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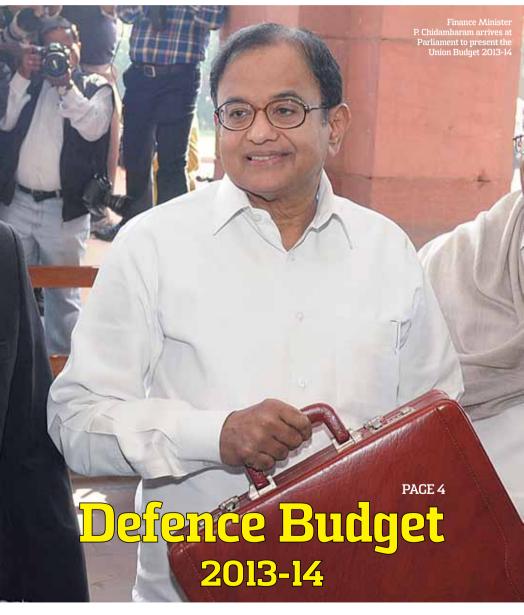






ONLY FORTNIGHTLY ON **MILITARY AEROSPACE INTERNAL SECURITY**

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Exercise Iron Fist 2013



The President Pranab Mukherjee and the Prime Minister Dr. Manmohan Singh witnessing the Indian Air Force firepower demonstration Exercise Iron Fist 2013 at Pokhran, Jaisalmer, Rajasthan on February 22, 2013.



The Prime Minister Dr. Manmohan Singh being presented a memento by the Chief of Air Staff, Air Chief Marshal N.A.K. Browne.



IAF's C-130J during the Exercise Iron Fist 2013





On February 28, when the Union Budget 2013-14 was presented in the Parliament, everyone was relieved to see Finance Minister P. Chidambaram giving a small raise in his eighth budget speech. This year's defence budget of ₹2,03,000 crore is up 5.18 per cent from last year's allocation of ₹1,93,000 crore.

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Defence budget should be linked to defence preparedness

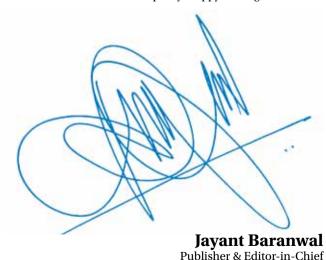
he Finance Minister P. Chidambaram has marginally raised the defence budget from ₹1,93,000 crore to ₹2,03,000 crore, up by 5.18 per cent, but if one considers the revised budget estimates for 2012-13, it would be 14 per cent. Of the ₹2,03,000 crore, about ₹1,16,000 crore will be for revenue expenditure while the remaining ₹86,741 crore will be capital expenditure (for new weaponry and other acquisitions) with substantial allocation going for the Indian Air Force, followed by the Indian Army and the Indian Navy. The Indian Air Force in all probability will be signing the deal for acquiring 126 Rafale fighter aircraft, among other acquisitions, and that is a huge, huge order.

The defence budget has to be seen in the background of defence preparedness for which we reiterate that it (defence preparedness) is not just a continuous process but an uncompromising one. Considering the growing external and internal threats (the latter invariably spurred by external elements), the armed forces have to be given the best of equipment, besides of course their remuneration and other perks to keep them motivated. The recent skirmishes on the border and the Hyderabad bomb blasts, in which 16 people were killed and more than 120 injured, are reminders of the across-the-border machinations.

In a quick analysis of the defence allocation, Air Marshal (Retd) Anil Chopra spells out the need for increased budgets for defence considering that we have belligerent neighbours. He advocates budget hike of anywhere between 15 and 20 per cent as India's shopping list is quite long. As such India is one the topmost importers of arms and we need not be shy of this fact as we need to take care of national security at any cost, while ensuring that all acquisitions are free from any corruption charges. And the Defence Minister A.K. Antony has said speedy indigenisation in defence production is essential to eliminate corruption in procurement process. The government is also thinking of tweaking both the Defence Procurement Procedure

and the Defence Production Policy. Indigenisation is not going to happen overnight. However, the good news is that the private sector is actively getting into defence production and the defence industry can only flourish if there are collaborations both at the national and the global level as we have to catch up with technologies.

In his fortnightly column, Lt General (Retd) P.C. Katoch talks about the change in Chinese leadership under Xi Jinping and wonders which direction China will take. China on the one hand has been arming and advising the Taliban in fighting the NATO-led Internation Security Assitance Force (ISAF) in Afghanistan, on the other hand concurrently it has been conspiring with Pakistan how to accelerate and integrate insurgencies in India. We need to guard against such forces and there cannot be a better excuse to equip our armed forces with the most modern weaponry. Happy reading!





AIR MARSHAL (RETD) ANIL CHOPRA

A history of messed up defence deals since the Jeep scam of 1950s. the more recent **Bofors field guns** scandal, HDW submarines, Scorpene submarines, among others, and the delays there on, has repeatedly affected defence preparedness of the country

Defence Budget 2013-14

efence Minister A.K. Antony's hint of a possible defence budget cut in the next fiscal, during Aero India 2013, had sent shock waves in the defence community. His statement coming immediately after the ₹10,000 crore cut in the 2012-13 defence budget, had brought in a mood of pessimism. High inflation, fiscal deficit, the forthcoming Lok Sabha elections in 2014, potential growth rate below eight per cent, had made all apprehensive about what will come in next. Nevertheless, the Defence Minister continued to lobby for more funds on the sidelines.

On February 28, when the Union Budget 2013-14 was presented in the Parliament, everyone was relieved to see Finance Minister P. Chidambaram giving a small raise in his eighth budget speech. This year's

defence budget of ₹2,03,000 crore is up 5.18 per cent from last year's allocation of ₹1,93,000 crore. It is just 1.79 per cent of the projected GDP, down from 1.9 per cent last year and 14 per cent hike vis-à-vis last year's revised estimate (RE) of ₹1,78,503 crore. Of this, ₹86,741 crore, up from ₹69,579 crore, a 24 per cent increase over revised estimates of last year; would be for capital expenditure. Having for the first time breached ₹2 trillion, everyone is now waiting to analyse the fine print.

India has serious boundary disputes with its two nuclear powered neighbours. The region is also the

epicenter of terrorism. There is an increasing gap between the military capability of our northern neighbour and us. "China continues to grow faster than India," the Minister said in his speech. By and large, the budget increase should be at least 15-20 per cent. Last year's final allocation was less than two per cent of GDP. One day we have to go from 2.5 per cent of GDP to about 3.5 per cent of GDP in military spending. The shopping list is huge. Therefore, it is still not a time to clap.

Defence Preparedness

India's defence preparedness had been in the limelight for some time now. Earlier the former Army Chief General V.K. Singh had written to the Prime Minister about the lack of Indian Army's operational preparedness. The defence budget cuts in the end of 2012 had postponed many an important purchases.

The restart of the entire process for purchase of 197 light utility helicopters (LUH) worth about ₹10,800 crore, which had already been in the final procurement stage, has put the helicopter fleet of the Army and Air Force backwards by a few years. The recent scrutiny and allegations of bribery in the purchase of helicopters from a unit of Italian defence giant, Finmeccanica SpA, and the threat of cancellation of the deal has affected the morale even further. A history of messed up defence deals since the Jeep scam of 1950s, the more recent Bofors field guns scandal, HDW submarines, Scorpene submarines, among others, and the delays there on, has repeatedly affected defence preparedness of the country.

The Indian Air Force (IAF), which gets the lion's

share of the budget for new weapons, followed by the Indian Army and the Indian Navy, is most eagerly awaiting the signing of the 126 medium multi-role combat aircraft (MMRCA) programme to restore the dwindling numbers. Also awaited are the 22 Apache attack helicopters and 15 Chinook heavy-lift helicopters. The Army wants ₹32,400 crore to raise battalions in the Indo-China border. Navy has a shopping list to secure the sea lanes. The carryover liabilities are eating into the modernisation funds. As terror resonates in the region and Mumbai and Hyderabad

terror strikes repeat at regular frequency; it is time for introspection. The government's job is not easy. There are competing demands from the social and development sectors. "Faced with a huge fiscal deficit. I have no choice but to rationalise expenditure. We took a dose of the bitter medicine. It seems to be working. India must make tough spending choices," the Minister said in his speech and added, "The Minister of Defence has been most understanding and I assure the house that constraints will not come in the way of providing any additional requirement for the security of the nation.

"Doing business in India must be seen as easy, friendly and mutually beneficial," said the Minister. It is presumed that he meant it also for the defence sector. While we weed out corruption from the entire society, defence of the nation should not become the only casualty.



Government to have a second look at defence procurements

efence Minister A.K. Antony has said speedy indigenisation in defence production is essential to eliminate corruption in procurement process. Addressing the Second International Seminar on Army Air Defence, Antony said the armed forces, the government, the DRDO, the industry-both public and private sector should come together in a mission mode so that the country can achieve maximum for indigenisation in a reasonable framework of time. He assured that the government would provide all support required to achieve this objective.

Antony said the government is going to have a second look at both the Defence Procurement Procedure and the Defence Production Policy and amend it in a manner so that the industry can take more interest in defence production.

Referring to the recent allegations of corruption in a defence deal, Antony said the government had taken stringent action against six companies which had resorted to unethical practices in securing other defence contracts. He said it is regrettable that lessons have not been learned from that episode. Antony said the country can't afford to lose poor taxpayers' money for greedy players in the field.

The Minister had a word of advice to the armed forces. He said while drawing up the list of products for their operational requirements, the Services should look at the availability of the same in the country first. "Imports should be the last resort," he said. The Minister added that the public and the private sectors have to synergise their competencies in creating capabilities for technologies in niche areas. This would promote self-reliance and foster our endeavour towards modernisation. It is important that



the private sector emerges as a major player, fully geared to meet various operational requirements of our armed forces with requisite knowledge, expertise and wherewithal. It is extremely relevant to appreciate each other's concerns, strengths and opportunities which are thrown up in this process. A strong and vibrant partnership between the public and private sector is crucial for delivering the much-needed defence technological upgradation.

Antony said, our domestic defence industry is at a take-off stage. We need collaboration at the global level to leverage the benefits of the latest available technologies. Government's policy on Offset is expected to facilitate this. "I would urge the industry to come forward and take advantage of this policy."

Army Chief chairs Mechanised Forces Conference



hief of the Army Staff General Bikram Singh chaired the Fifth Biennial Mechanised Forces Conference on February 26. Addressing the delegates at the Fifth Biennial Mechanised Forces Conference hosted by the Armoured Corps Centre and School, Ahmadnagar, from February 25-27, General Singh praised the battle readiness of the Mechanised Forces which deliver the vital punch on the battlefield. The COAS said that their commitment, morale, training and operational capabilities must instil fear in our potential adversaries.

The COAS added that a fresh impetus is required for change in the Army. Towards pursuit of all-round excellence, the General exhorted all ranks of the Mechanised Forces to focus on effective training for integrated all-arms operations. He said that the Army has always been the epitome of trust and discipline, for which they should always be proud. The COAS emphasised on the focus areas enunciated by him for all ranks of the Army.

During the three-day conclave, important issues regarding modernisation, realistic operationally-oriented training and human resource management issues were discussed. A large number of senior serving officers of the elite Armoured Corps, Mechanised Infantry and Brigade of the Guards also attended the conference.

Japan's defence force chief in India

dmiral Katsutoshi Kawano, Chief of Staff, Japan Maritime Self Defence Force (JMSDF), called on Admiral

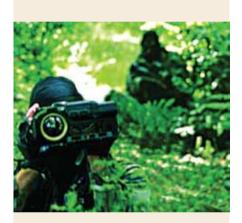


D.K. Joshi, Chief of the Naval Staff, Indian Navy at the Naval Headquarters. During the meeting, a wide range of subjects of mutual interest in the maritime domain were discussed. The Indian Navy and the JMSDF have been collaborating towards combating piracy off the Gulf of Aden. Admiral Katsutoshi Kawano also called on the Defence Minister A.K. Antony. The JMSDF Chief was on a two-day official visit to India.

Admiral Katsutoshi Kawano visited the Western Naval Command Headquarters at Mumbai, where he interacted with Vice Admiral Shekhar Sinha, FOC-in-C Western Naval Command. It may be mentioned that the inaugural Indo-Japan Maritime Affairs dialogue was held at New Delhi, recently.

hales will manufacture and supply ten sets of Sophie XF Type longrange cooled thermal imagers to the German armed forces under a new agreement announced on February 25. The contract was awarded by the Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support (BAAINBw), with delivery expected during the autumn of 2013.

Sophie XF is designed to complement around 100 previous systems used by the German armed forces. The hand-held, multi-functional thermal imaging device



features laser range finder, daylight camera and position sensor (GPS receiver and digital compass). The continuous optical zoom makes the high optical performance capability very easy to utilise. The system also features a distinctive multitude of measurement and recording options, low-weight, longer-life batteries and reduced noise generation.

According to the company, the German armed forces will use this longrange imager for surveillance, target acquisition and identification and determining the coordinates of these targets at night and in adverse visibility conditions. The order also includes logistical support, documentation and training.

Holger Brandt, Vice President Defence & Security Systems, Thales Deutschland, said: "We are delighted with this follow-up procurement order, which will provide the user with an innovative, user-friendly device with a wide range of applications."



Pinaka successfully testfired from Odisha coast

The personnel of Pune-based Armament Research and Development Establishment (ARDE) conducted a series of tests of an advanced version of multibarrel rocket system Pinaka from a defence base off the Odisha coast on February 28.

At least three rounds of Pinaka rockets were test-fired from a multi-barrel rocket launcher (MBRL) located at the firing point - II of the Proof and Experimental Establishment (PXE) at Chandipur.

The tests termed as sample tests were aimed to assess the stability of rockets in flight as well as accuracy and consistency. Though the system can fire rockets with a range of 39-40 km, but this time, sources said, it was tested for nearly 30 km.

The tests were conducted with logistics

supports from the PXE. According to the reports, the rocket launcher, which is also known as the Weapon Area System (WAS) can launch 12 rockets with one tonne of high explosives within 40 seconds.

"Its quick reaction time and high rate of fire provides the Army an edge during low-intensity war-like situations. The unguided rocket system put under trial here could be used to destroy a higher geographical area with its salvo of rockets," said a defence scientist.

Pinaka rocket is a state-of-the-art weapon for destroying enemy troop concentration areas, communication centres, air terminal complexes, gun or rocket locations and for laying mines by firing rockets with several warheads from the launching vehicle.

Last month seven Pinaka rockets were successfully test-fired from the same test range. SP

ICGS Gopalpur commissioned

Indian Coast Guard Station (ICGS) Gopalpur, the second Coast Guard Station in Odisha after Paradip, was commissioned by the Chief Secretary of Odisha, Bijaya Kumar Patnaik, in the presence of Lt General V.K. Saxena, Commandant, Air Defence College, Gopalpur; Inspector General K.C. Pande, PTM, TM, Commander Coast Guard Region (NE), officials from the Odisha state and district administration. senior officers from the Indian Army and the Indian Navy.

The station is a part of the ongoing efforts by the Coast Guard to strengthen maritime and coastal security. The assets based at Gopalpur will help augment patrolling along the south Odisha coast for safeguarding Indian maritime interests.

Speaking on the occasion, the Chief Secretary lauded the efforts of the Indian Coast Guard in maintaining a high state

of vigil off the Odisha coast, saving precious human lives during search and rescue (SAR) operations and aiding the state administration during cyclones, floods and other natural calamities. He also praised the key role played by the service in the protection and preservation of maritime environment and endangered species.

The Commander Coast Guard Region, North East, in his address during the commissioning ceremony, stressed the need for maintaining continuous vigil of this strategically important maritime state. He further stated that the Coast Guard had initiated several far-reaching measures to augment force levels and manpower to meet existing and future maritime challenges.

Coast Guard Station Gopalpur will function under the administrative and operational control of the Commander Coast Guard Region (NE), Kolkata, through the Commander Coast Guard District Headquarter-7 located at Paradip. Commandant Ramendra Rajkamal has been appointed as the Commanding Officer of the station.



Russia should induct BrahMos in its armed forces: Antony

Antony has said that Russia should induct BrahMos supersonic cruise missile in their fleet so that the success achieved in the joint venture will be fully appreciated.

Addressing the 'Partnership Day' marking the 15th anniversary of the signing of Inter-Governmental Agreement (IGA) between India and Russia for the formation of BrahMos joint venture in New Delhi, he said, soon the Indian Air Force will have BrahMos, land and air platforms, making it a real force multiplier for all the wings of the Indian armed forces.

Army, Navy and Air Force consider BrahMos to be an important weapon due to its pace, precision and power. The Government has also decided to expand the infrastructure at multiple centres to cater to larger production requirement of BrahMos missiles and systems.

Antony said the cooperation between the scientists and scientific expertise of DRDO and NPOM and many other organisations from India and Russia has proved that there is a way to do things faster and take the lead in the world. The partnership has blossomed and yielded results, which have not been achieved by any other country. He admitted that the role of DRDO, NPOM and the quality assurance agencies in grooming this industry to achieve high technology levels and a superior quality product has indeed resulted in customers' delight, that is, our defence forces.

The CEO and Managing Director of BrahMos Aerospace Dr A. Sivathanu Pillai in his welcome address gave a brief account of the growth and evolution of this joint venture. The Chief of Air Staff, Air Chief Marshal N.A.K. Browne in his address said that the modified Su-30MKI aircraft will soon be equipped with BrahMos missile.

Indian Coast Guard ship ACV H-190 commissioned

Indian Coast Guard ship H-190, the fourth in the series of twelve air cushion vehicles (ACVs) designed and built by Griffon Hoverwork Limited (GHL), UK, was commissioned at Mandapam by Vice Admiral M.P. Muralidharan, Director General, Indian Coast Guard, in the presence of Inspector General S.P. Sharma, PTM, TM Commander Coast Guard Region (East) and other dignitaries from Central and state Government.

The 21 metres long ACV with 31 tonnes displacement can achieve a maximum speed of 45 knots. The ACV is capable of undertaking multifarious tasks such as surveillance, interdiction, search and rescue

and rendering assistance to small boats/craft in distress at sea.

ICGS H-190 will be based at Mandapam under the administrative and operational control of the Commander Coast Guard Region (East). The ACV is commanded by Commandant R. Suresh. The ACV has a crew of two officers and 10 enrolled personnel.



MILITARY Updates



Vice Admiral Anurag G. Thapliyal takes over as new DG Indian Coast Guard

Tice Admiral Anurag G. Thapliyal has taken over as the 20th Director General of Indian Coast Guard on February 28, 2013, succeeding Vice Admiral M.P. Muralidharan.

Since commissioning in the Indian Navy on July 1, 1977, Vice Admiral Anurag G. Thapliyal has held a mix of operational and sea appointments. He is a Navigation and Aircraft Direction specialist and his various sea appointments include command of INS Ajay, Khukri, Tabar and Mysore. He has also commissioned INS Cheetah as a Navigating Officer in Poland, and INS Ajay and Tabar as Commanding Officer, both in Russia. The Flag Officer has also been the Fleet Operations Officer, Eastern Fleet at Visakhapatnam.

He has also held several challenging appointments on shore which include the appointments of Chief Instructor ND School, Deputy Director Naval Operations, Joint Director Naval Plans at the Integrated Headquarters of MoD and Director Maritime Warfare Centre, Visakhapatnam. He is an alumnus of Naval War College, USA and Defence Services Staff College Wellington and possesses Masters Degrees in Physics as well as Defence Studies. He has been the Chief of Personnel at the Integrated Headquarters of the MoD, prior to taking over as the DG Coast Guard. The Flag Officer is a recipient of AVSM. SP



Textron introduces two new vehicles

extron Marine & Land Systems has introduced two vehicles to its Commando family of vehicles at the International Defence Exhibition and Conference (IDEX 2013).

The new Commando select mortar vehicle and Commando utility baserunner are designed to meet growing requirements of international combat units for a more operationally flexible and adaptable under-armour indirect fire capability. The new Commando select mortar vehicle is capable of firing up to 120mm mortars from a common mount, and stowing up to 82 rounds of high explosive, illumination and smoke rounds. The vehicle is expandable to other fire control systems. The mortar vehicle mount also can fire at an azimuth of up to a 360-degrees and a firing elevation of 45 to 85 degrees.

Three other Commando Select variants are currently being produced and fielded for the Afghanistan National Army. Like all vehicles in this line, the mortar vehicle exceeds MRAP levels of crew protection and takes advantage of the proven mobility and survivability of TM&LS' Commando family of armoured vehicles. Commando select vehicles are easy to operate and maintain.

The TM&LS' new Baserunner 4x4 selectable gas/electric hybrid Commando Utility vehicle is built to facilitate missions in forward and rear echelon operational environments. These vehicles perform demanding tasks with ease, allowing users to efficiently and safely complete tasks. The Commando utility vehicle line also includes the survivable combat tactical vehicle (SCTV) system, an MRAP-style fully-armoured monocoque v-hull crew capsule designed to replace the crew compartment of the HMMWV in a one-for-one exchange.

BAE Systems' tests 155mm long-range projectiles

AE Systems and Lockheed Martin Corporation recently completed a series of successful guided flight tests for 155mm long-range land attack projectiles (LRLAP) as part of the ongoing qualification test programme at White Sands Missile Range in New Mexico.

The three tests evaluated the LRLAP's long-range (63 nautical miles) flight performance and accuracy with a preconditioned tactical rocket motor in hot, ambient, and cold temperatures. All test requirements were met or exceeded, and all range, accuracy, and lethality objectives were successfully demonstrated.

"This was a critical step forward for the US Navy's 155mm LRLAP programme," said Tom Pfenning, Director of Precision Guided Munitions at BAE Systems. "BAE Systems continues to progress on track to fully qualify the 155mm LRLAP in support of the deployment of the advanced gun sys-



tem aboard the DDG 1000."

The 155mm LRLAP is effective against a variety of targets in multiple mission areas and was designed to provide expeditionary forces with an affordable, ship-launched alternative to currently used missiles. The LRLAP is guided by a GPS and inertial measurement unit, allowing for high levels of accuracy at ranges beyond 63 nautical miles. This capability reduces costs by requiring fewer rounds to achieve desired effects on targets and is effective where collateral damage is an issue.

BAE Systems is progressing towards completing 155mm LRLAP live fire testing in O4 of 2013. SP



Coast Guard training ship Varuna celebrates silver jubilee

oast Guard Ship (CGS) Varuna celebrated 25 years of glorious service to the nation on February 27. Commissioned on February 27, 1988, at Mumbai, the ship as the training ship of Indian Coast Guard has served as the alma mater to about 600 officers of the Indian Coast Guard. DIG T.K.S. Chandran, Commander, Coast Guard District No 4, and a host of Navy and Coast Guard personnel were present onboard on the occasion.

CGS Varuna has also taken part in several search and rescue missions and apprehension of contraband at sea. The DIG also released a commemorative coffee table book on the occasion. Visit to an orphanage by the families of the crew and the traditional cake-cutting ceremony were the other highlights of the anniversary celebrations. Commander K.M. Arun Kumar commands the ship which is currently based at Kochi as part of the First Training Squadron of the Indian Navy. The ship has a crew of 99 enrolled personnel and 11 officers and can train 24 officer cadets onboard.



China on one hand has been arming and advising the Taliban in fighting the **NATO-led ISAF** in Afghanistan, concurrently it has been conspiring with Pakistan how to accelerate and integrate insurgencies in India

Which way China?

s the new leadership under Xi Jinping takes formal guard in Beijing this month, many question marks are emerging as to which direction China will take under the new dispensation. Forging links with the People's Liberation Army's (PLA) nuclear forces at the earliest opportunity, going after corruption and the smiling countenance of Xi Jinping with talks of political reforms, give rise to much speculation.

Political reforms are linked to China's out-of-control political economy, examples being, state monopoly of industries and similar real estate bubble. Though commercial and social media now affect Chinese society and politics, the unrest in youth is palpable. However, given the fact that the Chinese Communist Party (CCP) is continuing in power doesn't really leave much scope of manouvre for Jinping. The CCP is responsible for China adapting aggressive posture in recent times

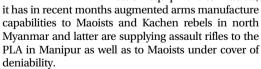
and will be looking for consolidating power by applying China's galloping comprehensive national power more and more externally albeit with Sun Tzu's characteristics "to win a war without even fighting a war," small scale conflicts notwithstanding. It is the emerging new US doctrine of "letting things play out in a region" that encourages China more than the present downturn in US economy. Interestingly, PLA Chief reports directly to the CCP and not to the Chinese Government, PLA Generals form part of the Politburo and hardliner PLA Generals are advisors to the China Reform Forum.

Tibet and Taiwan will continue to be the areas of core national interests, as declatrd by China. Recent appointment of hardliner Losang Gyaltsen (Vice Chairman of the Tibet Autonomous Region (TAR) in 2011 and Alternate Member of 18th CPC in 2012) as Governor of indicates China doesn't want to ease oppression in Tibet. Desire to add more buffer to Tibet has led to Chinese strategic footprints in Northern Nepal and Gilgit-Baltistan, latter also facilitating Chinese strategic designs in Afghanistan, CAR and Indian Ocean region. In the same vein are Chinese claims to Arunachal Pradesh and illegal occupation of Aksai Chin and Shaksgam Valley. While issues like PLA's increasing capabilities, both conventional and nuclear including missile capabilities under PLA's Project 249,

some 4,800 kilometres maize of underground tunnels pan China housing nuclear assets and the January 2, 2013 CCTV military news showing India as the target for China's new air combat simulation system need monitoring, of immediate concern should be Chinese deliberate efforts to boost insurgencies within India, particularly Maoists.

Historically, China has waged unconventional warfare through spread of communist ideology. Maoists in Nepal were created by China and they are firmly linked with Maoists in India. Chinese links with Al Qaeda and Taliban go back to over a decade plus but what has been significant to India is China's advice to Pakistan to create irregular forces to fight in India's backyard and tacit support to Pakistan's anti-India jihad. Pakistan's proxies with the Lashkar-e-Toiba (LeT) in the forefront, therefore, indirectly become proxy-proxies of

> China. China on one hand has been arming and advising the Taliban in fighting the NATO-led International Security Assistance Force (ISAF) in Afghanistan, concurrently it has been conspiring with Pakistan how to accelerate and integrate insurgencies in India. United Liberation Front of Assam (ULFA) after being routed from Bhutan, were given asylum and support by China. Chinese nationals with fake Indian documents have been caught in a bid to contact Naga insurgents. China is not only supplying arms and communication equipment to Maoists,



While China-Pakistan "higher than the mountains, deeper than the ocean" relationship is a full spectrum bond, China's irregular allies and plan to establish an unconventional springboard for enlarging operations behind enemy lines is in line with Sun Tzu's preaching, "To subdue the enemy without fighting is the acme of skill". India would do well to take note and take countermeasures.

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





AIR MARSHAL (RETD) ANIL CHOPRA

Considerable improvement in **ABM** capability by positioning more missiles in Alaska and Japan could put pressure on China to armtwist Pyongyang. The new leadership in Seoul and Tokyo need to quickly take stock with Washington in view of the new scenario.

North Korea's nuclear tests

n February 12, North Korea shook the earth by conducting its third nuclear test. The earlier tests were conducted in 2006 and 2009. Shock waves from what the Western world calls a 'Rogue state' went far, and so are the long-term implications not only for the neighbourhood but also for nuclear proliferation as a whole. This underground detonation picked up on seismic instruments was officially announced by North Korea as using 'miniaturised device'. Still the sole superpower and the global policeman United States was the first to react, condemning the event strongly. The young heir Kim Jong-un is obviously in full command. This test comes just weeks after the unanimous UN Security Council resolution against Korea's ballistic missile programme was passed in December 2012. Are

there signals in the timing of the test which was conducted only a day before the "State of the Union Address" by the US President Barack Obama. Is this timed to trigger a reaction from the incoming South Korean Government?

Pre-launch activities were also somewhat suspicious. They kept creating a flurry of activities at the missile launch site to divert international satellite's attention. Seoul had been cautioning the world for about a week. The traditional 'event' warning was given by the 'Regime' to Washington and Beijing at the eleventh hour. Koreans are known for keeping the world guessing.

All Encompassing Capability

A nuclear warhead mated on a long-range missile makes it a lethal combination. The US, Russia, China, Japan and South Korea all feel immediately threatened. With other rouge states like Pakistan and Iran at different levels of nuclear capability, has the world gone out of the civilised control? Do we now start dealing with North Korea as a full-fledged nuclear state? Do we keep passing UN resolutions which show unanimous resolve, but always seem to fall on deaf ears? Will any amount of sanctions have no effect on the ground? Can China be persuaded to exert overt/covert pressure?

The type of test conducted has its own dynamics. North Korea has shown capability, in both; plutonium processed and enriched uranium routes. International enforcement of uranium based devices is as difficult as it is easy to process and hide these devices. It is also easy to transfer the devices. Could Iran and North Korea be talking? Is the world most helplessly allowing a monster to become a demon? How does one dialogue with a reclusive regime that has cut off its people from the rest of the world? Does the new US Secretary of State have his plate full, but has no fork and knife to cut the steak?

What is the real strategy behind the tests? Is it to create conditions and take a high ground for bargaining a great financial package from a position of strength? Is becoming a nuclear power the ambition of the 'family' which otherwise rules a closed famished state? Are there designs overlooking the 'Armi-

> stice' line to browbeat South Korea and then unification and beyond? Is there a desire to free itself from dependence on big brother China? The Chinese have been concentrating on retaining stability in the Peninsula so that they could emerge as a power.



Tough Times Ahead

In the last 23 years on-and-off negotiations have not brought results. Perhaps it is time for Seoul to reverse the confrontationist approach of its predecessor and President-elect Park reduces the verbal assault. But for how long can the world carry on with measured approach? There should be

no knee-jerk reaction to begin a policy of placation or rushed negotiations. Considerable improvement in ABM capability by positioning more missiles in Alaska and Japan could put pressure on China to arm-twist Pyongyang. The new leadership in Seoul and Tokyo need to quickly take stock with Washington in view of the new scenario. Also President Obama needs to have one-on-one engagement with the incoming Chinese President Xi Jinping. There are tough times ahead with no easy answers on the horizon. Hard kill is not an option. Chinese will have a big role. However, some accommodation will be required.

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

HAL's indigenous chopper enthrals visitors at Iron Fist exercise

fter enthralling thousands of aviation enthusiasts in Aero India 2013, India's first indigenously designed and developed light combat helicopter (LCH) by the Hindustan Aeronautics Limited (HAL) demonstrated its prowess in the Iron Fist exercise of the Indian Air Force (IAF) at Pokhran.

The first prototype of LCH piloted by HAL's Chief Test Pilot Wg. Cdr (Retd) Unni Pillai, and Group Captain (Retd) Hari Nair was flown at Jaisalmer as the President, the Prime Minister and other dignitaries watched the manoeuvres.

"It is a matter of pride for us to have HAL imprint at this biggest exercise of the Indian Air Force", said Dr R.K. Tyagi, Chairman, HAL.

LCH has the capability for target detection and acquisition in all weather conditions facilitated by an advanced sensor suite consisting of day and night sensors (CCD camera, FLIR, laser designator and range finder). The LCH will be armed with an array of long-reach weapons. The M621 20mm cannon, which is known for its accuracy and high muzzle velocity, is mounted on a chin turret and is slewable with either pilot's helmet mounted sighting system, giving the



capability to look and fire at targets around the aircraft. The 68mm rockets can be fired at targets up to six kilometres even if not within the line-of-sight. Mistral-II air-to-air missiles and air-to-ground missiles can take on aerial and ground targets respectively.

Bell Helicopter delivers first Bell 429s to Nigeria



ell Helicopter has delivered two Bell 429s, one to the Nigeria Police Air Wing (NPAW) and another to the Nigeria Emergency Management Agency (NEMA). These Nigerian deliveries are the first 429 deliveries on the continent of Africa. NPAW will utilize the Bell 429 for general law enforcement, surveillance and force projection. NEMA will fly the aircraft for disaster relief and humanitarian support missions.

"Our Nigerian customers are thrilled to be the first Bell 429 operators in Africa. The Bell 429 is the most technologically advanced and capable light-twin helicopter in the marketplace and will serve the NPAW and NEMA well for many years to come," said Robert Prentice, Vice President, Aircraft Sales, Africair, Inc., a Bell Helicopter independent representative in Africa. "They are particularly impressed with Bell Helicopter's reputation for exceptional product support."

The NPAW and NEMA selected the Bell 429 for its large cabin size, state-of-the-art avionics, its smooth and fast ride, and the EASA-approved Bell Helicopter maintenance programme that ensures superior post-delivery support and service.

Royal Saudi Air Force accepts Airbus Militaru **A330 MRTT** into fleet



he Royal Saudi Air Force has formally inducted into service the Airbus Military A330 MRTT new generation tanker/transport aircraft. Deputy Minister of Defense Prince Khaled bin Sultan dedicated the aircraft at a ceremony at Riyadh Airbase on February 25.

The aircraft is the first of a batch of three that have now been contractually delivered.

Deliveries of a second batch of three which were subsequently ordered will begin at the end of 2014. They will be used to refuel RSAF fighters including the F-15, Typhoon and Tornado.

Air Marshal Daljit Singh takes over as AOC-in-C. **South Western Air** Command

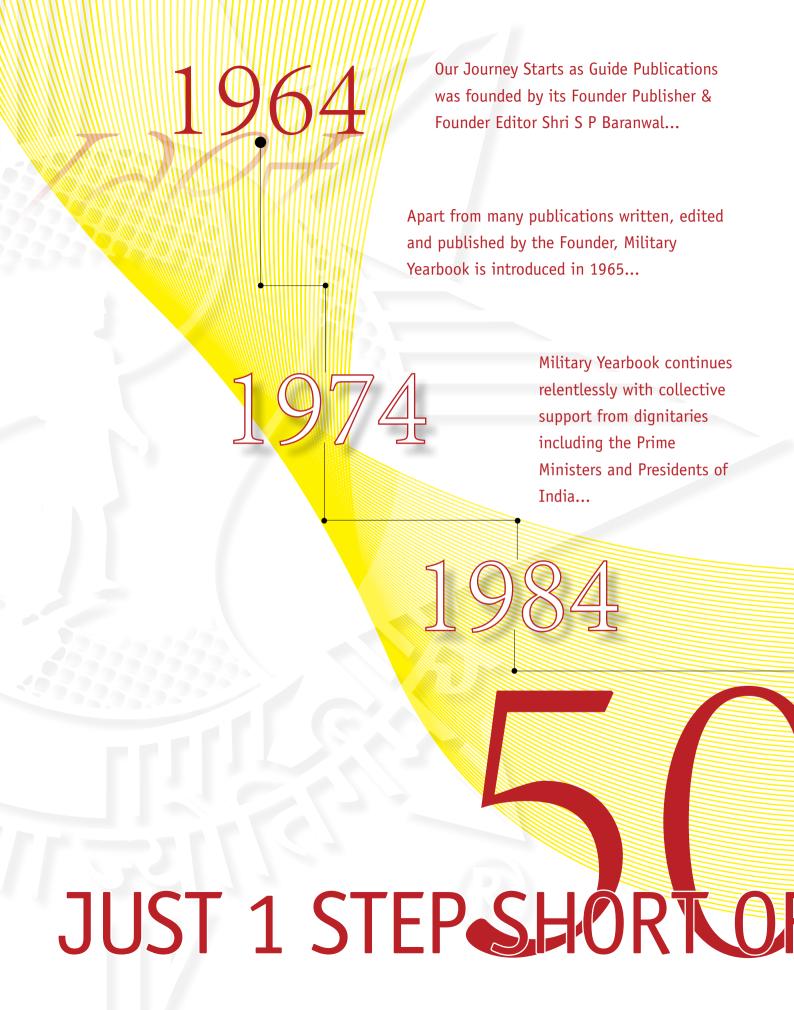
Marshal Daljit Singh has takén over as Air Officer Commanding-in-Chief, South Western Air Command (SWAC), Gandhi-nagar on March 1. The Air Marshal inspected a ceremonial Guard of Honour and addressed



all air warriors, DSC, NCs(E) and civilian employees on the occasion.

Air Marshal Singh was commissioned in the fighter stream of the Indian Air Force in June 1976. An alumni of the National Defence Academy, he has flown over 3,500 hours on various aircraft which include Gnats, Ajeets, MiG-21s, Su-30MKI and Mirage-2000 aircraft. He is a qualified flying instructor and a graduate of the Defence Services Staff College, Wellington. He was Director General Air (Operations) at Air HQ prior to assuming the post of AOC-in-C. He is a recipient of AVSM VM.

■



WE SHALL BE 50 THIS YEAR

Guide Publications is rechristened as SP Guide Publications offering tribute and gratitude to its Founder...Also envisioned is the path of introduction of a few magazines...

2013

Military Yearbook is rechristened as SP's Military Yearbook conveying gratitude to Founder Publisher...

SP's Aviation, SP's Land Forces, SP's Naval Forces are launched starting from '98 and within a span of a few years...

SP's Airbuz, SP's
M.A.I. follows the
intensity of magazines
introduction...

1994

50 YEARS



SP GUIDE PUBLICATIONS

₹418 crore defence contract to HAL for Cheetal helicopters

industan Aeronautics Limited (HAL) has signed a contract worth ₹418 crore with the Ministry of Defence for supply of 20 Cheetal helicopters and associated equipment to the Indian Army over the next four years. HAL will also provide training to the pilots and technical crew. This is the first contract for supply of Cheetal helicopters to the Indian Army. HAL had the initial order for 10 Cheetal helicopters from the Indian Air Force.

It may be mentioned that Cheetal is the re-engined variant (developed as company funded programme) of the proven Cheetah helicopter being manufactured by HAL for over four decades. Cheetal helicopter is equipped with a Turbomeca TM 333-2M2 free turbine turboshaft engine which is more fuel-efficient and provides higher payload capability of 90 kgs at an altitude of six kilometres. Cheetal helicopter can operate up to seven kilometres altitude and has a range of 640 kilometres with an endurance of 3.50 hours.

The Cheetal is fitted with a full authority digital engine control (FADEC) system for engine control and an electronic backup control box (EBCB) system which automatically takes over engine control in the event of FADEC failure.

Cheetal incorporates features of modern cockpit instruments



like electrically driven artificial horizon, directional gyro, flight monitoring system, cockpit voice recorder and master flasher warning system. The Cheetal helicopter is a multi-role helicopter and is best suited for the missions such as personnel transport, casualty evacuation, reconnaissance and aerial survey, logistic air support, rescue operations and under slung loads (cargo).

USAF selects A-29 **Super Tucano for light** air support programme



US Air Force (USAF) has announced that it has selected the Embraer Defense and Security's A-29 Super Tucano for its light air support (LAS) programme. The aircraft will be supplied in partnership with Sierra Nevada Corporation (SNC) as the prime contractor, and will be used to conduct advanced flight training, aerial reconnaissance and light air support operations. After a thorough rebidding process, the USAF considered the overall solution offered by Embraer Defense and Security and SNC to be the superior choice for this critical mission.

"This award confirms that the A-29 Super Tucano is the best aircraft for LAS operations. We are ready to start working and honoured to support the US Government and its partners with a cost-effective solution," said Luiz Carlos Aguiar, President

and CEO of Embraer Defense and Security. "We are committed to pursuing our investment strategy in the United States and to delivering these aircraft on schedule and within budget."

"The light air support (LAS) programme is essential to the United States' objectives in Afghanistan and to our national security. It is a great honour to serve our country by providing the aircraft, training and support for this programme," said Taco Gilbert, Vice President of Integrated Tactical Solutions for SNC's Intelligence, Surveillance and Reconnaissance business area. "The A-29 Super Tucano with its proven track record is exactly what's needed for the LAS programme where the mission is critical and the time is short."

Russian Helicopters launches global helicopter firefighting initiative

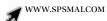
ussian Helicopters has launched the Global Helicopter Firefighting Initiative (GHFI) to increase the use of firefighting helicopters specially equipped with the suspended firefighting systems (Bambi Buckets), water cannons and other firefighting equipment. The GHFI will involve makers of firefighting systems and equipment for helicopters producing innovative technologies to qualitatively improve helicopter-based firefighting systems. Russian



Helicopters plans to involve its own design bureaus in the search for new engineering solutions in the field.

One member in the GHFI will be the Russian-built Ka-32A11BC helicopter, which can be equipped with various firefighting systems. The helicopter is already popular in more than 30 countries, with 188 machines operating successfully in Russia, Canada, Spain, Portugal, Switzerland, China, Bulgaria, Austria, South Korea, Chile, Indonesia and Japan, among others.

The Ka-32A11BC meets AP-29 standards and was awarded type certification in 2009 by the EASA. In December 2012, the helicopter received its flightworthiness certification in Australia. The Ka-32A11BC can tackle virtually all types of fires both on the ground and in high-rise buildings by deploying a collapsible Bambi Bucket and water cannon. Coaxial rotors make the Ka-32A11BC the only helicopter in its class that can execute difficult manoeuvres



Lockheed gets \$6.9-billion contract for F-22 upgrades



ockheed has been awarded a \$6.9-billion contract to upgrade the US Air Force's fleet of 185 F-22 fighters, at an average cost of \$37.4 million per aircraft. Lockheed Martin Aeronautics Co., Fort Worth, Texas, is being awarded an indefinite-delivery/indefinite-quantity contract (FA8611-13-D-2850) with a ceiling of \$6.9 billion for F-22 modernisation.

The locations of performance are El Segundo, California; Scottsdale, Arizonia; San Diego, California; Nashua, New Hampshire; and Wayne, New Jersey. Work is expected to be completed by February 20, 2023. This award is a result of a sole source acquisition.

Airbus Military A400M undergoes cold weather tests

s the countdown to first customer delivery progresses, the Airbus Military A400M new generation airlifter has successfully passed a renewed series of cold weather tests in a production-representative configuration.

During a week-long deployment to Iqaluit, Canada, the flight test team demonstrated the capability of equipment such as the cargo system and production-standard engines which were not available during earlier tests in Sweden.

Tests conducted over five days on Grizzly 5 / msn6 included engine runs after a 24-hour cold-soak to -32°C, use of all the cargo bay equipment, taxying, and a development flight. 22

Rockwell Collins selected by Piaggio Aero to develop avionics

ockwell Collins has been selected by Piaggio Aero to develop an integrated avionics system with touch-control flight displays for the Piaggio Aero multirole patrol aircraft (MPA).

In July 2012, Piaggio Aero was selected by Abu Dhabi Autonomous System Investments (ADASI) for the development of the MPA, a new special missions/surveillance aircraft designed to meet the need for a robust and high-tech solution for land, coastal, maritime and offshore security.

The Rockwell Collins integrated avionics system for the Piaggio Aero MPA features: easy-to-use 14-inch touch-control primary flight displays that enable natural, eyes-forward operation and dramatically enhance situational awareness through all phases of flight; advanced communication, navigation and surveillance systems, including automatic dependent surveillance-broadcast (ADS-B Out) compatibility for impending SESAR and NextGen airspace requirements; synthetic vision for increased situational awareness of terrain, especially at night or during low-visibility conditions; European mandate compliant Link 2000+ controller pilot data link communications (CPDLC) to enhance operational efficiency with electronic messaging; Rockwell Collins' ascend aircraft information manager (AIM) to automatically upload flight-critical database updates and download aircraft maintenance information; European mandate compliant traffic alert collision avoidance system (TCAS II version 7.1) for enhanced safety. The first flight of the MPA with Rockwell Collins Avionics system is expected in 2014.

Cassidian delivers 100th Eurofighter to the German Air Force

assidian has handed over the 100th Eurofighter to the German Air Force at the Military Air Systems Centre in Manching. The aircraft with the identifier 31x00, took off on its delivery flight to Boelke Fighter Bomber Wing 31 in Noervenich. Speaking to delegates including politicians, representatives of public authorities, German armed forces and industry; Bernhard Gerwert, CEO of Cassidian, underscored the importance of this milestone for the company.

"The Eurofighter programme is and remains one of the essential pillars of Cassidian's business. Eurofighter is the largest European hightech programme and is the most modern multi-role combat aircraft in the market today. Together with the German Air Force, we can be proud that this programme is running soundly and successfully."

General Lieutenant Muellner, Chief of Staff of the German Air Force, said: "Due to its interoperability, modularity and growth potential, the multi-role weapon system, Eurofighter, is today the backbone of the German Air Force's combat aircraft fleet, particularly in light of the new orientation of our armed forces, and will also remain in future."

The German Air Force received its first Eurofighter from Cassidian at the beginning of 2003. The combat aircraft was launched in Germany in 2004 and since then has flown more than 30,000 flight hours without accident. The Eurofighter is currently operational at 'Steinhoff' Fighter Wing 73 in Laage, Fighter Wing 74 in Neuburg and 'Boelke' Fighter Bomber Wing 31 in Noervenich.

With 719 aircraft under contract, 571 orders and 355 deliveries,

the Eurofighter is currently the largest military procurement programme in Europe and boosts the European aviation industry's standing in international competition. Seven nations (Germany, the UK, Italy, Spain, Austria, Saudi Arabia and Oman) have procured the Eurofighter. At present, the aircraft are being operated by 20 operative entities worldwide. Till date, the Eurofighter fleet has completed more than 1,60,000 flight hours globally. It is thus the safest and one of the most reliable combat aircraft in operational use.



Boeing Phantom Eye completes second flight

Doeing's liquid hydrogen-powered Phantom Eye unmanned airborne system completed its second flight on February 25, demonstrating capabilities that will allow it to perform intelligence, surveillance and reconnaissance (ISR) missions for up to four days without refuelling.

During the flight, at NASA's Dryden Flight Research Center at Edwards Air Force Base, California, Phantom Eye climbed above an altitude of 8,000 feet and remained aloft for 66 minutes at a cruising speed of 62 knots before landing. The aircraft exceeded what it achieved last year during its first flight when it flew at an altitude of 4,080 feet and remained aloft for 28 minutes.

"Today's combination of geopolitical and economic issues makes Phantom Eye's capabilities, affordability and flexibility very attractive to our global customers," said Darryl Davis, Boeing Phantom Works President. "No other system holds the promise of offering on-demand, persistent ISR and communications to any region in the world, rapidly responding to natural disasters and national security issues."

Boeing is self-funding development of the environmentally responsible Phantom Eye, which generates only water as a byproduct of its propulsion system.

"This flight, in a more demanding high-altitude flight envelope, successfully demonstrated Phantom Eye's manoeuvrability,



endurance and landing capabilities," said Drew Mallow, Phantom Eye Program Manager.

Following the first flight, Boeing upgraded the aircraft's software and hardware, including the landing gear. The upgrades paid off in the form of a picture-perfect landing.

The Phantom Eye demonstrator is capable of carrying a 450-pound payload while operating for up to four days at altitudes of up to 65,000 feet.

Elbit delivers Hermes 900 UAS to a customer in the Americas

Hermes 900 unmanned aircraft system (UAS) to a customer in the Americas. The programme includes delivery of ESL's Hermes 900 unmanned air vehicles, Universal Ground Control Stations (UGCS) including installation in a mission control centre, advanced electro-optic systems and additional unique systems.

Due to high demand, ESL has increased its UAS production activities and will soon be delivering additional Hermes 900 systems to other international customers.

ESL announced on December 31, 2012, that it was awarded a second contract to sup-



ply a wide range of Hermes 900 UAS to the Israel defence forces (IDF). The contract, a follow-on to the initial IDF order for Hermes 900 in 2010, calls for development of additional advanced UAS capabilities as well as UAS maintenance services. On January 27, 2013, ESL announced that it received an approximately \$35 million contract from the Israel Ministry of Defense for the development of advanced features for UAS. One of the mission requirements is the quick reconfiguration of the UAS' payloads.

BAE Systems' clever technology recognised

BAE Systems Australia's groundbreaking technology that enables Unmanned Aerial Vehicles (UAVs) to land themselves has been awarded the inaugural National Defence Industry Innovation Award at the Australian International Airshow.

The award recognises innovation in the Australian aerospace industry.

The technology is an Intelligent Recovery System that enables UAVs to autonomously locate a suitable landing strip and land safely without relying on aids such as GPS, remote piloting or external systems.

When a landing strip is visible, the system uses visual or image-based clues and develops specific algorithms to land safely.

The system is so clever that it can also calculate algorithms for moving platforms such as naval ships.

BAE Systems Chief Executive David Allott said this award underscores the company's track record for delivering innovative solutions for customers.

"We have been leading the world in the development of autonomous systems and technologies for 15 years," Allott said.

"The Intelligent Recovery System sets a new benchmark in autonomy for UAVs and it's a testament to our highly skilled engineers that this cutting-edge work has been recognised with the inaugural National Defence Industry Innovation Award."

Allott said the Intelligent Recovery System offered customers significant operational and safety benefits.

"This technology means UAVs can safely land in emergency situations without assistance – an innovation that not only protects the UAV and offers increased reliability, but has the potential to save lives. The Intelligent Recovery System can even be used for manned civil and military aircraft."

Added benefits include reducing planning for missions and operator workload.

The technology is currently installed on BAE Systems Australia's Kingfisher 2 UAV system and significant elements are embedded in the global company's next generation of UAVs.

Northrop Grumman's Global Hawk programme selected for USAF Sustainment Excellence Award

■he US Air Force RO-4 Global Hawk unmanned aircraft programme was recently awarded the 2012 Dr James G. Roche Sustainment Excellence Award for demonstrating the most improved performance in aircraft maintenance and logistics readiness. Northrop Grumman Corporation is the prime contractor for the high-flying fleet of Global Hawks.

"Even with a year marked with fiscal challenges and heightened operations tempo, the Global Hawk government-industry team was able to increase aircraft mission capability by 26 per cent in fiscal year 2012. This increase allowed the Global Hawk team to execute and fly more than 13,400 hours last year," said George Guerra, Vice President of the Global Hawk programme for

Northrop Grumman's Aerospace Systems sector. "This prestigious award signifies that the entire team is constantly striving to improve in every area and doing everything we can to support US and allied troops."

Echoing the programme's marked performance improvements is the recently released director, Operational Test and Evaluation annual report to the Secretary of Defense. The extensive report highlights the Global Hawk's mission-capable rate, which rose from approximately 52 per cent in fiscal year

2011 to nearly 78 per cent in 2012, while exceeding the Air Force's goal for 19 consecutive months.

"Congratulations to Northrop Grumman for ensuring our warfighters are equipped with a system that is ready and available when they need it," said Colonel Carlin Heimann, Global Hawk system Program Director for the US Air Force. "It is encouraging to be recognised at Air Force levels for the contributions this team makes to improving Global Hawk reliability and sustainability. This will always be a joint government-contractor effort and together we earned this award, which is a reminder that we have our priorities right."

In 2004, the Air Force Chief of Staff approved the award, named for the 20th secretary of the Air Force, to promote maintenance excellence. Air Force officials determine the award recipients by calculating the improvements for a predetermined set of metrics and multiplying each metric by a corresponding weighted value. The award will be presented at a date and location to be determined.

> Capable of flying for more than 30 hours at an altitude over 60,000 feet, Global Hawk provides decision-makers with nearreal-time intelligence, surveillance and reconnaissance, and provides warfighters with unmatched communications relay capabilities. It continues to fly missions around the world, accumulating more than 88,000 total flight hours, 80 per cent of which were flown in combat in support of overseas contingency operations. A total of 37 Global Hawks have been delivered to the Air Force, with additional aircraft scheduled for delivery this year.



Procurement of first Predator XP system



eneral Atomics Aeronautical Systems, Inc. (GA-ASI), a leading manufacturer of remotely-piloted aircraft (RPA), tactical reconnaissance radars, and electrooptic surveillance systems, has announced the procurement of its first Predator XP RPA system by the United Arab Emirates (UAE).

Predator XP is an updated version of the company's flagship Predator RPA that has been licensed by the US Government for sale to a broader customer base, including countries in the Middle East and North Africa.

"Two years ago we made a commitment to help the UAE strengthen its national security and protect critical infrastructure, and today we are pleased to share the news that this allied nation will soon be realising the benefits of Predator XP's long-endurance and wide-area surveillance capabilities," said J. Neal Blue, Chairman and CEO, GA-ASI. 52

Successful flights for Thales I-Master on Camcopter S-100

hales' I-Master radar system has successfully completed flight trials onboard a Schiebel Camcopter S-100 UAS (unmanned air system). The flight trials on Camcopter S-100 took place recently at the Schiebel test facility in Wiener Neustadt, Austria. The flights, each lasting several hours, successfully proved both sensor performance and the stability of data transfer between radar operator and the airborne I-Master.

I-Master is a high-performance radar, providing ground moving target indication (GMTI) and synthetic aperture radar (SAR) capability for all-weather surveillance, detec-



tion and recognition of targets over large areas at long stand-off ranges. Schiebel's Camcopter S-100 is capable of carrying a wide range of sensors for military and civilian applications.

Eddie Awang, Vice President of Intelligence Surveillance and Reconnaissance at Thales UK, said, "This trial, conducted in partnership with Schiebel, provided excellent GMTI and SAR results. It shows that I-Master can operate successfully on this VTOL UAV, meeting the specific challenges of unmanned platforms without interference or operational impact.Whether installed alone or to complement electro-optical/infrared sensors, I-Master greatly improves the effectiveness of any surveillance scenario. SP

The Union Home Minister Sushilkumar Shinde made the following statement in Parliament on Hyderabad blasts:

On February 21, twin blasts took place in a busy locality of Dilsukhnagar area of Hyderabad city at a local bus stop and a canteen, which were about 150 metres from each other at 6.58 p.m. and 7.01 p.m. respectively.

Preliminary investigations reveal that the improvised explosive devices (IEDs) were placed on bicycles causing explosions at both the places. A total of 16 persons died and 117 were injured out of which four are critically injured. The state government immediately deployed emergency medical response team along with 25 ambulances to take the injured to the hospital.

The state police and a team of National Investigation Agency (NIA) Branch office at Hyderabad immediately reached the place of occurrence and cordoned off the area and collected the evidence. State forensic teams were also pressed into service to collect the evidence from the crime scene. A team of NIA lead by IG and Post Blast Investigative Team (PBIT) of the National Security Guard (NSG) were sent to Hyderabad from Delhi at 9.30 p.m. vesterday by a special plane and reached Hyderabad by 11.30. Two cases have been registered vide CR No. 14/2013 of Saroor Nagar Police Station, Cyberabad and CR No. 56/2013 of Malakpet Police Station, Hyderabad city. The NIA will investigate the case in conjunction with Andhra Pradesh Police.

I along with Home Secretary and DG, NIA went to Hyderabad



and reviewed the situation with the Andhra Pradesh Governor, Chief Minister, Chief Secretary, DGP, Commissioner of Police and other senior officers. I visited the scene of occurrence and thereafter I visited injured in hospital.

The Prime Minister of India has announced ex-gratia of ₹2 lakh for the deceased and ₹50,000 to injured persons. State government has also announced ex-gratia of ₹6 lakh to deceased and ₹50,000 to ₹1 lakh for injured besides bearing all the expenses for the treatment of the injured. The situation is under control.

I extend my heartfelt condolences for the bereaved families who lost their near and dear ones in the blasts. The Government is committed to combat such cowardly terror attack and it shall make all possible efforts to apprehend the perpetrators and masterminds behind the blasts and ensure that they are punished as per the law.

Protected area, movement prohibited

Inder the Foreigners (Protected Areas) Order, 1958, all areas falling between the 'Inner line' and the "International Border of the State" have been declared as Protected Area. Currently, Protected Areas are located in the following States: whole of Arunachal Pradesh; parts of Himachal Pradesh; parts of Jammu and Kashmir; parts of Rajasthan and whole of Sikkim (partly in Protected Area and partly in Restricted Area.) Further, under the Foreigners (Restricted Areas) Order, 1963, the following areas have been declared as 'Restricted Areas: Andaman & Nicobar and part of Sikkim.

A foreigner is not normally allowed to visit a Protected/ Restricted Area unless it is established to the satisfaction of the government, that there are extraordinary reasons to justify such a visit. Every foreigner, except a citizen of Bhutan, who desires to enter and stay in a Protected or Restricted Area, is required to obtain a special permit from a competent authority delegated with powers to issue such a special permit to a foreigner. In cases where the powers have not been delegated to any subordinate authority by the Government of India, the application for special permit should be referred to the Ministry of Home Affairs for prior approval.

Special Permission for entry by Indians. (i) Inner Line Permit (ILP) regulates visit of Indians to states where ILP regime is prevalent under Bengal Eastern Frontier Regulation, 1873. In terms of of Section 2 of the Bengal Eastern Frontier Regulations, 1873, the Inner Line Permit system is prevalent in the three North Eastern States, namely, Arunachal Pradesh, Mizoram and Nagaland. Citizens of other states require ILP for visiting these three states.

With a view to promote tourism, some protected/restricted

areas, notified by the Government of India from time to time, can be visited by foreign tourists, either in groups, or as a couple in the case of a husband and wife, or by individuals, after obtaining the necessary permit from the competent authority. Powers have been delegated to various authorities to issue the special permit, without the prior approval of the Ministry of Home Affairs, to facilitate foreign tourists subject to the following exceptions:

Citizens of Afghanistan, China and Pakistan and foreign nationals of Pakistani origin shall not be issued a special permit without the prior approval of the Ministry of Home Affairs, according to R.P.N. Singh, Minister of State for Home Affairs. 52

Strategic border roads along **Indo-China border**

he government has approved construction of 27 strategic border roads along the Indo-China border at an estimated cost of ₹1,937 crore for the effective movement and operational requirement of Indo-Tibetan Border Police.

These roads are being constructed by Border Roads Organization (15 roads), Central Public Works Department (8 roads), National Project Construction Corporation (2 roads) and Himachal Pradesh Public Works Department (2 roads) in the State of Jammu & Kashmir, Uttarakhand, Sikkim, Arunachal Pradesh and Himachal Pradesh. Out of these 27 roads, construction of one road has been completed. The construction of 25 roads is in progress and the construction work of one road will start in 2013.

This was stated by Minister of State for Home Mullapally Ramachandran in the Lok Sabha. 52

Addressing cyber security in a holistic manner

overnment is aware of the nature of the threats in cyber space and is taking appropriate measures to address these threats by way of an integrated approach with a series of legal, technical and administrative steps to effectively deal with the issue of cyber security in the country and to ensure that necessary systems are in place to address the growing threat of cyber attacks. In support of this approach, the Information Technology Act, 2000 has included adequate provisions for protection of critical information infrastructure and cyber security incident response in the country, the Minister of State for Home R.P.N. Singh has said in the Parliament.

In order to address the issues of cyber security in a holistic manner, the government has come out with a draft "National Cyber Security Policy" after public consultation, to unify the various activities and programmes of the government to address the cyber security challenges with an integrated vision and a set of sustained and coordinated strategies for implementation. In addition, government is taking various measures to ensure necessary awareness and robust security system in all the critical government agencies.

- Salient features of the steps taken by the government are:
- Computers security policies, standard operating procedures and guidelines were formulated and circulated to all ministries/ departments for implementation.
- All Central Government ministries/departments and state/union territory government have been advised to conduct security auditing of entire information technology infrastructure including websites periodically to discover gaps with respect to security practices and take appropriate corrective actions.
- National Informatics Centre (NIC) has been directed not to host websites, which are not audited with respect to cyber security.
- A crisis management plan for countering cyber attacks and cyber terrorism is in place and circulated for implementation by all ministries/departments of Central Government, state governments and their organisations and critical sectors.
- The Information Technology Act, 2000 as amended by the Information Technology (Amendment) Act, 2008 has been enforced with effect from October 27, 2009. The Act provides legal framework to address the issues connected with security breaches of information technology infrastructure.
- The Indian Computer Emergency Response Team (CERT-In) issues alerts and advisories regarding latest cyber threats and countermeasures on regular basis. SP

Cuber fraud in banks

he details furnished by the Reserve Bank of India (RBI) in respect of Scheduled Commercial Banks pertaining to frauds relating to ATMs/debit cards/ Internet banking and credit cards has been increasing in rupee terms.

In 2010, the number of cases reported was 15,018 and the amount involved was about ₹40 crore; in 2011 the cases reported were 9,588 and the amount of loss was about ₹37 crore and in 2012 the number of cases came down to 8,322 but the amount involved increased to nearly ₹53 crore.

RBI has informed that it does not have data on cyber frauds in the public sector banks that have turned into non-performing assets.

US working cuber security framework for critical infrastructure

■he US President Barack Obama called for the development of a cyber security framework to reduce cyber risks to critical infrastructure such as power plants and financial, transportation, and communications systems.

In line with this the National Institute of Standards and Technology (NIST) has issued a request for information (RFI) in the Federal Register as its first step in the process to developing that

Cyber security to be focus of next **NATO** meeting

ith cyber threats escalating, the next meeting of NATO Defence Ministers will include a major focus on cyber security, US Secretary of Defense Leon Panetta said.

Panetta said he called on NATO to address the issue, as the cyber threat from other nations and hackers continues to grow.

"We are seeing continuing attacks in the cyber arena, on the private sector, on the public sector, in the defence arena," Panetta told reporters as the two-day NATO ministerial meeting. "This is without question the battlefield of the future and a scenario that NATO needs to pay attention to."

His comments come in the wake of a new report by a private cyber security firm that concluded that a special unit of China's military is responsible for sustained cyber espionage against US companies and government agencies. China has denied involvement in the attacks in which massive amounts of data and corporate trade secrets, likely worth hundreds of millions of dollars, were stolen.

The US Government officials have said that nations around the world must work together in order to tacklle the growing cyber threats. To date there are no broadly accepted rules that describe what constitutes a cyber act of war or the parameters of the battlefield in cyberspace. Nations also have widely disparate laws governing Internet crime.

China worried about cuber security

Foreign Ministry spokeswoman said recently that the Chinese Government is worried about recent negative developments in cyber security.

Spokeswoman Hua Chunying made the remarks at a regular press briefing in response to a question regarding an alleged Chinese cyber attack directed at Germany.

Hua said some countries have treated cyberspace as a new battlefield, justifying their efforts to build up their own cyber arsenals by making their own rules for how cyberspace should be treated.

Hua said these activities have increased the risk for a potential conflict. She said the cyber espionage conducted by some countries represents an attempt to divert attention from real problems and will not help to create a cooperative international atmosphere.

"China has cooperated in the areas of cyber security and law enforcement with 30 countries, including Britain, Germany and Russia. It has developed an overall mechanism for fighting cyber crime and hacker attacks," she said, adding that China hopes relevant parties will stop lodging accusations and work together to safeguard cyberspace security. 52

AgustaWestland statement

request for information regarding the AW101 contract, received last week, AgustaWestland confirms it is responding to the notice in the spirit of full cooperation with the Indian Ministry of Defence.

AgustaWestland confirmed that its conduct has been fully compliant with the rules which regulate the AW101 helicopters

contract signed with India.

The contract was awarded to AgustaWestland following a comprehensive technical and flight evaluation of competing types performed by the Indian Air Force in accordance with the Defence Procurement Procedures. This evaluation demonstrated that the AW101 was the only aircraft able to fully meet the Indian Air Force's operational requirements, as already confirmed by the Indian authorities in different occasions.

Alexander Kocherscheidt is new MD of Atlas Elektronik

lexander Kocherscheidt has taken over as Managing Director of Atlas Eelektronik. As Chief Financial Officer (CFO), he will be responsible for the Finance Division as well as for the Human Resources, Legal and Compliance Divisions. With a degree in business law, he currently holds the position of CFO at Regional Centre British Islands of ThyssenKrupp Elevator, which has its headquarters in London.



Alexander Kocherscheidt will succeed Dieter Rottsieper, who joined the

Management Board of ThyssenKrupp Marine Systems GmbH.

Thales acquires Visionix and expands avionics portfolio

hales has completed the acquisition of the Visionix helmet mounted display (HMD) and InterSense motion tracking businesses formerly owned by Gentex Corporation. The new company, Thales Visionix, Inc., is operating as a wholly-owned subsidiary of Thales.

This acquisition is a strategic fit that complements Thales' global portfolio of Helmet Mounted Sight and Display systems for rotary and fixed-wing platforms. It gives Thales the ability to offer highly capable HMD technology amidst rigorous budget constraints within the market.

Boeing acquires CPU Tech's microprocessor business

Doeing continued to address its global customers' enduring need to protect warfighters from information-assurance attacks by acquiring CPU Technology Inc.'s Acalis business. Acalis microprocessors contain unique hardware and software that can guard mission-critical onboard systems in Boeing platforms.

"Acalis provides security-on-a-chip that can help defend the manned and unmanned aircraft we build at Boeing today and in the future for customers around the world," said Chris Chadwick, President of Boeing Military Aircraft. "With these processors onboard, warfighters can complete their missions and not be sidelined by malware, cloning and other cyber threats against the aircraft's systems."

Acalis will be integrated into Boeing Military Aircraft's Global Strike division. The Acalis business employs approximately 40 people and is based in Pleasanton, California.

Raytheon, Chemring Group developing naval capability

aytheon Company, acting through its missiles systems business, and Chemring have agreed to develop a naval capability to defend against surface targets, for use on ships ranging in size from small patrol boats to large combatants.

"This initiative combines Chemring's innovative multi-mission launcher, Centurion, with a variety of Raytheon's combat-tested missiles to provide a sea-based, inside-the-horizon defensive system," said Rick Nelson, Vice President of Raytheon Missile Systems' Naval and Area Mission Defense product line. "Our Raytheon-Chemring team will combine a multifunction decoy and missile launcher with world-class missiles and existing ship systems to provide a new mission capability to meet our customers' specific self-defence needs."

Currently in the integration engineering phase, live-fire testing of the new mission defence system is scheduled for mid-2013. Testing is expected to include at least two different missiles in order to establish a multi-mission capacity against manoeuvring surface threats such as fast inshore attack craft.

The solution to counter fast inshore attack craft consists of a variety of Raytheon missiles with ranges matched to the intended target. The missiles will be fired from the Chemring Centurion launcher, with initial target detection, tracking and identification provided by the ship's sensors.

"Our shared goal is to generate a low-cost, effective and versatile solution to increase naval platform protection," said Mark Papworth, Chief Executive of Chemring Group. "Thanks to a layered-defence approach capitalising on the versatility of the Centurion launcher and Raytheon's missiles, users will have a multi-mission capability using a single-launch platform."

Boeing, ADASI sign agreement for UAS

Boeing and Abu Dhabi Autonomous Systems Investments Company (ADASI), a Tawazun subsidiary, signed a teaming agreement for the two companies to address the growing Middle East market for unmanned systems.

Speaking at the International Defence Exhibition and Conference (IDEX) in Abu Dhabi, company representatives said the teaming agreement enables ADASI to provide training, support and marketing services for Boeing's ScanEagle and Integrator unmanned aircraft systems in the United Arab Emirates (UAE), with prospects to expand into the Middle East and North Africa.

"This agreement advances Boeing's strategy of partnering with best-in-industry companies such as ADASI," said Debbie Rub, a Vice President and General Manager in Boeing Military Aircraft. "We plan to continue investing and growing in the UAE and the broader Middle East region in order to support US allies' enduring need for affordable intelligence, surveillance and reconnaissance (ISR) solutions, such as ScanEagle and Integrator."



he Starlite International Training Academy, South Africa's leading helicopter training organisation, has ordered an Elite Evolution S723T FNPT II - the first Elite rotary-wing training simulator sold in Africa. The device will be installed at Starlite's training academy at Mossel Bay Airfield and will be used to enhance helicopter flight training there - a location which, together with Starlite's base at Durban Airport, has already trained over 1,000 helicopter pilots.

Starlite's Managing Director Training and Chief Flying Instructor, Kate Odendaal, spent two days at Elite's headquarters at Dübendorf, Switzerland, to assess the simulator and its performance and then placed the order. The Elite S723T replicates the twin engine Eurocopter AS355 and will have a 3-channel CAVE visual system, dual pilot layout with dynamic control loading on the cyclic and pedals, an original Garmin GNS430 GPS, and a navigation and RealView data base covering all of South Africa with

specific ultra-high resolution airport insets for the airports at Mossel Bay, Durban, Port Elizabeth and George.

Elite's Marketing and Sales Director, René Huddlestone, said: "We were so impressed with Kate Odendaal's professional knowledge about everything to do with helicopters. We have sold fixed wing simulators in Africa but this is the first purchase in that continent of an Elite helicopter simulator, and we are very pleased that it has been ordered by the leading rotary-wing training organisation in South Africa."

Starlite focuses on providing military standard aviation training, offering ab initio and specialised courses to the military, paramilitary, commercial and institutional sectors and continuously updates both the flight and ground school syllabi to meet changing civil and military criteria.

Kate Odendaal, who became Chief Flying Instructor at Starlite in 2009 and now leads a team of 11 rotary-wing instructors and who sits on the board of advisors of the Southern African Women in Aviation and Aerospace group, said of the purchase of the Elite S723T: "Starlite is honoured to be the launch customer for the Elite helicopter simulator in Africa. It is the first EASA, JAA, FAA, SACAA approved FNPT II helicopter simulator to be approved under the new South African Civil Aviation (SACAA) regulations of 2013. "We believe that the twin engine, multicrew, dual EFIS, fully IFR configuration will add significant value to the scope of training that we currently offer.

"I was very impressed with the real feel of the flight controls provided by the dynamic control loading and in particular during simulation of emergencies such as hydraulic failure, autorotations and tail rotor control failures.

Working closely with René Huddlestone and his team at Elite, who expertly interpreted our requirements, resulted in having the custom designed RealView 3D visuals of the areas in which we train developed specifically for our needs, as opposed to using generic views.

"With such an acquisition, Starlite has again positioned itself to deliver the highest standard of training, with added benefits to our diverse clientele list which includes the air forces, armies and police air wings of Southern Africa. We look forward to a long and rewarding relationship with the Elite team."

Quantum displays ExpeditionDI

uantum3D is showcasing its award-winning combat simulator, Expedition DI, for the first time in Abu Dhabi at the International Defence Exhibition and Conference (IDEX) Abu Dhabi. ExpeditionDI is the industry's first self-contained, wearable and fully-immersive close combat infantry simulator training platform designed to deliver a realistic, immersive 3D training experience. It is equipped with a high-resolution head mounted display (HMD) and fully integrated wearable computing pack to respond simultaneously to multiple body and weapon movements, enabling an infantry squad to move through and interact in a virtual environment as they would in a real-world combat situation.

Recoil simulation weapons from Scheubeck

ST Scheubeck from Germany has introduced SST – recoil simulation weapons on a Rauser model. The features include recoil without tube, CO² or air cartridges; no sealing problems; maintenance free; simple reload; manufactured for continu-

ous use; realistic trigger function and electro mechanical charging station.

It has realistic recoil simulation; realistic weapons movement and realistic weapons behaviour.

In 1990, with the sale of PC hard and software as well as audio and video technology, Harry Scheubeck laid the foundations for what is now SST Scheubeck GmbH. The idea of developing and producing training simulators arose in 1992 after a visit to an indoor shooting



range for police training. Since then, SST Scheubeck has developed accurate and modern interactive video combat systems for training the police, military and special forces. In addition to real conditions in shooting training, Scheubeck also facilitates comprehensive recording and evaluation of every single shooter.



Kim Kardashian and Kanye West bypass security at IFK airport

he US Transportation Security Administration (TSA) is investigating a security breach involving celebrities Kim Kardashian and Kanye West at JFK airport, New York City. The two celebrities were allowed through major checkpoints without any security screening, but later were taken off the airplane for additional screening, which delayed the flight by nearly an hour.

According to reports, an excited airline employee took the two celebrities past the major checkpoints at the airport without going through security protocol. A TSA spokesperson said that the two were escorted by the airline employee through a non-public area in order to provide expedited access to their domestic flight. "In doing so, the airline employee violated security protocols by permitting the travellers to bypass the TSA security checkpoint." Bypassing of security checkpoints entirely is not permitted.

The agency statement continued: "TSA officials learned of the violation and conducted a private screening of the two passengers in the area of the jetway. The passengers were cleared to board their flight, which departed after a delay of approximately 50 minutes. TSA is actively investigating the incident."

Kim, who is a reality star, is expecting her first child with boyfriend West in July, and was flying home with the rapper after a trip to Rio de Janeiro, Brazil, where they enjoyed the city's annual Carnival celebration. 📴

Security threats to all-girl band

n December 24, Aneeka Khalid, Farah Deeba and Noma Nazir, all Class 10 students, performed in a music show Battle of Bands at the indoor stadium in Srinagar. However, the band - Pragaash (towards light)— had to quit the band after the grand mufti, Mufti Bashi-u-Din issued a fatwa asking them to desist from playing music. Besides, there were adverse comments on Facebook and the band felt it was 'threatening'.

This created an uproar forcing the police to register a case under Section 66-A of IT Act and Section 506 RPC (criminal intimidation) in the Rajbagh police station in Srinagar against alleged online abusers who issued threats to the girls on the Facebook page.

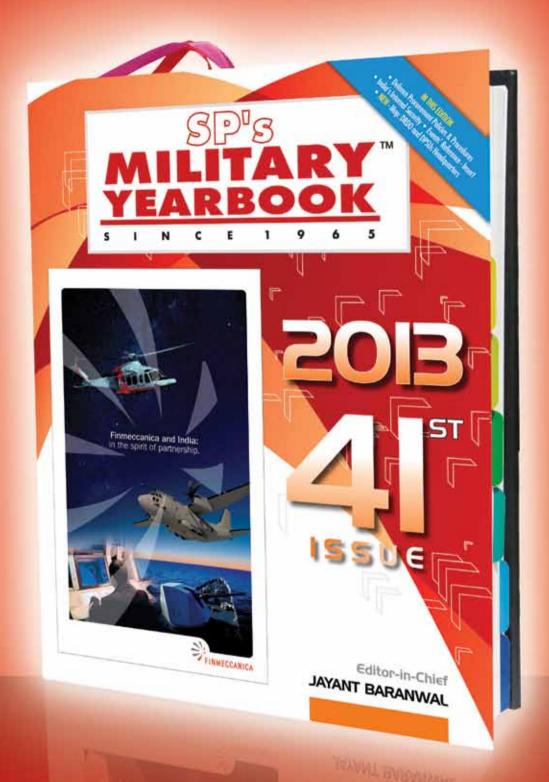
Even though Jammu and Kashmir's Chief Minister Omar Abdullah came out in strong support of Pragaash and offered security to the girls if they wished to pursue their music career, the troubled families of band members have reportedly gone into hiding. The family of one of the band members said the girls never wanted to pursue music as a full-time career. The People's Democratic Party leader Mehbooba Mufti described the whole issue as "avoidable, unnecessary controversy". SP

Hotel room doors, are they safe enough?

In the US, there is a nationwide fear that hotel room doors are highly vulnerable to security breaches. Hotel guests who think they have locked the hotel door and assume it to be safe are totally wrong as thieves have invented a small, simple device that can unlock hotel doors at some of the most popular chains. The device is so small, thieves can hide it in a magic marker.

According to a Forbes report, Janet Wolf's hotel room in Hyatt in Houston was robbed and there was no sign of a forced door or a picked lock.

The room's lock hadn't been picked, and hadn't been opened with any key. The hotel management confirmed that none of the housekeeping staff had opened the door as per their records. Instead, it had been hacked with a digital tool that effortlessly triggered its opening mechanism in seconds. The burglary was one of a string of similar thefts that hit the Hyatt in September 2012.



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