art of War,* are enduring elements in the Chinese military strategy. The Sino-Indian 1962 War was a classic example. China took India by surprise by mounting calibrated and well-prepared large-scale attacks on two fronts, almost 2,500 km apart, and caught India off guard. The Indian debacle was primarily the result of a failure of India's strategic foresight, and military capabilities.

Beijing justified the invasion as a 'defensive act'. In the current military strategic parlance, they call it 'active defence'. It must be noted that China, involved in the largest number of military conflicts in Asia, has always carried out military pre-emption in the name of strategically 'defensive act' with no forewarning: Tibet invasion, entry into Korean War, 1962 conflict with India, border conflict with the Soviet Union in 1969, and attack on Vietnam in 1979.

## Strategic Thinking

In his book *On China*, Henry Kissinger treats the India–China border war of 1962 as an important illustration of the Chinese statecraft wherein 'deterrent coexistence' and 'offensive-deterrence', defined as 'luring in the opponents and then dealing them a sharp and stunning blow', are important components. According to him, 'the confrontation triggered the familiar Chinese style of dealing with strategic decisions: thorough analysis; careful preparation; attention to psychological and political factors; quest for surprise; and rapid conclusion.' He emphasises the difference between the Chinese 'comprehensive approach' to 'segmented policymaking' by other nations. Kissinger concludes that behind the facade of 'principled' ideological firmness/political toughness/historic civilizational patience, the Chinese leadership is capable of extreme elasticity and pliability, as seen in the physical contortions of a Chinese circus gymnast. Two other important lessons that emerge from this episode are: political realism versus ideological wish thinking, and interlacing of grand and military strategy.

## India's Military Capabilities

Prior to the 1962 war, there was a steep erosion of every aspect of India's military capabilities: civil-military relations, military leadership and morale, force levels and armaments.

Throughout 1950s, the Indian Government paid scant attention to the requirements of the armed forces. This neglect led to a gradual yet steady deterioration of their fighting capacity, skills, and

like any other rot within, remained hidden till these were brutally exposed by the war in 1962.

This period also saw Nehru's contemptuous and Krishna Menon's acid-tongued, acerbic wit and rude behaviour with senior military leadership. There were incidents like Thimaya's retracted resignation, Verma's disagreement over Nehru's misleading statement in the Parliament on the situation in Ladakh leading to the former's supersession and resignation. Political patronage allowed Kaul's elevation and arrogant behaviour amongst senior officers. These events sent the message down the line that one could stand up only at one's own peril. It also affected their leadership and performance in the field.

Looking at the present state of the armed forces, it appears that we have not learnt from that experience. The armed forces are not in any major strategic consultations and decision-making loop; not even on issues that seriously affect the welfare and morale of soldiers. There are visible signs of dissatisfaction amongst serving soldiers and veterans over status, pay and pension anomalies. There is mounting discontentment over the political leadership's inability to set things right.

Minister of National Defence of China, General Liang Guanglie meeting the Defence Minister A. K. Antony in New Delhi on September 4, 2012

PHOTOGRAPH: PIB

One of the cornerstones of democracy is a healthy politico-military relationship. A major reason for the fragility of India's politico-military relationship is that instead of maintaining 'political control,' it practices a unique system of 'bureaucratic control' over the military. With bureaucracy ensconced in between, there is hardly any discourse between political and military leaders on geopolitical and security-related environment, defence planning and service conditions of the armed forces.

## The Way Forward

On the face of it, India and China have a cordial bilateral relationship with burgeoning economic cooperation. But the deep strategic fissures cannot be ignored. In recent years, China has been more vocal and assertive on its claim over Arunachal Pradesh. China is non-committal over nuclear arming of Pakistan and induction of PLA in Gilgit-Baltistan area of Pakistan Occupied Kashmir. By issuing stapled visas to Indian passport holders from Jammu & Kashmir, Beijing is virtually questioning the status of the State, providing support to Pakistan's position on the issue, and ensuring greater security to its occupied territory in Aksai Chin.

Some Sinologists say that China does not nurse extra territorial ambitions. But there are many who feel that China never gives up its border claims. The problem is that most of China's neighbours do not know which Chinese era is its territorial benchmark. What exactly is the Chinese territory? China recognises McMahon Line as its boundary with Myanmar but not with India. Till date, it has not revealed its perception of the LAC which will reduce frequent local tension and allow implementation of confidence-building measures envisaged in Article 3 of the 'Agreement on Confidence Building Measures in the Military Field along the LAC-1996.' China's refusal to indicate its version of the LAC points towards a larger ploy; of progressively building up a case of its claims over Aksai Chin and Arunachal Pradesh. Its inroads in India's neighbourhood and assertive maritime dominance in the Indian Ocean echo its long-term strategic motives. These developments will soon give it a wide array of options, including military coercion, to resolve impending disputes in its favour while bargaining from a position of strength.

China now has the benefit of an extensive military oriented infrastructure in Tibet which provides capability for rapid build-up of forces and a smooth chain of supply, supplementing its power projection capacity. Lack of infrastructure on the Indian side creates huge logistic difficulties and restricts military deployment and manoeuvre.

India is not capable of fighting a two-front war (Pakistan and China) in the foreseeable future. This must be avoided diplomatically. However, such a scenario in Gilgit-Baltistan area cannot be ruled out. We must prepare ourselves; develop military infrastructure along the Northern border, put in place synergised border management operations, and build greater surveillance (satellite, aerial and ground level), night fighting and rapid deployment capabilities for the mountains. We must modernise our armed forces and be able to convince the other side that any aggressive moves will invite counter moves.

## Conclusion

Strategy and diplomacy in international relations is based on the art of possible and the advancement of national interests. At strategic level, we require a long memory and a longer foresight and vision. We have weak strategic culture and thinking. Despite several foreign aggressions in our post-independent history, we seem to lack realism. There is a sense of self-righteousness and singular faith in words, without looking for underlying falsehoods and incompetence.

India's national security framework and its antiquated civil–military relationship have not grown in step with the needs of new security challenges. We need to change our mindsets and attitudes and look beyond the narrow boundaries defined by turf and parochialism. It is high time that we asked ourselves (a) Does our political leadership demonstrate critical understanding of larger strategic issues, constraints, effects and implications of military strategic and operational employment and its institutional conduct? Are they conversant with military purposes, capabilities, constraints and effects? (b) Does our military demonstrate critical and creative understanding of the strategic purposes and contributions? Does it demonstrate a willingness to speak up, and when necessary speak out, especially in opposition to strategically flawed policies and initiatives? (c) Are the civilian authorities who oversee the military adequately competent in military strategy and defence planning? Objective answers to these questions will lead us to a correct strategic path. SP

LT GENERAL (RETD)
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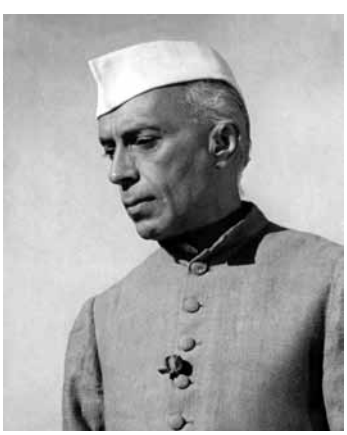
# Indo-China War
## What went wrong?

Sardar Patel's 1950 letter to Nehru not only lambasted the Indian Ambassador in Beijing K.M. Panikkar bending backwards to China but more importantly warned of grave danger from China. Displaying strategic vision he wrote, "Chinese irredentism and communist imperialism are different from the expansionism or imperialism of the western powers. The former has a cloak of ideology which makes it ten times more dangerous. In the guise of ideological expansion lie concealed racial, national or historical claims...India's defence has to concentrate itself on two fronts simultaneously... a communist China which has definite ambitions and aims and which does not, in any way, seem friendly disposed towards us." Nehru, with his disdain for military, utopian belief that China and India could live peacefully with open borders (utopians of today propose open borders with Pakistan) and not recognising the harsh fact that economic growth and national security are symbiotic, ignored Patel's advice.



Military preparedness continued to be wholly neglected. Nehru continued to support China's control over Tibet (actually an autonomous region) without reciprocal commitment from China on the status of Sino-India boundary (we frittered away demise of East Pakistan and handed over 93,000 prisoners under the Shimla Agreement of 1972 without solving the J&K boundary dispute with Pakistan). The net has photos of Indian demonstrators carrying banners urging Nehru to take a firm stand towards Chinese violations of the Indian border during Chou-en-Lai's visit to India in 1960 (today, we ignore opposition calls to take up the issue of border violations with visiting Chinese officials). Chou-en-Lai cunningly sang peace lullabies and our gullible hierarchy was taken in.

Defence Minister Krishna Menon was more interested in making money through importing jeeps and appointing B.M. Kaul (an ASC officer) to head the Corps facing the Chinese battlefront, compounding the debacle of 1962 in the process. Both Nehru and Krishna Menon kept saying China would not attack (Manmohan Singh said the same last December). Krishna Menon went to the extent of pooh-poohing a war game conducted in Lucknow in 1961 that brought out exactly how the Chinese would attack; which was exactly the way it happened in 1962. Just before the Chinese invasion, Krishna Menon addressed the National Defence College in Delhi in 1962. When queried about the possibility of China attacking India, he hollered at the audience to shut up and blurted that with such thinking, the NDC should be shut down.

A.G. Noorani, in his recent book *Two Sides of Nehru,* says that it was Nehru who "shut the door to negotiations on the (India-China) boundary on 1st July 1954" and his refusal to negotiate plus the 1960 rebuff to Chou-en-Lai when he was visiting and appeared ready to settle the issue may well have sowed the seeds of the 1962 India-China war.

What happened in 1962 is well known including Nehru's missive to an ill-prepared, ill-equipped and ill-trained army to throw the Chinese out of Thagla Ridge, Chinese divisions breaching the LoC, their 'human wave' tactics of assault and supreme sacrifices made by our soldiers – many fighting to the last round and battling on with bayonets and khukris to their last breaths. Nehru died a disillusioned man after telling the nation that a powerful and unscrupulous opponent had responded with evil to our good.

At a recent defence-related international conference, a scholar assessed, "To shock India into territorial concessions, PLA may consider a savage campaign including limited nuclear exchange. While some may consider this extreme, Manmohan Singh and his successors need to remember we are in the 21st century and China has only refined her policy of ambiguity and deceit and PLA continues to follow surprise, deception and pre-emption. SP

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

**Manmohan Singh and his successors need to remember we are in the 21st century and China has only refined her policy of ambiguity and deceit and PLA continues to follow surprise, deception and pre-emption**

PHOTOGRAPH: great-indians.com

## ATK delivers 2 billion ammo rounds to US Army

ATK recently achieved a world-class production milestone by delivering the 2 billionth 7.62mm round of ammunition manufactured at the Lake City Army Ammunition Plant (LCAAP) in Independence, Missouri. Since assumption of LCAAP manufacturing operations in 2000, ATK has increased the production rate for 7.62mm ammunition fivefold in direct support of US Army requirements.

ATK, the world's largest supplier of ammunition, has established a proven record of success in managing and modernising the Department of Defense's primary source for military small-calibre rifle ammunition.

"I am very proud of what ATK has delivered for the US Army while being entrusted with our stewardship responsibility to safely and efficiently operate LCAAP. We value our commitment to deliver a lean, scalable and sustainable capability that will serve the needs of our nation for years to come," said Mike Kahn, President of ATK Defense. "We take to heart that the lives of our warfighters depend on the quality of each and every round we produce at this government-owned facility. We are honoured with this responsibility."

In partnership with the US Army, ATK successfully implemented a complex expansion and modernisation programme at LCAAP that resulted in increasing plant production from 374 million to more than 1.6 billion rounds annually. This includes high-volume deliveries of the US Army's M855A1 Enhanced Performance Round (EPR) on modernised equipment. The EPR is an enhanced version of the M855 5.56mm cartridge and offers a significant breakthrough in ammunition performance for America's warfighters. ATK has delivered more than 350 million M855A1 rounds since transitioning to production in 2010.

ATK implemented a unique lean manufacturing system that focuses on maximising efficiencies through a continuous improvement based culture that targets the elimination of waste. ATK also initiated a system that employs cellular manufacturing processes, integrated enterprise information systems, and advanced material handling capabilities designed to enhance production efficiencies and throughput.

ATK received recent orders totaling $131 million for small-calibre ammunition under an Indefinite Delivery/Indefinite Quantity (IDIQ) contract with the US Army Contracting Command, Rock Island. SP

## Raytheon receives contract for SM-3

The Missile Defense Agency awarded Raytheon a $230 million contract for 14 Standard Missile-3 Block IA missiles and five SM-3 Block IB missiles. The SM-3 Block IA missiles will bolster the nation's inventory that is deployed around the world today aboard US and Japanese Navy ships.

Designed to destroy short- to intermediate-range ballistic missile threats in space, Raytheon's SM-3 Block IB includes an enhanced two-colour infrared seeker for better target discrimination.

This improved SM-3, which was recently successful in two back-to-back flight tests in May and June 2012, also has a throttleable divert and attitude control system that allows the kinetic warhead to propel itself toward incoming threats using short bursts of precision propulsion.

Raytheon has delivered more than 135 SM-3 missiles to the US and Japanese navies on time and on budget. SP

## RAF trials new Foxhound armoured vehicle

Members of No 5 RAF Force Protection Wing based at Camp Bastion in Helmand province, Afghanistan, have become amongst the very first Service personnel in the region to operate Foxhound, the MOD's latest protected patrol vehicle.

Personnel from No 5 RAF Force Protection Wing, which includes 51 Squadron RAF Regiment, form part of the Bastion Force Protection Wing with No 2 (Tactical) Police Squadron, working alongside members of the Tonga Defence Services and the Royal Artillery in order to keep the camp and its 28,000 personnel safe.

Members of the Bastion Force Protection Wing have been some of the first within the defence community to use the Foxhound protected patrol vehicle in an operational environment and are extremely impressed with the results.

Foxhound is a British-built, purpose-designed vehicle which makes use of the very latest advanced technology. For a means of transport of its size the Foxhound offers superior levels of blast protection for the RAF Police and RAF Regiment using the vehicle around Camp Bastion where the threat of improvised explosive devices is always present.

Being lighter and smaller than other protected vehicles such as Mastiff and Ridgback, Foxhound brings a whole new capability to the Force Protection Wing and is ideal for personnel operating in partnering roles and engaging with local communities.

The Foxhound's innovative design features mean that the whole engine can be removed in just 30 minutes and it can still be driven with just three wheels, allowing it to be driven away in an emergency situation.

A total of 325 new vehicles will eventually be delivered to the MOD under a contract worth £430m that is providing around 750 highly-skilled jobs across the UK. SP

PHOTOGRAPHS: US Army, mda.mil, UK MoD

## Australia's future submarine capability

The Australian Government has confirmed plans to buy 12 new submarines despite having run into serious problems with its four Collins class boats (above) and a manning shortage.

The Australian Minister for Defence Stephen Smith, Minister for Finance and Deregulation Senator Penny Wong and Minister for Defence Materiel Jason Clare announced Australia's Future Submarine Systems Centre which will be based in Adelaide continuing the strong relationship that has been formed between South Australia and the Commonwealth in support of Australia's maritime sector.

The Systems Centre will be the home of the future submarine programme. It will be formally established this year and over the next few years will expand to include hundreds of defence personnel from Navy, the Defence Materiel Organisation (DMO), the Defence Science and Technology Organisation (DSTO) and the Australian and international defence industry.

The Systems Centre is a similar facility to the one that was established for the Air Warfare Destroyer project. It will undertake a variety of tasks including evaluation of options, design work, programme management, engineering, logistics and production planning.

The Government is committed to acquiring 12 new submarines to be assembled in South Australia. This commitment will be reinforced as part of the 2013 Defence White Paper. The Future Submarine project will be the largest and most complex defence project ever undertaken. It will involve hundreds of companies and thousands of workers. SP

## Harris, Thales share $1.3 billion award for radios

Harris Corp., of Rochester, New York, is being awarded a $39,74,51,848 indefinite-delivery/indefinite-quantity, firm fixed-price contract for consolidated single channel handheld radios. Thales Communications, Inc., Clarksburg, Maryland, is also being awarded a $36,87,24,343. The contracts will provide Type 1 certified, software defined, handheld radios with multiple radio variants, waveforms, ancillaries, and accessories to support a wide variety of operational missions.

This is one of two multiple award contracts: both awardees will compete for task orders during the ordering period. This two-year contract includes two, one-year options which, if exercised, would bring the potential value of this contract to $71,27,96,588. This two-year contract includes two, one-year options which, if exercised, would bring the potential value of this contract to $64,43,27,813.

The Space and Naval Warfare Systems Center Pacific, San Diego, California, is the contracting activity. SP

PHOTOGRAPHS: Cumminscommentary, DCNS, Harris

## DCNS promotes Gowind OPVs in South Africa

The Gowind OPV L'Adroit visited Cape Town from September 5 to 9, 2012 during a long deployment off Africa, providing an opportunity for DCNS to promote the Gowind range and demonstrate the operational value of the vessels and their cutting-edge technologies. DCNS will also exhibit at Africa Aerospace & Defence (AAD) 2012 in South Africa from September 19 to 23.

DCNS's presence in South Africa is part of an ongoing partnership with local shipbuilder Nautic Africa (formerly KND) covering promotion, construction and sales of the Gowind® ocean patrol vessel (OPV). This type of arrangement is key to DCNS's ability to compete in export markets, and an operational presence in South Africa helps the Group understand the needs of the South African Navy and meet its local shipbuilding requirements.

With a length overall of 87 metres, OPV L'Adroit offers three weeks' blue-water endurance, a range of 8,000 nautical miles and a top speed of 21 knots. The design includes full provision for an organic helicopter and unmanned aerial vehicles (UAVs), crewing by a complement of 30 and accommodation for 30 passengers.

Innovations and capabilities of special interest to ship-based naval, commando and coast guard forces include a panoramic bridge offering 360° visibility, a single enclosed mast offering 360° sensor visibility, covert deployment of fast commando boats in less than five minutes and full provision for unmanned aerial and surface vehicles (UAVs and USVs).

The Gowind range also benefits from DCNS's vast experience in IT and command information systems. SP

## US Army to begin testing super MRAPs

The US Army announced that production of the first five mine resistant ambush protected (MRAP) prototype vehicles equipped with capability set 13 is complete and the vehicles have shipped from the US Army Tank Automotive Research, Development and Engineering Center, located in Warren, Michigan to Aberdeen Proving Ground, Maryland, where they will undergo safety release testing.

Capability set 13, validated as part of the Army's Network Integration Evaluations (NIEs), is the Army's first fully-integrated package of radios, satellite systems, software applications, smartphone-like devices and other network components that provides integrated connectivity from the static Tactical Operations Center to the commander on-the-move to the dismounted soldier and will begin fielding in October 2012 to two Brigade Combat Teams in the 10th Mountain Division.

"In order to quickly get these capabilities to the field, we incorporated lessons learned from the NIEs that allowed us to streamline engineering, prototyping and production build designs near simultaneously," said Paul Wilson, Director of Synchronized Fielding, System of Systems Integration.

The five "super configuration" MRAP configurations prototyped at TARDEC include MRAP all-terrain vehicle soldier network extension), M-ATV point-of presence, M-ATV vehicular wireless package, M-ATV-lite and MRAP MaxxPro Dash. The vehicles are equipped with the latest Army tactical radios, mission command software and the warfighter information network-tactical satellite communications suite. These vehicles will provide soldiers and commanders with mobile networking, or mission command on the move, allowing them to take valuable network capability with them as they manoeuvre around the battlefield. SP

## Thales Alenia Space to design France's military satellites communications

French defence procurement agency DGA (Direction Générale de l'Armement) has awarded Thales Alenia Space a design contract to study military space communications capacity to be available by 2019. This study falls within the scope of preparations for the replacement of two Syracuse III satellites built by Thales Alenia Space, and as a complement to the two satellites Sicral 2 and Athena Fidus, also developed by Thales Alenia Space and built in cooperation with Italy.

Building on its unrivaled heritage in space communications for security and defence, Thales Alenia Space will submit to the French Ministry of Defense in the coming months its analysis of the military satellite communications (milsatcom) capacity needed in orbit, acquisition procedures and collaboration schemes. Working with the French and Italian ministries of defence and space agencies, Thales Alenia Space was the industrial partner that enabled the first and still only two collaborative European programmes on space communications for security and defence.

Replacing this capacity entails major challenges: strategic challenges in terms of security and defence, a facet of national sovereignty; operational challenges because of the indispensable nature of milsatcom capacity for foreign deployments of armed forces; and economic challenges, given the context of the economic crisis and budget cuts.

Thales Alenia Space was chosen once again to participate in this major programme because of its proven skills and expertise in the production of communications satellites (operating in the X, Ka and other bands), and the construction of large-scale systems. SP

## Third frigate for the Royal Moroccan Navy

On September 8, 2012, the SIGMA class frigate, Allal Ben Abdellah, built by damen Schelde Naval Shipbuilding (DSNS) in Vlissingen, was transferred to the Royal Moroccan Navy.

The delivery of the last ship of a series of three marks the culmination of a period of dedicated and successful partnership with the Royal Moroccan Navy. All three ships were delivered in time, on schedule, meeting all the requirements as stated in the contract to the full satisfaction of the customer.

The delivery of the last of three frigates was achieved within four-and-a-half years from the effective date of contract, after a period of thorough engineering and three years of construction. The first Tarik Ben Zayid was commissioned on September 10, 2011, the second Sultan Moulay Ismail was commissioned on March 10, 2012.

The Damen Shipyards Group offers a complete range of naval and patrol vessels ranging from 7 to over 200 metres. Part of this portfolio are the Damen Schelde Naval Shipbuilding (DSNS) naval combatants and auxiliaries, embodied by the SIGMA and ENFORCER series.

At present DSNS also has under construction for the Royal Netherlands Navy: four Patrol Ships and a Joint Logistic Support Ship, the largest military vessel built by DSNS so far. SP

## Delivery of Visby

Visby, the lead ship of a new class of corvettes, has finally been handed over to the Swedish Defence Force; these are the stealthiest and most flexible warships yet designed. The final delivery of the ship by FMV, the Swedish Armed Forces Materiel Administration, to the Armed Forces is entering its final stages.

"There remain several trials and exams before we can start using HMS Visby fully but right now it feels good that the ship is finally delivered to the armed forces," said Anna-Karin Broth, commander of 41.korvettdivisionen, the 41st Corvette Division. This unit, one of four divisions of the Fourth Naval Warfare Flotilla, will operate the Visby-class corvettes.

Two Visby-class corvettes are planned to be included in the Fourth Naval Warfare Flotilla. We are currently training crews for the next ship that is very high-tech. Its 43-strong crew of officers and ratings must have solid training to handle the ship and its systems, said Anna-Karin.

The ceremony begins on HMS Visby's helipad, and the fine weather continues. All participants have been working for the same goal, to get the corvette Visby ready to start projecting power. "The vessel has repeatedly demonstrated outstanding results. I look forward to soon begin using its capabilities as intended," said Anna-Karin. SP

PHOTOGRAPHS: US Army, DSNS

LT GENERAL (RETD)
P.C. KATOCH

# Melting Siachen

A trend of veering to agree to demilitarise Siachen because "Pakistan wants it", disregarding advice of successive Army Chiefs, should make the country sit up. A Member of Parliament recently asked the Raksha Mantri why India was not insisting on authentication of CFL rather than the AGPL; hinting demand of authentication of AGPL be dropped. The manner in which media is being orchestrated to mould public opinion to demilitarise Siachen indicates political skullduggery of the worst kind that may earn brownies for coming elections and perhaps a peace prize but would be the biggest strategic blunder post the Shimla Accord without resolving Jammu & Kashmir.

Veterans who have joined the chorus are interestingly those who shed uniform under unsavoury circumstances. It is not only that we lack strategic sense but some don't mind shedding it for carrots. Our Track Two team discussing Siachen is without any officer who has served in Siachen and the team has never visited Siachen despite several months of discussions at locales around the world. A veteran's article says Siachen has no strategic significance even when describing Musharraf's admission of Pakistan wanting to put a battalion on Saltoro but pre-empted by Indians. Next, is the argument that if Pakistan wants to double cross us, movement would take highly skilled Alpinists minimum two-three weeks and they would be sitting ducks. Can a veteran be more naive knowing India's lightening helicopter occupation of Saltoro sans acclimatisation, special clothing, special rations and troops continuing there for one year.

Armchair warriors who talk of offensive when double crossed need to examine where, what depth and capturing which critical area(s) in nuclear backdrop. As regards some agreement reached in 1989, the changed geostrategic environment must be taken into account: China's strategic footprints in POK and increased aggressiveness; nuclear threatening by Pakistan; Pakistani infiltration and terrorism. The Track Two team certainly would not know that in summer months, how many and which of our posts on the Saltoro are 'without' snow. Demilitarisation will open the flood gates for infiltration that would penetrate the Ladakh and Zanskar ranges requiring thousands of troops to block it. ISI has been nurturing Shia terrorist organisations. Musharraf's confidence in making India demilitarise had led him to declare, "There will be many more Kargils."

As regards casualties, we have suffered a brigade minus worth in Kashmir Valley, many casualties in Northeast and avalanches have wiped out entire gun positions in Dras area. Does that justify withdrawal from these areas too? With Gilgit-Baltistan leased out by Pakistan to China and China illegally occupying Aksai Chin and Shaksgam Valley, demilitarised Siachen area will provide the bridge between these two, pushing Indian defences south to Ladakh Range requiring lakhs of crores of rupees to create the new defence line and many time more troops than the brigade manning Siachen.

We should tell Pakistan that circumstances have killed the Siachen demilitarisation issue. The LC beyond NJ 9842 should run "thence north" to Wakhan Corridor on J&K-China border. Any other talks concerning territory must await defining the line north from NJ 9842. When we are being bamboozled by threats of serial blasts even in the national capital by LeT, HUJI, IM on Pakistan's behest where is the question of demilitarising Siachen.

Agha H. Amin, defence analyst and veteran Pakistan officer, writes, "Utopians in India are jubilant that Pakistan has made peace with India. Nothing in reality can be farther from the truth. The real picture will emerge when the US withdraws from Afghanistan... Pakistan will be a semi-autonomous Chinese province by 2030 or so...Pakistan's political economy of exporting terrorism as a foreign policy tool...and ever growing reservoir of ...youngsters who will fill ranks of extremists and suicide bombers will continue". Let us ensure our own national interests. SP

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

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PHOTOGRAPH: Indian Army

## Elbit Systems wins Israel training aircraft contract

Elbit Systems and IAI's partnership have reached an agreement with the Defense Ministry on the Israel Air Force's future trainer programme.

Elbit Systems announced that TOR Advanced Flight Training, its partnership with Israel Aerospace Industries Ltd. (IAI), established for the Israel Air Force's future trainer programme, has reached an agreement with the Ministry of Defense on a $603 million contract, of which Elbit Systems' share is $420 million for providing services and systems as a subcontractor to TOR.

The contract is expected to be signed in the coming weeks, following the finalisation of several financing procedures. In order to facilitate meeting the project's schedule, TOR received an interim $27 million purchase order and financing from the Ministry of Defense.

In the project's establishment phase, Elbit Systems will establish an enhanced logistic support and maintenance infrastructure for the new trainer as well as an advanced ground training array. The new, advanced avionics systems that Elbit Systems will supply will improve the readiness of Air Force pilots in operating next-generation aircraft. Elbit Systems' share in this phase of the project, worth $110 million, will be carried out over three years.

During the project's operational phase, Elbit Systems will provide logistics services for the trainer and the new aircraft array, worth $310 million, over 20 years.

Alenia Aermacchi M-346 trainer

Elbit Systems outgoing President and CEO Joseph Ackerman said, "We are proud to take part in yet another important project for the Ministry of Defense and the Air Force. In recent years, we have provided the Air Force with advanced avionics systems and training infrastructure, as well as maintenance and logistics support services." SP

## Northrop Grumman navigation system for Embraer's KC-390 military aircraft

Northrop Grumman Corporation has been awarded a contract to supply the hybrid global positioning system (GPS) and inertial reference system for the Embraer Defense and Security KC-390 medium-lift military transport aircraft.

Under the contract, the company's German navigation systems subsidiary, Northrop Grumman LITEF, will provide the fibre-optic, gyro-compass LCR-100 Attitude and Heading Reference System. The system will be used on Embraer's new fly-by-wire KC-390 aircraft, which is anticipated to have the first flight in 2014.

"The LCR-100 gyro-compass brings efficiencies, savings and safety to Embraer's KC-390 military transport aircraft," said Eckehardt Keip, Managing Director for Northrop Grumman LITEF. "This system will meet the exacting standards Embraer sets for its new aircraft."

The LCR-100 is a high-performing inertial reference system that provides navigation information regarding the aircraft's position, heading and attitude. The gyro-compass feature eliminates the need for a magnetic sensing unit. Additionally, the system offers extended coasting performance that allows the aircraft to maintain accuracy and continue to provide navigation information in the event of GPS signal loss. SP

## Honeywell bags engine contract from Israel

Honeywell, as part of the International Turbine Engine Company LLC, has signed a contract to supply its F124-GA-200 turbofan engines for the Israel Ministry of Defense's (IMOD) new 30-strong Alenia Aermacchi M-346 Master advanced jet trainer fleet. The contract is worth approximately $735 million and includes engine supply and after-market support.

The purchase of the F124-powered M-346 by the IMOD comes at a time when numerous defence departments, including that of the United States, are evaluating new training platforms to simulate the latest fighter aircraft such as the F-22, F-35, Eurofighter, Gripen and Rafale.

With more than 7,00,000 flight hours across the entire F124/F125 engine family to date, the F124-GA-200 engines will deliver proven and reliable propulsion performance to the IMOD's M-346 fleet.

The F124/F125 family is now selected by five international defence departments, with operational status on Taiwan's Indigenous Defense Fighter and the Czech Air Force's L159 light combat aircraft. The F124 will also power M-346 fleets recently purchased by the Italian Air Force and Republic of Singapore Air Force when they enter service in 2013.

The deal was signed between Honeywell on behalf of the International Turbine Engine Company LLC, a joint venture between Honeywell, AIDC and NDIDF; the IMOD; and TOR, an Israeli joint venture between Elbit Systems and Israeli Aerospace Industries. SP

PHOTOGRAPHS: Alenia Aermacchi, Embraer, Honeywell

## Raytheon successfully tests HARM upgrades

Raytheon has completed testing of high-speed anti-radiation missile (HARM) upgrades, which make the combat-proven missile more precise and accurate, while reducing collateral damage.

HARM suppresses or destroys surface-to-air missile radars, early warning radars and radar-directed air defence artillery systems. The upgrade, called the HARM Control Section Modification (HCSM), adds a GPS receiver and an improved inertial measurement unit (IMU) for precision navigation. HCSM also features a digital flight computer that merges targeting solutions from navigation and seeker systems. The enhancements improve the probability of hit, while controlling where the missile can and cannot fly.

The HCSM effort is an ongoing US Air Force-led competition between two contractors, with a down-select scheduled in 2012 for full rate production.

"HCSM improves HARM's anti-radar capability to defeat counter-HARM tactics, while reducing the risk of fratricide and collateral damage," said Harry Schulte, Vice President of Air Warfare Systems for Raytheon Missile Systems. "HCSM also enables warfighters to leverage HARM's supersonic speed and stand-off capability to rapidly and accurately engage time-critical targets." SP

## Iraq's first Super Hercules

The first of six C-130J Super Hercules for the Iraqi Air Force recently completed its first flight here. The Iraqi Air Force intends to use the C-130J for intra-theater support of its troops and humanitarian relief operations in various locations.

These new transport aircraft will provide Iraq with the ability to operate seamlessly with US, NATO and coalition forces. The first C-130J for Iraq is scheduled for delivery later this year. SP

## PZL-Swidnik SA developing of naval helicopter

PZL-Swidnik SA, an AgustaWestland company, has started development of the W-3PL/N multirole naval helicopter, further expanding the already outstanding range of products for multiple maritime applications available through both AgustaWestland and PZL-Swidnik SA. Based on the W-3PL Głuszec multi-role armed helicopter, the W-3PL/N represents a proven, cost/effective solution to meet a number of maritime mission requirements.

Nicola Bianco, Managing Director of PZL-Swidnik SA, said "The launch of the W-3PL/N demonstrates our continued commitment to offering maritime operators across the world

the greatest range of helicopters for the task. This latest addition to the product range benefits from our unrivalled expertise in the naval helicopter sector and builds upon the success of the Sokol platform."

A dedicated programme team based at the PZL-Swidnik SA headquarter in Swidnik is developing the W-3PL/N with the active support of AgustaWestland, a world leader in naval helicopter design and system integration. The W-3PL/N development also leverages on experience gained from the W-3 Anaconda maritime SAR helicopter operated by the Polish Navy in the Baltic Sea.

The W-3PL/N will be fitted with mission equipment including a radar, compact sonics system (dipping sonar, sonobuoys), FLIR, rescue hoist and search light. The aircraft will also feature an emergency floatation system, an all-new landing gear and main rotor blade folding system. Weapon systems will include air-to-surface missiles, torpedoes and machine guns.

The W-3PL/N is perfectly suited to perform many maritime missions including anti-submarine warfare, anti-surface warfare, search and rescue, naval tactical transport and target designation. SP

## MBDA's Viper strike munition scores direct hits against high speed targets

MBDA Incorporated's GBU-44/E Viper Strike munition, launched from a Cessna Caravan test aircraft, scored direct hits against high speed vehicles in a recent two-day test. During a US Government-sponsored test at White Sands Missile Range in New Mexico, Viper Strike successfully hit eight vehicles travelling at extremely high speeds in varying realistic scenarios.

"This proven high-speed target attack capability is a game-changer for warfighters that need to hit very fast vehicles with great precision and from any direction of attack" said Tom Bien, Viper Strike's Programme Manager.

Viper Strike has been used in combat by both manned and unmanned aircraft, and will deploy next on the US Marine Corps' KC-130J Harvest Hawk aircraft. Viper Strike is launched from a common launch tube that can be carried either internally or externally from the host aircraft, helicopter or UAV.

Viper Strike is a glide munition capable of precisely hitting targets from extended stand-off ranges using GPS-aided navigation and an end-game, semi-active laser seeker. Its small, 44-lb. highly agile airframe and quiet attack profile provides a covert launch and low collateral damage effects against stationary and high speed moving targets. Using Viper Strike's new fast-attack software, the weapon has proven that it can be quickly employed against moving targets by both air-designated and ground-designated targets. SP

PHOTOGRAPHS: Raytheon, PZL-Swidnik, MBDA

## Israel's largest UAV returns to the skies

The Israeli Air Force (IAF) resumed flying the advanced Eitan unmanned aerial vehicle (UAV), also known as the Heron TP, on September 7. The Air Force carried out a successful trial flight yesterday, the first such flight since January.

The flight took place after Air Force Commander Major General Amir Eshel approved the Eitan's return to service. The aircraft had been grounded since one crashed during an experimental flight in January of this year. Major General Eshel's decision to resume the UAV's flights was made in light of the conclusions of a joint investigation into the causes of that incident that was carried out by the IAF, the Ministry of Defense's Administration for the Development of Weapons and Technological Infrastructure, and Israel Aerospace Industries (IAI).

"After a long period of tests and experiments designed to find the source of the crash, there is no doubt that today is a day of celebration for us," said Lt Colonel Momi, the representative of the IAF's Equipment Division responsible for the Eitan project. "We will return operational capabilities to this squadron as quickly as possible. In the meantime, the airplane can continue to carry out all of the activities that it performed before the crash, just with different restrictions."

The joint investigation revealed that January's crash was not caused by human error, nor by the extra weight that the plane was carrying on its wing for the experimental flight. "The incident reflected a structural problem in the wing of the airplane," explained Lt Colonel Momi. "A problem in one of the stages of the production of the wing caused it to collapse under the weight, taking down the Eitan." SP

## US Army orders more RQ-11 Raven UAVs

AeroVironment Inc. (AVAV) recently announced that it has received $1,64,72,298 in additional funding to perform from the United States Army under a contract action with a total projected value of $6,58,89,191. The company announced the initial $15.8 million funding of that contract action on June 1, 2012.

The overall contract action includes RQ-11B Raven systems, new miniature gimbaled payloads and initial spares packages and is funded from the Army's fiscal 2012 procurement budget. Delivery of systems, spares and payloads is scheduled for completion by June 30, 2013.

Weighing 450 grams, the ruggedised, multi-axis Mantis i23 payload for the Raven system houses an electro-optical and infrared thermal video sensor in addition to a laser illuminator. The single payload replaces two separate sensor payloads on the Raven air vehicle, delivering daytime and nighttime capabilities from a single package. SP

## UAV takes off from lake, sans runway

The Navy successfully launched its newest small unmanned aircraft without using a runway at Naval Air Weapons Station China Lake, California.

A little more than two years into its engineering, manufacturing and development phase, the RQ-21A Small Tactical Unmanned Air System (STUAS) entered developmental test at China Lake, beginning with a 66-minute flight.

During the initial developmental flight test at the weapons station, operators flew the RQ-21A using a unique pneumatic launcher and a recovery system known as Skyhook. This system, developed by Insitu, Inc., eliminates the need for runways and enables a safe recovery and expeditionary capability for tactical missions on land or sea.

"The flight at China Lake marks the start of a new test phase for RQ-21A STUAS, the first expeditionary, multi-intelligence UAS in its class," said Colonel Jim Rector, STUAS programme manager (PMA-263) at Patuxent River, Maryland. "Developmental test will be fast-paced, like the rest of the programme has been. We are on track for initial operational capability in 2013." SP

## Patria and Insta complete UAS flight with data link

Patria and Insta have successfully completed the first unmanned aerial system (UAS) test flights of the multi-purpose networking data link (MPNDL). Carried out in connection with the Cassidian-led Agile UAV NCE test flight campaign, the tests were the first time MPNDL has flown on-board an unmanned system. SP

PHOTOGRAPHS: IAI, USAF, US Navy

## GA-ASI flies new MQ-9 Predator Block 1-plus

General Atomics Aeronautical Systems, Inc. (GA-ASI) announced the successful first flight of the Block 1-plus Predator B/MQ-9 Reaper, an upgrade to the original Block 1 Predator B that has been in production since 2003.

The MQ-9 Block 1-plus test flight occurred on May 24 at the company's Gray Butte Flight Operations Facility in Palmdale, California, with no discrepancies.

"We continue to enhance the capabilities of our aircraft, improving their performance to meet emerging customer requirements," said Frank Pace, President, Aircraft Systems Group, GA-ASI. "The first flight of the MQ-9 Block 1-plus follows in the footsteps of the aircraft's combat-proven Block 1 configuration and is an important technological achievement that will provide increased effectiveness, increased multi-mission flexibility, and even greater reliability." SP

## Australia to buy $3 billion spy drone fleet

While the Royal Australian Air Force (RAAF) wants to buy MQ-4Cs, the naval variant of the Global Hawk, it has also looked at the Mariner, above, which can carry out 80 per cent of the same missions at 10 per cent of the cost. The Australian Defence Force is quietly resurrecting plans to buy seven huge intelligence and surveillance drones that could cost up to $3 billion. The unmanned aerial vehicles will be used for maritime surveillance and intercepting asylum seeker boats.

The decision comes despite claims that the RAAF's top commanders have long opposed the acquisition of unmanned aerial vehicles because they will put pilots out of a job and threaten RAAF culture. The $200 million Northrop Grumman RQ-4 Global Hawk reconnaissance drone is the largest, most expensive unmanned aerial vehicle in the world today. SP

## Ascent Solar, Silent Falcon and Bye Aerospace partner for solar-powered UAS

Ascent Solar Technologies, Inc. (ASTI) announced it is collaborating with Silent Falcon UAS Technologies and Bye Aerospace to provide its lightweight, flexible copper-indium-gallium-diselenide (CIGS) photovoltaics to power the Silent Falcon unmanned aerial system (UAS).

Silent Falcon is a small tactical UAS drone designed to be easily carried and used for longer-duration intelligence, surveillance and reconnaissance (ISR) missions. Silent Falcon represents the synergy of several new technologies, including ASTI's flexible photovoltaic modules, to provide a near silent, rapidly deployed platform that has multiple military and civilian applications. With three wing configurations available for different mission profiles, each Silent Falcon system could represent up to 30 modules. SP

## X-47B UCAV flies with arrester hook for carrier trials

The Fleet Readiness Center South West (FRCSW) in California surpassed the call of its traditional line of work to rapidly manufacture parts for a new, unmanned demonstrator aircraft being tested here.

In late spring, a team from Patuxent River, Maryland, called on FRCSW at Naval Air Station North Island to redesign the hook point for the first unmanned aircraft designed to operate in and around an aircraft carrier — the X-47B unmanned combat air system (UCAS).

To land on the flight deck of a carrier, aircraft need a tailhook to catch one of four arresting wires. When unsuccessful roll-in arrestment tests of the X-47B revealed the need for a modified hook point, the team needed to come up with a plan to make the modifications in order to perform arrested landings and catapult launches this fall.

"We reached out to the team at North Island because of their proven history of providing critically needed aircraft components with very short response times," said Capt. Jaime Engdahl, Navy UCAS programme manager at Pax River. "They have repaired, modified and delivered thousands of high quality aircraft components to the fleet. We knew they could get the job done."

"The hook point is a fracture critical safety item so you've got to do the job right. You have to create them correctly," said Mike Grice, FRCSW Systems Engineering Department head. SP

PHOTOGRAPHS: GA-ASI, Northrop Grumman, Silent Falcon, US Navy

## Home Minister calls for cooperation between Central and State police forces

The Union Home Minister Sushil Kumar Shinde has called for more cooperation between central agencies and state police forces as they work together towards achieving the common objective of curbing terrorism. Inaugurating the annual conference of DGPs/IGPs recently, he urged them to take prompt notice of every piece of intelligence as it is received and develop capacities for addressing the threats posed by terrorism.

The Minister announced that a nine-member standing committee of DGPs headed by the Director of Intelligence Bureau had been set up to suggest 'Best Practices and Standard Operating Procedures' for any aspect of police operations/functioning and also propose/recommend assessments on any contemporary issue of national security.


Shinde also said that there is increasing evidence of resort taken by terrorists to the cyber-space domain. The recent incidents in Bangalore and Pune and other places in India where motivated rumours and irresponsible use of the social networking media posed a new challenge.

The Director, Intelligence Bureau, Nehchal Sandhu, said that the conference has come to be a useful platform whereat police leaders are able to discuss challenges to security and design responses besides taking note of emerging trends that might require greater extension in the days ahead. He also mentioned that the recent approval of a standing committee of DGPs will carry forward the process of professional exchanges in the period between these annual conferences. Sandhu also added that these conferences provide inspiration and encouragement to 2.2 million police personnel across the country. SP

## Funds released for CCTNS project

Funds to the tune of ₹418.87 crore have been released till date to all the State/Union Territories under the Crime and Criminal Tracking Network & Systems (CCTNS) project in various heads ranging from system integrator, project management, capacity building to networking as well. As of now, pilot testing for core application software is going on at few chosen locations in Assam, Kerala and Uttar Pradesh. No cities have so far been connected with CCTNS.

CCTNS project is yet to be implemented across the country. The project aims at creating a comprehensive and integrated system for enhancing the efficiency and effectiveness of policing at the police station level through adoption of principles of e-governance, and creation of a nationwide networked infrastructure for evolution of IT-enabled state-of-the-art tracking system around "investigation of crime and detection of criminals" in the real time, which is a critical requirement in the context of the present-day internal security scenario.

This was stated by Jitendra Singh, Minister of State of Home Affairs, in the Lok Sabha. SP

## DHS submersible to tackle drug cartels

In the early 1990s, South American drug cartels came up with a new tactic to transport narcotics destined for the United States: small, radar-dodging, self-propelled, semi-submersibles (SPSSs); better to address the submersible problem, DHS Science and Technology Directorate created its own submersible and called it Pluto, after the planet which is difficult to spot.

The erstwhile planet Pluto was known for decades as a small, dark planet — hidden, difficult to spot, and on a quiet, determined course all its own. So when the DHS Science and Technology Directorate (S&T) needed a target semi-submersible to detect the hidden but determined maritime smuggling operations of the South American drug cartels, it created its own vessel and called it Pluto, after the planet which is so difficult to spot.

S&T's Pluto is a small, semi-submersible which is representative of what are popularly called "narco subs," and serves as a realistic practice target for the detection systems of DHS and its national security community partners.

A DHS release reports that in the early 1990s, South American drug cartels came up with a new tactic to transport narcotics destined for the United States: small, radar-dodging, self-propelled, semi-submersibles.

Although clandestine semi-submersibles were rumoured to exist in the mid-1990s, many believed them to be a myth, hence their name Bigfoot. Then in 2006, an actual Colombian semi-submersible was captured by the US Coast Guard in the Eastern Pacific Ocean. Today, drug cartels continue to build their narco subs. With low profiles and low radar reflectivity, these illegal, stealthy, drug-running semi-submersibles cut through the water at wave height and are nearly impossible to detect.

S&T built Pluto in 2008 to serve as a surrogate SPSS with many of the same features as the vessels built by the cartels. It is used as a target by DHS and its national security community partners to help test the performance of detection systems and give operators of those systems real world experience under controlled conditions. This testing helps develop new concepts of operation for seaborne, airborne, and space-borne technologies to spot illegal vessels. "Small surface vessels, self-propelled semi-submersibles, and now the most recent innovation of fully submerged vessels (FSVs), pose significant challenges to maritime security," says Tom Tomaiko of S&T's Borders and Maritime Security Division.

"While some small boats sitting low in the water have legitimate purposes, there are many that are used for illicit purposes The release notes that dozens of these boats have been captured by the United States and partner nation law enforcement agencies in the last few years, sometimes with their cargo still on board, sometimes after it has been thrown overboard. "When the crews become aware they've been spotted, they will typically scuttle the boat immediately, knowing they'll be rescued by us anyway," says Tomaiko. Meanwhile, cramped living conditions within the illegal SSPSs can be horrendous. There is generally only 3" of space above the waterline, meaning the ride can be very rough. The small crews of three or four have little to eat, poor air quality, no toilet facilities, operate with little rest until they reach their destination, and are sometimes watched over by an armed guard. SP

PHOTOGRAPH: PIB

SP's EXCLUSIVE

# EADS, BAE in advanced merger talks

It will be one the largest ever acts of consolidation in the arms and aerospace industry ever, certainly the biggest in Europe. The under-discussion merger of defence and aerospace giants EADS and BAE Systems, in discussions at the highest levels since earlier this year, has a distinct Indian connection. It is widely believed that Eurofighter's runner-up loss in the Indian medium multi-role combat aircraft (MMRCA) competition presented not just phenomenal disappointment for Eurofighter—a programme administered by EADS and BAE Systems together—but also a larger inflection point. Focusing much energy on the twin American campaigns had failed to push the Typhoon across the finish line, trumped as it was by its own European cousin, the French Rafale—an airplane it is similar to in many respects. While actual trigger may have been the MMRCA loss, the coming together of the two massive firms has also been driven by a perceived need to mount a single corporate entity to battle US firm Boeing. Synergies would also allow both firms to rationalise operations in the face of a global dip in defence expenditure. India, as it turns out, is an exception, not really a rule in that sense.

One of the theories that insiders in both EADS and BAE had for the MMRCA loss was that it wasn't led by the British team, which had decades of experience doing aerospace business with India. The much more inexperienced German component of the consortium, some in both companies say, may not have precisely know how to handle the programme. This was only one example of disparate corporate entities perhaps not taking the best decision available – something that may be streamlined with a merger. The complexity of both companies, though, would still need a phenomenal degree of synergy, considering that EADS and BAE have overlapping interests and business units. For instance, both companies manufacture trainer aircraft, UAVs and other advanced systems for the civil sphere. The merged entity would, however, be perhaps the most integrated weapons company in the world—making everything from warships, to aircraft, UAVs, helicopters and spacecraft, to land systems, electronics, military vehicles, missiles and artillery. India has procurement or joint development interests in virtually every one of those areas.

Both EADS and BAE Systems have had a fairly mixed bag in the country, even if analysts find it tempting to paint most things now with the MMRCA brush. BAE Systems has a successful Hawk programme currently on with HAL—it has just been handed an RFP for 20 more Hawks for the IAF's revamped aerobatics team—and

*M777 ultralight artillery gun*

is in line to receive close to a billion dollar deal for 145 M777 ultralight artillery guns. Several other competitions, both in defence and civil, shore up a healthy market outlook for a company that has, across several avatars, been an old hand in dealing with India. EADS, on the other hand, has faced a string of disappointments in India, certainly as far as defence is concerned. While the Typhoon defeat stung badly, it was also made to endure two big-ticket contract aborts at the last moment—the first attempt to procure 197 light reconnaissance helicopters and the first attempt to procure six new mid-air refuelling tankers. The company waits eagerly for the outcome of the sophomore attempt on both contracts.

A corporate coming together of the two companies would make the resulting entity a formidable one, even if one is to consider how wrong mergers in the arms industry can actually go. In India, an EADS-BAE entity would be in a position to be a pan-industry vendor. And considering that India happens to be one of the few countries that doesn't appear to be in a position to slash its security spending, New Delhi could take primacy of place in the attention that the new company pays to international customers. SP

***—SP's Special Correspondent***

## Boeing to establish avionics MRO in Korea

Boeing has signed a memorandum of understanding with the Korean province of Gyeongsangbuk-do and the city of Yeongcheon to establish an avionics maintenance, repair and overhaul (MRO) facility in the region that will service avionics components for the Republic of Korea Air Force (ROKAF) fleet of F-15K Slam Eagles.

"Boeing continues to improve its services by bringing them closer to our customers, reducing turnaround time and costs for mission-essential components," said Joe Song, vice president of International Business Development-Asia-Pacific for Boeing Defense, Space & Security. "Over the past half century of working in partnership with the Republic of Korea, Boeing has come to know Korea's strong infrastructure and the excellent knowledge and talent base of its people and industry. We can tap into that as we expand our presence locally and grow our operations while supporting Korea's development objectives."

The facility, which will be located in the Yeongcheon Industry District of Daegu-Gyeongbuk Free Economic Zone, will support the area's Aero Techno Valley vision of a high-tech aerospace industry corridor and expanded in-country avionics capabilities. The location is close to Daegu Air Force Base and ideally suited for the Slam Eagle work as part of Boeing's Performance-Based Logistics (PBL) programme. SP

PHOTOGRAPH: Wikipedia

## AgustaWestland signs agreements with Korean companies

AgustaWestland, a Finmeccanica company, has signed partnership agreements with Firstec Co., Ltd, a company engaged in the provision and support of defence and security equipment and systems, and Dodaam Systems Co., Ltd, a company engaged in developing training systems for simulation in the defence industry.

Both companies are committed to offering the highest level of support services to military in the Republic of Korea. The signing of MoU's between AgustaWestland and Firstec and AgustaWestland and Dodaam is the first step in providing dedicated service and training centres for the military helicopters in Korea.

Geoff Hoon, AgustaWestland's Managing Director for International Business, said "the MoUs covering integrated logistics support and training services provide opportunities for AgustaWestland to deliver enhanced through life support to operators such as the ROK Navy. The most important part was selecting the right partners and AgustaWestland is delighted to have the opportunity to work with both Firstec and Dodaam who will offer excellent value to the partnerships by providing maintenance and repair services, spare parts inventory management for military helicopters and a series of dedicated training solutions to the military services. SP

## Astrium services integrates its Vizada and Paradigm subsidiaries

Astrium, Europe's leading space technology company, has announced that the satellite telecommunications services offered by Vizada, Vizada Networks and Paradigm will be marketed under the Astrium brand name from October 2012. The products and services of the company's London Satellite Exchange (LSE) and TDCom subsidiaries will also be renamed Astrium.

This rebranding gives Astrium Services a new, unified organisational structure and marks the final phase in the full integration of the Vizada Group, which was acquired in December 2011. Thanks to this reorganisation, Astrium Services has reinforced its position as a world leader in satellite services. Now comprising four business lines (Business Communications, Government Communications, Satcom Systems and Solutions, and Geo-Information Services), it is the only company in the world to provide both telecommunications services and Earth observation satellite services.

"By bringing Vizada fully into the fold, we have opened up a new business line in commercial satellite communications (Business Communications) and enhanced our range of solutions and global presence in the government domain," said Astrium Services CEO Eric Beranger. SP

## JSC Rosoboronexport and Italian Industries cooperation in airborne surveillance

JSC Rosoboronexport and Italian company OMA SUD S.p.A., i.e. the affiliate of ATR Group and designer and manufacturer of certified multimission general-purpose aircraft – twin-engine Skycar and single-engine Redbird, signed Memorandum of Understanding during the 9th International Exhibition Gydroaviasalon-2012 which traditionally takes place on the Russian coast of Black Sea in Gelendzhik.

The main purpose of the cooperation is joint production of light amphibian aircraft, on basis of the one, developed by JSC Beriev, capable to perform special patrolling as well as humanitarian and double-purpose missions.

The Agreement between JSC Rosoboronexport and SELEX Galileo Ltd was signed within the frames of work set out in July in Farnborough on development of cooperation mechanism on project integrated diagnostic centers for operation and maintenance of Russian and Western origin fix and rotary wing aircraft, earlier delivered to third countries.

As well JSC Rosoboronexport and MBDA Italia S.p.A signed a corresponding agreement, specifying the order of interaction of the Russian and the Italian sides, on purpose of implementation of joint projects in field of special purpose aviation in the interests of third countries. SP

PHOTOGRAPHS: AgustaWestland, Astrium

# Squad Mission Support System, largest ever UGV deployed with US Forces

The SMSS (Squad Mission Support System) is an autonomous Unmanned Ground Vehicle (UGV) manufactured by Lockheed Martin, for the US armed forces. It is the largest autonomous UGV ever deployed with the US forces.

The SMSS unmanned vehicle is primarily designed to provide logistics support for light and early-entry forces.

## Development of the SMSS

The SMSS was developed as an independent research and development project funded by Lockheed Martin. The vehicle was unveiled at the the AUSA 2006 exhibition. It was first evaluated during the Army Expeditionary Warrior Experiment (AEWE) in 2008. A military utility assessment was conducted at Fort Benning in 2009.

The vehicle demonstrated its capabilities during the Portable Power Excursion (PPE) tests in late 2010. The second AEWE evaluation was conducted in 2011.

After winning the Army-sponsored Project Workhorse UGV competition, the SMSS was selected in July 2011 by the US Army Rapid Equipping Force for a three-month Military Utility Assessment (MUA) in Afghanistan. Four SMSS Block I vehicles were trailed during the in-theatre assessment. The SMSS was also assessed by the British Army in 2012. The vehicle was granted six safety releases by the US Army to work in close proximity around soldiers.

## Design features of the Squad Mission Support System

The SMSS is based on the six-wheeled amphibious ATV Land Tamer platform. The modular design allows the vehicle to be modified as transport, scout, mobile power and mobile communications platform.

The vehicle has a length of 3.6 m, width of 1.8 m and a height of 2.1 m. The standard weight of the SMSS is 1,724 kg. The vehicle can carry up to 544 kg of payload.

The SMSS sensor suite integrates Light Detection And Ranging (LIDAR), infrared and a colour camera. The vehicle can lock-on and follow any person by identifying his 3D profile captured by the onboard sensors. The SMSS autonomously navigates through a pre-programmed route using GPS way-points.

The SMSS Block I vehicle can be controlled through supervised autonomy, voice, tele-operation or by manually driven modes. The operator control unit includes a computer, control/display unit, batteries and antenna. The unit can be carried in the standard modular lightweight load-carrying equipment (MOLLE) system.

## Squad Mission Support System missions

The SMSS is intended to reduce the load of the nine to 13-man squads or teams by transporting their equipment, supplies, arms and ammunition on unpaved roads and cross-country terrains.

The autonomously operated vehicle will save the time utilised by the warfighter to control robotic systems. The reliable squad-size vehicle enhances the combat readiness by ensuring the re-supply channels and casualty evacuations. The future armed variants will feature improved reconnaissance, surveillance and target acquisition potentialities.

## SMSS engine and mobility

The SMSS is powered by a 60 hp or 80 hp turbo diesel engine. The UGV is equipped with hydraulic/gear drive system. Each hydraulic drive motor driven by an independent pump of the tandem pump set up delivers torque to the three wheels on either side of the vehicle.

The drive system of the UGV delivers more power to the wheels than other hydraulic vehicles with a hydraulic wheel motor at each wheel. The SMSS drive system components are housed inside the hull to withstand the impact of water, mud, dust and rocks.

The highly mobile 6 x 6 vehicle is ideal for asymmetrical and urban battlefields. It can support the squad to carry out various missions on most dangerous terrains. The SMSS Block I vehicle has a range of 200 km. The vehicle can negotiate a vertical step of 0.55 m and trench of 0.7 m. It can be internally transported by CH-47 Chinook and CH-53 helicopters.

The SMSS also features sling load lift points for external transportation by helicopters such as UH-60 Black Hawk. SP

PHOTOGRAPH: Lockheed Martin

## Kristen Bell apologises for Twitter.com security breach

Actress Kristen Bell recently urged fans to change their Twitter.com passwords out of fear they may have been compromised when her account was hacked.

The *Forgetting Sarah Marshall* star's social networking site was targeted recently by an Internet prankster, who posted a cryptic link on her page in order to steal log-in information from unsuspecting followers. She tweeted, "My twitter was hacked by some dipstick-dont open the 530am tweet abt (about) 'stalking ur twitter' it's a link designed to steal passwords. To be clear—if u clicked on the link I'm not positive ur passwords were compromised—but I would change them just in case. Sorry guys." SP

## Harry Potter fans lose out because of lapse

J.K. Rowling fans in the United States were disappointed when the author announced she'd be making just one stop in US this year to promote her upcoming book, *The Casual Vacancy*, at New York's Lincoln Center to a crowd of just over 1,000.

Tickets accidentally went on sale early and now the highly anticipated event is oversold.

Little, Brown and Company, the publisher putting out the new book, arranged for the event to take place in the Jazz at Lincoln Center theatre on October 16. Rowling is set to be interviewed on stage by author Ann Patchett, answer a few audience questions, and sign copies of *The Casual Vacancy* for everyone with a ticket.

PHOTOGRAPHS: www.needawallpaper.com, Daniel Ogren / Wikipedia

Tickets for the event were publicised as going on sale 10 a.m. on September 10 but went on sale 12 hours early, at 10 p.m., on Lincoln Center's website only. They quickly sold out but the message didn't get to the box office. Sales took place in person the following morning before the glitch was realised.

Due to a security breach, tickets for the J.K. Rowling event on October 16, 2012 were made available prematurely at 10 p.m. on September 9. Jazz at Lincoln Center is in the process of investigating how this occurred and what arrangements may be made to honour each ticket purchased, and will provide an update as quickly as possible. Neither Rowling nor Little, Brown and Company are responsible for this situation. Jazz at Lincoln Center apologises for any inconvenience, the Center said in a release. SP

## Y-12 nuclear weapons plant security guard sacked

WSI-Oak Ridge, a security contractor at the Y-12 nuclear weapons plant, confirmed that one of the guards on site during the July 28 security breach has been fired and others have been disciplined.

"One (security police officer) has been terminated and appropriate disciplinary action has been taken with the additional individuals," Courtney Henry, a spokeswoman for WSI, a unit of G4S Government Solutions, said by e-mail in response to questions. The names of the guards and other details of the disciplinary actions were not released.

WSI earlier had stated that three guards were suspended and placed on restricted duty status following the incident, in which three protesters entered the high-security installation in the predawn darkness and cut through fences to reach the plant's storage compound for bomb-grade uranium. The storehouse was defaced with spray-painted protest messages and splattered with human blood before guards arrived at the scene around 4:30 a.m.

The National Nuclear Security Administration was highly critical of the guards' response during the incident, saying Y-12's protective force was slow to respond to alarms and — even when they reached the scene — failed to take appropriate steps to secure the Plowshares protesters. SP

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