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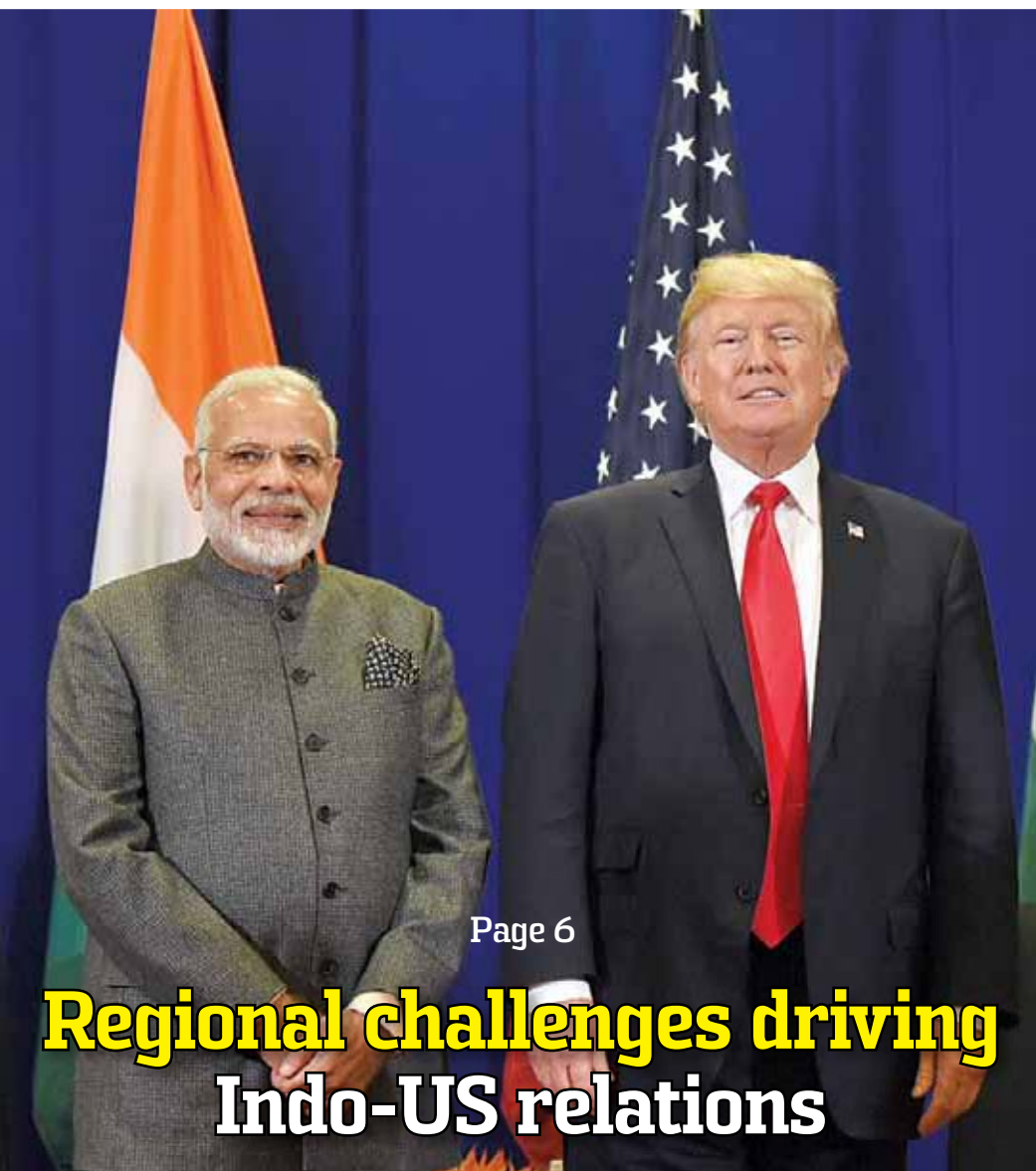


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Narendra Modi, Hon'ble Prime Minister of India (*message received in 2014)



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[**SP's @ 53** PURSUING EXCELLENCE OVER FIVE DECADES SINCE 1964]

4th JWGACTC meeting in India

The 4th meeting of the Joint Working Group on Aircraft Carrier Technology Co-operation (JWGACTC), constituted under the auspices of the Indo-US Defence Trade and Technology Initiative, was organised in India from October 29, to November 3, 2017. A 13-member US delegation, headed by Rear Admiral Brian Antonio, Program Executive Officer Aircraft Carriers, visited the Shore Based Test Facility at Goa, Naval Base at Karwar, INS Vikramaditya at sea, Mazagaon Dock Limited and Headquarters Western Naval Command.

The concluding session of the Joint Working Group Meeting was held on November 3, 2017, at New Delhi and was co-chaired by Vice Admiral D.M. Deshpande, Controller Warship Production and



Acquisition, and Rear Admiral Brian Antonio, Programme Executive Officer Aircraft Carriers. During the meeting, both sides acknowledged the significant achievements of the Joint Working Group so far and discussed plans for future cooperation under various aspects of aircraft carrier technology such as design optimisation, construction philosophy, trials procedure and project management. A joint statement was also signed on November 3, 2017.

The meeting marked yet another significant landmark in the ongoing cooperation between the two countries in the field of aircraft carrier technology. The two sides agreed to meet in the US early next year. **SP**



Cover:

Prime Minister Narendra Modi meeting President Donald Trump, in Manila, Philippines, on November 13, 2017

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Emerging quad of democracies amid China's rising power

Prime Minister Narendra Modi arrived in Manila on November 12 on a three-day visit to the Philippines for the 15th India-Association of Southeast Asian Nations (ASEAN) meet and the 12th East Asia Summit. On the side lines of the scheduled meetings, an important agreement started to take place which signaled the return of the Quad. It implied that leaders from like minded democracies to include India, Australia, Japan and the US met on November 12 and agreed that "a free, open, prosperous and inclusive" Indo-Pacific served long-term global interests, giving impetus to an emerging quad of democracies amid China's rising military and economic power. US is a key partner in this Quad and thus the lead article is on the march of Indo-US relations where Dr Vivek Lall, Chief Executive, US and International Strategic Development, General Atomics, gives an overview of them and comes to a conclusion that, "both countries have discovered common ground and shared concerns, which have propelled them towards discarding old mistrusts and misconceptions, and adopting methods to establish renewed faith and confidence in each other."

Prime Minister of Italy, Paolo Gentiloni visited India from October 29 to 30 which indicates a thaw in the India-Italy relations due to the arrest of two Italian marines in 2012 who killed two Indian fishermen from Kerala in Indian maritime boundary. The Modi-Gentiloni summit resulted in clearing the path for resumption of defence cooperation between India and Italy. With this view the two Prime Ministers agreed to enhance bilateral defence cooperation for which a structured dialogue will be held in Rome or New Delhi in the first half of next year writes Ranjit Kumar. The Prime Ministers also okayed the Italian proposal to allow the defence companies from both the countries to meet and discuss areas of cooperation. Significantly, the Italian Prime Minister also supported India's intensified engagement with Wassenaar Arrangement, the Australia Group, and the Nuclear Suppliers' Group (NSG) which strengthens global non-proliferation efforts.

Media has reported that the Indian Army is going in for equipping infantry soldiers with a world-class assault rifle, while non-infantry soldiers would get a cheaper, 'less effective,' indigenous rifle. Lt General P.C. Katoch (Retd) writes that this is quite a logical move and should be taken forward.

Chabahar is Iran's only oceanic port which is India's gateway to Afghanistan as Pakistan does not allow India land transit facilities to Afghanistan. It is now being used by India to send supplies to Afghanistan.

The growing ISIS drone threat led the US to launch a \$700 million crash programme in September 2017 to thwart the menace. A 13-member US delegation, headed by Rear Admiral Brian Antonio, Programme Executive Officer Aircraft Carriers visited India for the 4th meeting of the Joint Working Group on Aircraft Carrier Technology Co-operation, constituted under the auspices of the Indo-US Defence Trade and Technology Initiative, held from October 29 to November 3, 2017. The concluding session of the Joint Working Group Meeting was held on November 3, 2017, at New Delhi and was co-chaired by Vice Admiral D.M. Deshpande, Controller Warship Production and Acquisition, and Rear Admiral Brian Antonio.

Global and regional news just about wraps this issue.

Happy reading!

Jayant Baranwal
Publisher & Editor-in-Chief

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DR VIVEK LALL
GENERAL ATOMICS

Regional challenges driving Indo-US relations

Both countries have discovered common ground and shared concerns, which have propelled them towards discarding old mistrusts and misconceptions, and adopting methods to establish renewed faith and confidence in each other



Prime Minister Narendra Modi and the President Donald Trump at the Joint Press Statement, at White House, in Washington DC, on June 26, 2017

Both countries have discovered common ground and shared concerns, which have propelled them towards discarding old mistrusts and misconceptions, and adopting methods to establish renewed faith and confidence in each other.

From a neutral standpoint, the relations between the US and India have always been influenced by the regional hegemonies of South-East Asia. While the US has sought to protect and assert its

influence in the region since the early 1950s to contain the spread of Communism, India has constructed its global perspectives built around the more immediate threats across its borders from Pakistan and China. However, since the demise of the Soviet era, the rapid intermingling of economies built on fast flowing trade, and the emergence of China has added new constructs to the US-India equation, albeit with new challenges. Since the dawn of the new millennium, both countries have discovered common ground and

shared concerns, which have propelled them towards discarding old mistrusts and misconceptions, and adopting methods to establish renewed faith and confidence in each other.

The increased frequency of exchanging visits in the recent past by the respective Heads of State and top government officials signals the intent from both sides. The US interest in the region is only magnified by its rising concerns over China's purposes and North Korean military ventures. Looking at India as a stabilizing force, US think-tanks have sounded an 'Engage India' clarion. The Diplomat recently reported that, "US Secretary of Defence Ashton Carter's visit to India coincided with the statement by Vice Admiral Joseph P. Aucoin, Commander, US Seventh Fleet, that the US will look at keeping the sea lanes of communication open and also keep a check on North Korea." Aucoin stated, "The best and the brightest are being shifted to this part of the world. Almost 60 percent of our submarines are in the Indo-Asia-Pacific region. Within the next couple of years, 60 percent of our surface ships will be here too North Korea is a threat. Our number one concern is to protect Japan, South Korea and our country."

Ashton Carter, while as Under Secretary of Defence for Acquisition, Technology and Logistics, had managed to convince the Indians for the Defence Technology and Trade Initiative (DTTI) in 2012. During his visit in June 2015, both the countries signed the Framework for the US-India Defence Relationship. Carter met the then Defence Minister Parrikar four times in the space of a single year. Under the aegis of DTTI, the US-India defence collaboration initiative oversaw the emergence of various joint working groups. The Jet Engine Technology Joint Working Group (JETJWG) and the Joint Working Group on Aircraft Carrier Technology Cooperation (JWGACTC) allowed Indian officials at critical positions to engage directly. Parrikar and Carter also initiated two new DTTI pathfinder projects on Digital Helmet Mounted Displays and the Joint Biological Tactical Detection System, during the progress review of DTTI while agreeing to cooperate in more avenues. The US Embassy issued a statement to this effect, "They agreed to work towards greater cooperation in fields of cutting-edge defence technologies, including deepening consultations on aircraft carrier design and operations, and jet engine technology. They noted the understanding reached to conclude an information exchange annex (IEA) to enhance data and information sharing specific to aircraft carriers."

Under the DTTI arrangement, both sides have mutually agreed to extend collaboration in littoral maritime security and Maritime Domain Awareness (MDA). This arrangement also includes a "white shipping agreement" for data sharing on commercial shipping traffic in the Indian Ocean region (IOR), explore procedures to develop joint working groups on submarine safety and anti-submarine warfare and further their partnership at an international level. Importantly, the two sides also shared a joint statement regarding maintenance of freedom of navigation and over flight in the IOR, including the South China Sea, and working towards establishing a rules-based order and regional security architecture in the Asia-Pacific and Indian Ocean. Many other project agreements in the area of science and technology were also concluded.

In order to fruitfully gain from the recent military - diplomatic exchanges with India, the US commissioned the Logistics Support Agreement (LSA) as part of military cooperation, under the umbrella of the Communication Inter-operability and Security Memorandum of Agreement (CISMOA) on transfer of technol-

ogy, and the Basic Exchange and Cooperation Agreement (BECA) for sharing geospatial intelligence - mapping data and imagery. This effort has been on for the past decade and on the lips of every Indo-American inter-government meet.

There are also various realities that have emerged as truths from the ashes of the political burn out over Syria, North Korea and the Chinese angle. There is no denying that the Chinese-Pakistan-North Korea nuclear axis poses the most potent threat to peace in the modern world. Thomas Reed, a former US Air Force Secretary, addressed this in his book 'The Nuclear Express: A Political History of the Bomb and its Proliferation,' that China had deliberately proliferated nuclear technology to unstable regimes, particularly Pakistan. He stated to US News that under Deng Xiaoping, China decided to proliferate nuclear technology to communists and radical Muslims in the third world based on the strategy that if the west started getting nuked by Muslim terrorists or another communist country without Chinese fingerprints, it would be good for China. Lately, 60 percent of US Naval assets are being relocated to Asia-Pacific, since China has been demonstrating aggressive expansionist intentions to control and blockade the South China Sea, with the ultimate objective to position SSBNs in the Pacific via the South China Sea.

To rebut the rhetoric, the US Asia-Pacific Rebalance should also focus on the China-Pakistani nexus stretching through Gwadar, albeit threatening both India and Afghanistan.

Though this may be a late starter, but from the Indian standpoint, there are many apprehensions yet to be addressed. Continuing the agendas of past US Governments, Ashton Carter brought up the "US Rebalance to Asia and the Pacific" policy and India's recent 'Act East' policy. However, it needs to be said that while the US dialogue reiterates China and North Korea; India's strategic anxieties, concentrated on her western and north-western flanks are less focused upon. The Trump administrations recent crackdown on the Pakistani terrorist factions and acknowledgement of state support to regional subversive organisations signals the long-expected turn-around. This is probably the first of many confidence - building measures which will strengthen the Indo-American strategic partnership. Secretary Mattis's meetings with the Indian top echelons in the US and his recent outstanding visit to India will surely address these concerns.

Yet another reality that both the countries have to contend with are optimistic agreements being let down by bureaucracy on both sides. The DTTI announcements pronounced no holds barred cooperation by diplomats on both sides, but nothing substantial has been achieved yet. Equipment sought through the Foreign Military Sales (FMS) channel is still to materialize to its fullest potential. On the Indian side, the Ministry of Defence will have to ensure that acquisition cases are progressed rapidly. The issue of the Indian MoD Defence Procurement Procedure (DPP) 2016 after years of deliberations needs to address standards for choosing strategic partner.

The spark in Indo-American relations today is the rapport between the two charismatic heads of state. After speculations at various levels by US political analysts that India was low priority for the Trump administration, further edified by the delay in the first meeting (five months), the status quo today is anything but. Prime Minister Modi's efforts with the Obama administration, having invested enormous political capital and effort over the last three years, were assuaged by the high level of official and personal interactions between the two leaders. Almost all political pundits have termed Prime Minister Modi's visit as an unqualified success. Numerous substantial deci-

The increased frequency of exchanging visits in the recent past by the respective Heads of State and top government officials signals the intent from both sides



US Secretary of Defence Jim Mattis calls on the Prime Minister Narendra Modi, in Washington DC on June 26, 2017

sions were taken during the visit. The major takeaway in functional terms was the public rebuke to Pakistan and the declaration of Syed Salahuddin (the leader the Kashmiri militant outfit Hizb-ul-Mujahideen) as a Specially Designated Global Terrorist. Further, Pakistan has been mentioned repeatedly in the Joint Statement issued at the end of the visit, to ensure that its territory is not used to launch terror strikes against other countries, and to expeditiously bring to justice the perpetrators of the 26/11 Mumbai, Pathankot, and other cross-border terrorist attacks perpetrated by Pakistan-based groups. The Joint Statement also named terrorist groups such as Lashkar-e-Taiba, Jaish-e-Mohammed and others, and urged the international community to take united, stringent action against them.

Understandably, defence is a major area of cooperation between India and the US, with the US being the second largest supplier of defence equipment to India, after Russia. The acquisition of Guardian aircraft is high on the immediate agenda. Also, news reports have stated about a possible tie-up between Lockheed Martin and the Tata group to indigenise and manufacture F16 aircraft in India. This will prove to be an important incentive to the 'Make in India' initiative and can transform the landscape of the Indian aerospace industry. Trade has also formed an important keystone of this bridge. President Trump, in his Statement to the Press,

referred to a fair and reciprocal trading partnership between the two countries. In a response to Trump's worries about creating jobs in US, Prime Minister Modi mentioned in an op-ed in the *Wall Street*

Journal (WSJ), that Indian investments totalling \$15 billion in US will create jobs in 35 US States, including the states from where President Trump received massive support in his election campaign. Both sides discussed the sale of approximately 100 civil airliners to an Indian airline, export of natural gas, enhancing bilateral partnership on issues including Afghanistan, North Korea, Middle East, Pakistan, Indo-Pacific Region, India's membership in export control agreements and UN Security Council, cyber space, Malabar naval exercises, reaffirmation of India's designation as a Major Defence Partner, support to United States to join as an Observer in the Indian Ocean Naval Symposium, etc.

The trial-by-fire of the commitments promised by the two countries can be assessed only by positive actions. Good intentions aside, it is prime time for both sides to start delivering on the many fronts opened. With strong leaderships and robust economies, both the countries have only to overcome their own inertias and set the ball rolling for fostering peace, harmony, and financial wellbeing in the Indo-Pacific. **SP**

The writer is Chief Executive, US and International Strategic Development, General Atomics.

The two sides also shared a joint statement regarding maintenance of freedom of navigation and over flight in the IOR, including the South China Sea, and working towards establishing a rules-based order and regional security architecture in the Asia – Pacific and Indian Ocean

India-Italy to re-engage in defence



Prime Minister Narendra Modi with the Prime Minister of the Republic of Italy, Paolo Gentiloni in New Delhi on October 30, 2017

[By **Ranjit Kumar**]

The first Prime Ministerial visit from Italy in a decade was intended to mend the relations with an emerging Asian giant and a rising economic power, which is also set to be the biggest defence market in the coming years. The visit of Prime Minister Paolo Gentiloni from October 29 to 30 has melted the ice in the frozen India-Italy relations. The arrest of two Italian marines in 2012 who killed two Indian fishermen from Kerala in Indian maritime boundary, led to unnecessary diplomatic tensions and bilateral relations suffered a lot. The domestic Kerala politics and local sensitivities besides the judicial processes prevented the Central government from helping the Italian government to help secure the

release of the two Italian marines, who are now in Italy on Supreme Court directives.

Now that the dust is settled, it was high time for Italy and India to let the bitterness in relations evaporate, and give a fresh start to bilateral relations, with which India had friendly relations. The Modi-Gentiloni summit resulted in clearing the path for resumption of defence cooperation between India and Italy. With this view the two Prime Ministers agreed to enhance bilateral defence cooperation for which a structured dialogue will be held in Rome or New Delhi in the first half of next year. The Prime Ministers also okayed the Italian proposal to allow the defence companies from both the countries to meet and discuss areas of cooperation. Prime Minister Gentiloni underlined Italy's industrial expertise in this sector, and the renewed interest of Italian

industry in participating in defence manufacturing under the 'Make in India' initiative. The two sides will also discuss in the appropriate Working Group the draft Technical Agreement on Sharing of White Shipping Information between the Navies. The forthcoming structured dialogues is now expected to look into the issue of Finmeccanica-India relations. Finmeccanica had last year threatened to review the ongoing cooperation with Indian armed forces.

Italy being a leading member of the powerful 28 nation block of European Union, had indeed played a role in adversely impacting India EU relations. As a result India and EU could not hold the annual India EU summits for two consecutive years. The marines issue was followed by the Agusta Westland VVIP helicopters kickback scandal which led to the blacklisting of the parent firm of the VVIP chopper, the Finmeccanica. This Italian defence behemoth has substantial defence cooperation with India and scuttling of relations with the firm has led to cancellation of all future deals. The Finmeccanica is engaged with Indian armed forces in many critical areas and had emerged as a major player in the Indian defence market. Finmeccanica has supplied to Indian Naval ships 76 mm and 127 mm guns, besides spare parts for Sea Hawk Helicopters along with radars on several warships and helicopters. In view of India's ambitious acquisition programmes, Finmeccanica had termed India as an "interesting market. Last year in May the company had hoped that an agreed and transparent solution was found as soon as possible. The company had then warned it will not refrain from assessing the situation given the limited size of the ongoing business in the country. In spite of this warning the then Defence Minister Manohar Parrikar had said that the government had decided to cancel all ongoing tenders for defence equipment won by Finmeccanica as a precursor to blacklisting of the firm, which is being investigated for bribery in the Rs 3600 crores VVIP choppers deal. He had also declared that whenever there is a capital procurement of Finmeccanica and its subsidiaries, all Requests for Proposals will be closed.

Thus India effectively kept out the Finmeccanica from all Indian defence tenders, which is hurting the company's financial interests very much. Italy now wants to restore the era of cooperation in the pre- chopper scandals days. It is learnt that the Italian Prime Minister Gentiloni had raised the issue of blacklisting of Italian firms from Indian defence contracts during one to one talks with Prime Minister Narendra Modi. He is reported to have assured full cooperation with the Indian agencies in the investigation of the choppers deal.

Indian Government also realises the hurt caused to the Indian armed forces because of immediate blacklisting of the foreign arms majors, involved in kickbacks for supplying defence equipments to Indian armed forces. Hence the Modi Government took the initiative of inviting the Italian Prime Minister and put the relations on track. The visit turned out to be



The Prime Minister of the Republic of Italy Paolo Gentiloni meeting the President, Ram Nath Kovind at Rashtrapati Bhavan in New Delhi

After signing six agreements of cooperation, the two prime ministers underlined the historical importance of Gentiloni's visit to New Delhi, which not only sets a new momentum in bilateral ties but also seeks to revitalise ongoing engagements between the two countries.

more of a goodwill than with the intent of any substantial discussion on issues of cooperation of major interest to India. Informing about the visit of the Italian Prime Minister the Indian External Affairs Ministry Spokesperson Raveesh Kumar had already clarified, "the visit is aimed at strengthening the bilateral political and economic relations between the two countries."

Hence, mindful of the rising menace of terrorism and cyber crimes, the Italian and Indian Prime Ministers resolved to fight terrorism and violent extremism in all their forms and manifestations. They condemned in the strongest possible terms recent terror

attacks in India, in Europe and elsewhere and emphasised the need for strengthening international partnership and concerted action by the international community in addressing the menace of terrorism.

Indirectly hitting at China and Pakistan, India and Italy emphasised the need for effective implementation of existing international commitments on countering terrorism including UN Global Countering Terrorism Strategy, UNSC resolutions and targeted sanctions relating to terrorism. According to the Joint Statement, in this context, the leaders also called upon all UN member countries to designate terrorist entities in line with the relevant UNSC Resolutions. Both leaders also called for an early conclusion of negotiations and adoption of the Comprehensive Convention on International Terrorism in the UN, as an instrument that would reinforce the message that no cause or grievance justifies terrorism. They also called upon all countries to work towards rooting out terrorist safe havens and their infrastructure and networks and halting cross-border movement of terrorists.

After signing six agreements of cooperation, the two prime ministers underlined the historical importance of Gentiloni's visit to New Delhi, which not only sets a new momentum in bilateral ties but also seeks to revitalise ongoing engagements between the two countries.

The Joint Statement said that the two leaders agreed on the need for a closer partnership between India and Italy based on shared principles and values of democracy, freedom, rule of law and respect for human rights and territorial integrity of States. The two leaders expressed their shared desire to work together to support a rules-based international system that upholds agreed international norms, global peace and stability, and encourages inclusive growth and sustainable development in all parts of the interconnected world. They welcomed the growing India-Italy convergence on contemporary global issues and agreed to enhance bilateral cooperation in multilateral forums. Significantly, the Italian Prime Minister also supported India's intensified engagement with Wassenaar Arrangement, the Australia Group, and the Nuclear Suppliers' Group (NSG) which strengthens global non-proliferation efforts. The visit thus ended in a happy note with Italy getting the promise from India to re-engage in defence arena. **SP**

The writer is a Strategic Analyst.



LT GENERAL
PC. KATOCH (RETD)

Different rifle for infantry and others?



A file photograph of Indian Army soldiers with the 99th Mountain Brigade's 2nd Battalion, 5th Curkha Rifles, participating in an exercise with the US Army's 1st Brigade Combat Team, 82nd Airborne Division in a remote location in the US.

Coing by media reports, the Army is going in for equipping infantry soldiers with a world-class assault rifle, while non-infantry soldiers would get a cheaper, 'less effective', indigenous rifle. The saga of new assault rifles actually began in 1980 when 17 x 5.56mm rifles from 11 countries were imported by Ministry of Defence (MoD) to equip three Para Commando battalions and three Para Battalions. Despite successful trials, the red tape and mafia blocked imports, giving these 17 weapons to Defence Research and Development Organisation (DRDO) who took 15 years to produce the 5.56 INSAS rifle that was nowhere close to top 10 assault rifles of the world.

The Indian Peace Keeping Force (IPKF) went to Sri Lanka in

1987 armed with the unwieldy 7.62 SLR rifles battling the Liberation Tigers of Tamil Eelam (LTTE) armed with AK-47 assault rifles. Eventually, Army had to import 1,00,000 AK-47 rifles (then costing only \$300 apiece) to give 100 per infantry battalion in the IPKF. It may be recalled that the global tender floated in 2011 (with MoD approval) for new generation assault rifles with interchangeable barrels for conventional warfare and CI operations was finally scrapped in June 2015 despite being termed "Priority I" for the 382 infantry battalions. Reputed foreign firms participated in the trials for the double-barrel rifles, Army having taken conscience decision to go for interchangeable barrels, which had MoD approval. The plan was direct acquisition of 65,000 new generation rifles costing ₹4,848 crore to equip



Indian Army Para Commandos with Israel made Tavor assault rifles

120 infantry battalions. OFB was to then manufacture over 1,13,000 such rifles through joint venture (JV) with the foreign vendor providing ToT. The rifle was to weigh around 3.5 kgs with advanced night-vision, holographic reflex sights, laser designators, detachable under-barrel grenade launchers etc. It is not that the type of assault rifle the Army sought was not available globally, but what caused the tender to be scrapped was the DRDO coming up with the 'Improved 5.56 INSAS' dubbed Excalibur, which had been under development past several years.

After the request for proposal (RFP) for the assault rifles was scrapped by MoD in June 2015, the Army in September 2016 relaunched its global hunt for assault rifles after similar bids over last decade were shelved on various grounds including corruption. What is being touted in the media is that the army had planned to procure some 800,000 state-of-the-art assault rifles from the global market, each costing about ₹2,00,000; that would have cost about ₹16,000 crore – significantly more than what the army can afford. But this is grossly incorrect since Army had all along planned to procure around 2,00,000 assault rifles, not 8,00,000 being reported now. In fact, only 65,000 (costing ₹4,848 crore) were to be imported and 1,13,000 were to be manufactured by OFB. Had this been pursued in 2011, Army's 140 infantry battalions would have already been equipped and balance in the process through a JV.

The media has quoted the Army Chief having decided to now buy only 2,50,000 rifles from the international market, "and issue them only to combat infantrymen – the frontline foot soldiers who are directly in contact with the enemy". The remaining 550,000 army soldiers who are authorised rifles but serve mainly in non-infantry arms and services will get a new indigenous rifle, as per media reports; the army will choose between the INSAS-1C, designed by DRDO, and the 'Ghatak', designed by Ordnance Factory, Kirkee. If the media is to be believed, even within an infantry battalion, not every one of its 800-odd soldiers will be issued a 7.62 mm assault rifle. These will go only to soldiers who can expect to be in direct contact with the enemy: its four rifle companies and the commando platoon, totaling up to about 565 persons per battalion. The remaining personnel would be issued other weapons such as 5.56 mm

carbines and rifles. At 565 rifles for each of these infantry units, the total adds up to 2,50,000 rifles. At ₹2,00,000 for each foreign assault rifle, equipping these 250,000 infantrymen will cost ₹5,000 crore. For the remaining 5,50,000 non-infantry soldiers, their indigenous rifles – INSAS-1C or the Ghatak rifle, whichever is chosen.

This is some weird mathematics given the fact that Army went on to combatise the non-combatant employees (NCEs) decades back realizing that every man jack will need to fight in war. The Ghatak and INSAS 1C both remain "works in progress". How long the "work in progress" will be is not known though rumoured to be small, but it certainly will be shorter than the procurement process for importing the 2,50,000 "world class" assault rifles. More significantly, the "work in progress" is not really material. What is relevant here is that they should clear the trials, for which the standards should not be diluted to dump these personal weapons on to what are ironically not being considered as frontline foot soldiers, even creating something like a class system of rifles within an infantry battalion. The question here is whether we can really make a strict division between the conventional war and counter insurgency where hybrid war that we have

been fighting past decades includes all forms of warfare including conventional and irregular warfare, terrorism and insurgencies included. It is a borderless war with frontlines not clearly defined. Having two different type of rifles even within an infantry battalion catering for only 565 persons as frontline soldiers equipped with "world-class" assault rifles indicates grossly muddled thinking. The record of the DRDO-OFB in providing state-of-the-art small arms to the Army has been atrocious, the versions of INSAS provided so far being sub-standard compared to global counterparts in this category of weapons. The present ongoing exercise appears to be to somehow push the INSAS-1C to the 550,000 army soldiers not being labeled frontline soldiers under the pretext of the requirement being of a cheaper, "less effective", indigenous rifle. One can also expect that the import of the so called "world-class" imported 200,000 assault rifles will be suitably stalled, while the INSAS 1-C gets fielded, followed by the question why shouldn't the balance infantrymen get the same weapon. This is the trap that must be avoided. In an article published in July 2017, Debalina Ghoshal in her article titled 'Why Indian Army's hunt for assault rifle under Make in India is no good' quotes a veteran Army Brigadier and defence analyst Rahul Bhonsle saying, "DRDO projects will remain technology demonstrators given that they do not provide confidence to the customer, the Indian armed forces, that these weapon systems are modern state-of-the-art". The Army Chief maybe having his own reason for wanting to import 250,000 assault rifles. However, the original plan of importing only 65,000 and balance equipping being done through JV with foreign partner should be as good an option – saving much money. More than 1,000 foreign firms from 40 countries want to enter the defence sector in India. Prudence would demand that strategic partnership with private companies in India will be a better and faster option, the DRDO-OFB having managed to even scuttle import of carbines and light machine guns for the Army, while themselves being unable to produce anything worthwhile in this category. **SP**

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

Defence Minister receives sacred soil of two martyred soldiers of WWI

Delegation of Garhwal Rifles Regimental Centre recently returned with the sacred soil from the resting place of two soldiers of 39 Garhwal Rifles. The urn was brought from Laventie, France, and will be carried to the Garhwal Rifles Regimental Centre at Landsdowne. The two urns containing the sacred soil were handed over to the Defence Minister Nirmala Sitharaman by the delegation in a simple and solemn ceremony.

On November 12, 2017, mortal remains of the two soldiers were sent on their final journey with full military honours at Military Cemetery, Laventie, France. A delegation comprising of Commandant and Subedar Major, two bagpipers from the Garhwal Rifles Regimental Center and Colonel Nitin Negi, grandson of late Naik Darwan Singh Negi, Victoria Cross, were present on the occasion. On behalf of the Chief of the Army Staff, homage was paid to the soldiers of Indian Meerut Division at Nueve Chapelle War Memorial by laying of wreaths by Brigadier Indrajit Chatterjee, Commandant and Subedar Major Trilok Singh Negi.

On September 20, 2016, during an excavation work on southern side of the village of Richebourg near Laventie Military Cemetery approximately 230 km away from Paris two human remains were found and identified to be of soldiers of 39th Royal Garhwal Rifles. The office of Commonwealth War Graves Commission in consultation with the French Government and Indian Embassy in France



decided to hold ceremony to rest them along with their comrades at Laventie Military Cemetery, with full military honors during the annual memorial service that is held to commemorate the Indian soldiers who were martyred in action in France and Belgium.

During WWI, the Garhwal Brigade comprising of 1st/39th and 2nd/39th Royal Garhwal showed unparalleled bravery in treacherous trenches of France and Flanders. Fighting shoulder to shoulder with British soldiers the Gharwal Brigade earned six Battle Honours and two Victoria Cross in France and Flanders Theatre. **SP**

Indo-Bangladesh Exercise 'Sampriti 2017' comes to an end

Closing ceremony for the seventh Indo-Bangladesh joint exercise Sampriti was held at Counter Insurgency and Jungle Warfare School, Vairengte in Mizoram on November 17, 2017. Exercise Sampriti is an important bilateral defence cooperation endeavour between India and Bangladesh. Major General Md Moshfequr Rahman of Bangladesh Army and Major General M.S. Ghura of the Indian Army presided over the ceremony.

The exercise is aimed at strengthening and broadening the aspects of interoperability and cooperation between the Indian and Bangladesh Armies while working together in a counter-insurgency and counter-terrorism environment under the UN mandate. Exercise was conducted under the aegis of the Red Horns Division of Gajraj Corps and had two distinct components which included Command Post Exercise (CPX) and Field Training Exercise (FTX).

Troops from 38 East Bengal Regiment of Bangladesh Army and Mahar Regiment of Indian Army represented respective

Armies during the exercise. The CPX was conducted at recently created Joint Training Node, Umroi, Meghalaya from November 6 to 11, 2017, over six days whereas FTX was conducted at Counter Insurgency and Jungle Warfare School, Vairengte, Mizoram from November 6, over a period of 13 days. The CPX focused on planning of counter-terrorist operations whereas during FTX focus was on company/platoon level tactical drills. A tactical exercise was also conducted during the FTX.

Both contingents displayed great enthusiasm and professionalism while carrying out joint drills and skill displays during the conduct of exercise and it was a great learning experience for both the contingents. The troops have not only learnt about each other's organisation, but have also identified best practices. The exercise was a great success and has taught valuable lessons to the troops of both the countries. Joint Exercises between Armies across the world are increasingly becoming an important aspect of the bilateral relations. Exercise Sampriti between the armies of India and Bangladesh was not only symbolic of their maturing relationship but will also built trust and confidence between both armies. **SP**



Navika Sagar Parikrama – INSV Tarini departs from Fremantle

The Indian Naval Sailing Vessel (INSV) Tarini left Fremantle, Australia on November 5, 2017, for its onwards journey to Lyttleton, New Zealand. INSV Tarini had arrived at Fremantle on October 23, 2017, after completion of first leg of its maiden voyage to circumnavigate the globe. This historic circumnavigation attempt by an all-women crew is being led by Lieutenant Commander Vartika Joshi, and the crew comprises Lieutenant Commanders Pratibha Jamwal, P. Swathi, and Lieutenants S. Vijaya Devi, B. Aishwarya and Payal Gupta.

The crew of INSV Tarini was officially welcomed to Western Australia (WA) by Tourism, Defence Issues and Citizenship and Multicultural Interests Minister Paul Papalia and Women's Interests Minister Simone McGurk on November 1, 2017. WA Ministers were accompanied by two Indian-origin members of WA Parliament, Yaz Mubarakai and Kevin Michel. Federal MPs from Western Australia, Madeleine King and Dr Anne Aly visited the vessel INSV Tarini.

Chief of Royal Australian Navy Vice Admiral Tim Barrett also visited the vessel on November 1 to welcome the crew. He also handed over a personal message from Australian Minister for Defence Marise Payne for the crew. The crew had several engagements during its stay in Fremantle, including call-on meetings with Governor of Western Australia, Kerry Sanderson AC and Deputy Mayor of City of Fremantle Cr Ingrid Waltham. President of WA Legislative Council Kate Doust also hosted the crew at WA Parliament for an interaction with female MPs from all major parties.



The INSV Tarini crew had an opportunity to interact with a wide range of stakeholders during the welcome reception hosted by the Consulate on October 28, 2017, which was attended by about 100 distinguished guests, including members of WA Parliament, state officials, businessmen, academicians, consular corps, leaders from Indian community and media persons.

The crew of INSV Tarini also had an opportunity to interact with strategic thinkers and academia during a presentation and reception event hosted by Perth US-Asia Centre, leading think tank focusing on geopolitical issues based in the University of Western Australia, on October 31, 2017.

The visit of INSV Tarini to Fremantle was covered widely in Australian print and electronic media, and ethnic media. **SP**

Lt General Bipin Puri is DG Armed Forces Medical Service

Lt General Bipin Puri assumed the apex appointment of Director General Armed Forces Medical Service (DGAFMS) on November 1, 2017.

An alumnus of the Armed Forces Medical College, Pune, the General Officer was commissioned in Indian Army (AMC) on March 30, 1979. He did his Post Graduation in Gen Surg in 1985, M. Ch in (PaedSurg) from PGI Chandigarh in 1993 and Fellowship in Paediatric Urology at the Birmingham Children's Hospital (UK) in 1997.

A renowned paediatric surgeon, the General Officer has pioneered the NUSS Procedure for Pectus Excavatum deformity in India. For his contribution towards field of Paediatric Surgery, he was honoured with the Ethicon Travelling fellowship award for 2005 by the Indian Association of Paediatric Surgeons. For his excellence in medical profession, the General Officer has been awarded Double Helical's National Health Awards-2017 by Indian Medical Association.

The General Officer has commanded Command Hospital (Northern Command), Udhampur and 155 Base Hospital, Tejjpur. He has also served MG (Med) HQ Northern Command at Udham-



pur, Director General (Org & Pers) in the office of DGAFMS, Director General Medical Service (Navy) and Director General Medical Service (Army) from June 1 to October 31, 2017, before taking over as DGAFMS.

For his distinguished service, he has awarded GOC-in-C Commendation in 2010, Chief of the Army Staff Commendation twice (2001 & 2012). He was appointed as President's Honorary Surgeon (PHS) on June 1, 2016. He was conferred the VishishtSeva Medal on January 26, 2017. **SP**

INS Sarvekshak reaches Dar-es-Salaam, Tanzania

In an initiative to bolster bilateral relations with friendly foreign countries and navies in the Indian Ocean region, INS Sarvekshak, a hydrographic survey ship of Southern Naval Command, arrived Dar-es-Salaam Tanzania on November 15, 2017, for undertaking joint Hydrographic Survey along with the Tanzanian Navy.

The joint survey will be conducted with the Naval personnel of Tanzania who have been trained in India in National Institute of Hydrography, Goa. During the survey, training of Tanzanian Naval personnel will also be undertaken on advanced hydrographic equipment and practices. Joint exercises with Tanzanian Navy are planned during the period of deployment.

INS Sarvekshak is a specialised survey ship of the Indian Navy presently based at Kochi and is fitted with state-of-the-art survey equipment like deep sea multi-beam echo sounder system, side scan sonars and a fully automated digital surveying and processing system. **SP**



LT GENERAL
PC. KATOCH (RETD)

Afghanistan via Chabahar – Strategic move

During the visit of Prime Minister Narendra Modi to Iran in May 2016, The trilateral engagement between India, Iran and Afghanistan was historic, expanding avenues of trade for India with Iran, Afghanistan, Central Asia and Russia through the International North South Transportation Corridor (INSTC). Chabahar is Iran's only oceanic port. Its name derives from Chabahar city on the eastern edge of Iran.

The ancient name of Chabahar was Tis, and this was described as from where the sea coast of India began by Persian historians. Chabahar consists of two separate ports named 'Shahid Kalantari' and 'Shahid Beheshti', each of which have five berths – overall 10 berths. India and Iran first agreed upon plans to further develop 'Shahid Beheshti' port in 2003, but India was deterred by sanctions against Iran. Under the Indo-Iranian agreement of May 2016, India is refurbishing one of the berths at 'Shahid Beheshti', and reconstructing a 600m long container handling facility at the port.

The bilateral agreement between India and Iran gives India the right to develop two berths of the Chabahar port as agreed in 2015, allowing them to be operated for 10 years by India Ports Global; joint venture between Jawaharlal Nehru Port Trust and Kandla Port Trust, in partnership with Iran's Aria Banader. Along with the development of Chabahar port, India is also to construct a railway line linking Chabahar with Zahedan on the Iran-Afghanistan border, which beyond Zahedan will be linked to the Iranian Railway running west and then north close to the Iran-Afghanistan border, avoiding the volatile Helmand Province of Afghanistan.

India's development of Chabahar will be at a cost of \$85 million over the course of 18 months. Upon completion of upgrade works agreed to in May 2016, Chabahar's capacity will be increased to 8 million tonnes from the current 2.5 million ton capacity. There were hiccups in the development of Chabahar since the US House of Representatives had voted to renew the Iran Sanctions Act for an additional 10 years and because of which despite lifting of UN and EU sanctions in 2016, large international bankers remained unwilling due to possibility of unilateral US sanctions that may be imposed irrespective of the nuclear deal. However, on October 29, 2017, India sent the first shipment of wheat from Afghanistan via the Chabahar port that has been jointly developed by India and Iran.

This enabled bypassing the pig-headed terrorist country Pakistan that has perpetually acted as 'dog in the manger' denying land route access to India to Afghanistan and Central Asia. Pakistan, while using Afghanistan to access Central Asia also continued to block Afghan goods transiting directly to India, forcing transshipment at the Wagah border. China, while profiting immensely from bilateral trade and investments in India, as also drilling oil and mining copper in Afghanistan is enjoying the fun rather than facilitating land access between India and Afghanistan, even as it is trying every tactic for India to join the China-Pakistan Economic Corridor (CPEC) in order to make it economically viable. The wheat shipment sent by India is the first of six such shipments planned. The shipment was

flagged off from India's Kandla port in Gujarat with External Affairs Minister Sushma Swaraj and her Afghan counterpart Salahuddin Rabbani joining the ceremony through video conferencing. Since the Chabahar-Zahedan rail corridor (co-financed by India and Iran) being constructed by Irocon of India at a cost of more than a billion dollars is not yet completed, the consignment of wheat was taken by trucks to Afghanistan from Chabahar.

This was a geo-strategic leap. A jubilant Sushma Swaraj remarked, "I believe that this is the starting point of our journey to realize the full spectrum of connectivity — from culture to commerce, from traditions to technology, from investments to IT, from services

to strategy and from people to politics." It is also significant to note that the US, despite its strained relations with Iran did not object to move of this Indian shipment, which signals the success in India's foreign policy. In fact the shipment occurred in close proximity of US Secretary of State Rex Tillerson to the Sub Continent.

Russia any is game because of stakes it has in the INSTC, in addition to its close strategic relations with India. In June this year, India and Afghanistan had launched an air freight corridor between the two countries to boost trade as Pakistan has been refusing land transit access through its territory. The Chabahar port is expected to open up new opportunities for trade and transit from and to Afghanistan and enhance trade and commerce between the three countries and the wider region. India and Iran have already expressed commitment for early completion of the work on the Chabahar port project. **SP**

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



A night view of Chabahar port



AIR MARSHAL
B.K. PANDEY (RETD)

Politicising defence procurement

Through the procurement of 36 Rafale jets, the NDA government has fulfilled the mandate, at least partially, of restoring the operational potential of the combat fleet of the IAF

On November 16, 2017, Rahul Gandhi, currently the Vice President of the Congress Party and soon to be its President, made allegations of wrong doing directly against Prime Minister Narendra Modi over the agreement with the Government of France to purchase 36 Rafale fighter aircraft for the Indian Air Force (IAF) through a direct government-to-government deal. A week earlier, a spokesman of the Congress Party had accused the NDA Government of compromising national security as also national interest in promoting crony capitalism by favouring Anil Ambani-led Reliance Defence Limited who is likely to benefit from this deal, not only causing heavy loss to the public exchequer, but also sacrificing the interests of the Indian defence public sector undertaking, the Hindustan Aeronautics Limited (HAL) which is a key player in the Indian aerospace industry of the nation. The Congress Party also alleged that in the deal for 36 Rafale jets, the unit cost of the aircraft was much higher than what was decided upon in the tender for 126 medium multi-role combat aircraft (MMRCA) floated in August 2007 when the UPA Government was in power. All these allegations have been negated by the party in power and Air Chief Marshal B.S. Dhanoa, Chief of the Air Staff has put at rest the questions raised by the Congress Party on technical aspects and has described it as "a very good deal". It would be pertinent to mention here that the Rafale had already been identified by the IAF as early as in 2012 as the best option available making any fresh evaluation totally unnecessary.

Procurement of Aircraft for the IAF

Acquisition of urgently required military hardware including aircraft through direct deals with foreign governments thus obviating the need for a laborious tendering process, is nothing new for the Indian Ministry of Defence. During the days of the Cold War, military aircraft including fighter and transport aircraft as well as rotary-wing platforms were acquired in large numbers from the then Soviet Union without going through the tendering process. At one point in time, around 70 per cent of the inven-

tory of the IAF consisted of platforms acquired through this route. More recently, during the tenure of the UPA government, the C-130J Super Hercules tactical transport aircraft and the C-17 Globemaster III strategic airlift aircraft were acquired for the IAF from the United States (US) through its Foreign Military Sales (FMS) programme, thus hastening the process of filling up critical gaps in the operational capability of the IAF without unnecessary delay.

Restoring Operational Capability of the IAF

The saga of the Rafale fighter jet began with the issue of tender for 126 MMRCA, equivalent to six squadrons, for the IAF, as the strength

of the combat fleet was expected to deplete rapidly and substantially over the next few years. Also, the indigenous light combat aircraft Tejas was nowhere in sight. The need to induct a modern fourth-generation combat aircraft in large numbers into the IAF was indeed urgent for it to maintain an operational edge over the air forces of both the adversaries namely Pakistan and China. Of the six contenders in the race for the MMRCA contract, after rigorous evaluation by the IAF, only two made it to the short list. These were the Rafale from Dassault Aviation of France and the Eurofighter Typhoon from the then European Aeronautic Defence and Space Company (EADS), now renamed as

Airbus Defence, Space and Security. As

the Rafale was somewhat less expensive when compared to the Eurofighter Typhoon, its quote was lower and hence was declared as the preferred platform. The first 18 of the number contracted for, were to be delivered directly by the original equipment manufacturer (OEM) in flyaway condition and the remaining 108 were to be manufactured in India by HAL with Transfer of Technology (ToT). While the Indian aerospace industry in the private sector was also to be involved, the share of HAL in the project was negotiated as being more than 70 per cent. The IAF was elated at the prospect of finally inducting a large fleet of extremely potent combat platform.



Rafale fighter jets in action

The timing of the move to target Prime Minister Narendra Modi, in all likelihood, appears to be aimed at influencing the forthcoming elections in Gujarat

...Continued on page 20



The 100th A380 delivered by Airbus to Dubai-based Emirates leads a formation of the United Arab Emirates' Al Fursan (The Knights) aerobatic display team as an opening aerial presentation at the Dubai Airshow 2017

Big two share spoils, bell tolls for the A380

They left the surly bonds of earth...and touched the face of god.

[By **Bikram Vohra**, Dubai]

Aviation's faithful came to Dubai 2017, its 15th aero exhibition and armed with their cheque books wrote up record deals worth \$113.8 billion.

The event, which is held once every two years in Dubai, logged an all-time record high of \$206.1 billion in its 13th round held in 2013, whereas the second record high was achieved in 2007 at \$155.5 billion, according to data compiled by financial consultants Mubasher.

2017 event marks a 175 per cent surge in the value of deals signed compared to the previous round held in 2015, which saw only \$39.8 billion in agreements.

The first two days belonged to Boeing and it looked all but over for Airbus. Even their chalet was relatively silent and gloomy as the American manufacturer reeled in the orders. Emirates, as host carrier, set the pace by ticking the box for 40 Dreamliners and this 787-10 investment worth \$15.1 billion will replace the Triple seven fleet

as Emirates increases its frequency on the under 10 hour routes. Any misgivings over the ability of the Dreamliner to perform at max levels in the heat of the desert were set aside and the A350 which still has residual affection and a better range and cost per passenger aggregate fell by the wayside.

As Airbus saw no more than the shadow of a smile on opening day there came the double whammy with flydubai, now a registered adjunct of Emirates, picking up a \$27-billion deal to purchase 225 Boeing 737 MAX aircraft, with options to buy 50 additional aircraft.

Airbus could by then have packed its bags and skulked off but wait, there was a major trick left in the bag and souring the bubbly at Boeing was on the cards. Hours later even as media and the aviation industry was empathising over the mauling Airbus was getting came the mega announcement. It was the biggest deal in history and Indigo US was making it. Airbus gently and yet with a dash of *soigné* announced the securing of an order valued at nearly \$50 billion for 430 planes from its single-aisle A320neo line. Suddenly the dimmed lights at Airbus went bright and life was good again.

While the agreement added to the lure of Dubai as a leading venue for the bi-annual gathering and gave it a full chapter in modern aviation history it also allowed Airbus to pump up a bottom line hurt badly by the loss of love for the A380.

Actually it really is not a loss of love as much as it is a pragmatism reflected by Airbus having to guarantee Emirates ten year production of the behemoth if there was any chance of getting Emirates to buy more aircraft.

For the moment despite the excitement it was an inhouse celebration for Airbus as it packaged it coloured paper as a gift for sales chief John Leahy days before he flies into retirement. The pair of giants had shared the spoils again. One calls them a pair advisedly because they work it out so they end up with equal shares of the market.

Of course what all this means is that the show is a success, the main stars have their lines right and everyone who is anyone is engaged in an orgy of backslapping one another on a job well done.

Many factors will kick in before the planes materialise in the skies with the livery of those who have gone in for them. As of now, the hard facts are that the bells you hear could well be the death knell for the A380 production line. Airbus has to be sorely wounded by the loss of the A350 option to Emirates when they could have had a solid deal in the bag that would have cold compressed the A380 bruising. But without it, the scuttling of the double decker flagship is twice as hurtful.

The \$2 billion needed to extend the wings by 15 feet, improve the range, reduce the per passenger cost effectiveness by 13 per cent and make the aircraft viable to its best customer is blowing in the wind because without other customers the sums do not add up... and there is no one knocking on the door.

The general belief now is that with Emirates hedging its bets and being frontal and transparent in its demands Airbus will return to Toulouse in an ambivalent frame of mind, ready to make the cruel cut...and mothball it's a 380 line.

The comfort from Indigo's largesse is still in the MoU stage and not signed and sealed so there can be many changes to what Bill Franke at Indigo Partners finally picks up for his carriers: Frontier Airlines, Volaris, Wizz Air Holdings, and JetSmart, the last now operating out of Chile.

It is a toss up how many of the 273 A320neo jets and 157 of the A321neo variant will finally be picked up and much will depend on

the oil prices, the peace in the region, the liquidity in the carriers in the Middle East and how the projected need for 10,000 new aircraft across the size spectrum pans out with the flying public. It has to be remembered that Qatar is already hurting by virtue of political isolation, Etihad has had two rough hits through its investments in Air Berlin and Alitalia and there will also be competition from airlines exercising the fifth freedom to fly between two foreign countries on a flight originating or ending in one's own country. Add to that the unofficial but widely practiced sixth freedom of flying from a foreign country to another while stopping in one's own country for non-technical reasons and regional carriers are not going to find it easy. With India, China and the ASEAN belt expected to be the new emerging markets the attention of the industry will engage in a tectonic shift.

In other deals Bombardier signed a letter of intent with Egyptair for the purchase 24 CS300 jets and Watanya Airways took the first step towards a possible 25 A320neo aircraft to Golden Falcon Aviation, its exclusive aircraft supplier.

In a breakdown given by Mubasher the delays per day make for impressive reading. On the first day of the Dubai Airshow, deals signed amounted to AED 71 billion (\$19.34 billion), while on the second day, companies signed AED 14 billion (\$3.8 billion) in agreements.

The third day saw AED 26 billion (\$7.1 billion) in deals, while the fourth marked the highest value of agreements signed with AED 282.5 billion (\$77 billion).

The fifth and final day of the Dubai Airshow saw AED 4.5 billion (\$1.23 billion) in signed agreements.

Airbus and Boeing came away with orders of 695 planes worth \$92 billion of which Indigo helped the French manufacturer pull in 510 aircraft of which 502 were from the A 320neo family and the rest were for the company's multi-role C295 transports and 'H generation' H160 rotorcraft at a tag of \$58.3 billion, according to Airbus.

Boeing, however, said it secured total commitments for 302 aircraft — including 50 options — with a value of about \$50.7 billion at list prices during the air show. It also signed agreements with Azerbaijan Airlines, Alafco, and Ethiopian Air. Meanwhile Air Arabia signed for the lease of six Airbus 321neos to augment its fleet.

And as the 160 aircraft in the static display took off for home there was good reason for Dubai to feel satisfied.

Now time will tell if the figures will be infused with a life. **SP**

(Left) Airbus A350-900 flying display at the Dubai Airshow 2017; (right) Military and commercial aircraft on display.



Defence Minister visits forward Army and Airforce bases in Assam and Arunachal Pradesh

Defence Minister Nirmala Sitharaman visited the forward Army posts in Arunachal Pradesh and Air Force base in Eastern Assam on November 5, 2017. In her visit to the forward army post of Kibithu in Eastern Arunachal Pradesh, which is in continuation with her visits to forward areas along the Line of Actual Control (LAC), she was accompanied by Lt General Abhay Krishna, GOC-in-C, Eastern Command and other senior officers of the Indian Army.

The minister was briefed on the situation and defence preparedness along the LAC. She also interacted with the troops and appreciated their dedication to the service and efforts in such a remote and inhospitable terrain. As part of this visit the Defence Minister also visited the important Eastern air base of Chabua, where she was received by Air Marshal Rajesh Kumar, Senior Air Staff Officer HQ Eastern Air Command, and Air Commodore George Thomas, AOC, Air Force Station Chabua. During the visit she took stock of the operational preparedness and infrastructure development of the base. The strategic base presented a static display of the combat assets available at the station to the Defence minister, which included the Su-30MKI fighter aircraft and mod-



ern missiles. She also interacted with Air Force personnel serving in this eastern most region of our nation and had lunch with the air warriors. She complimented the air warriors for their professional approach and commitment in the service of the nation. She appreciated the operational readiness, ongoing infrastructure development and the high morale of the Air Force personnel at the base. **SP**

Air Chief inaugurates SWAC Commanders' Conference



The Annual Commanders' Conference of South Western Air Command (SWAC) was inaugurated by Chief of the Air Staff Air Chief Marshal B.S. Dhanoa on November 17, 2017, at Gandhinagar. The Commanders of Stations located in Rajasthan, Gujarat and Maharashtra states attended the conference.

On arrival at HQ SWAC, Gandhinagar, Air Chief Marshal B.S. Dhanoa inspected an impressive Guard of Honour. In his inaugural address, the Chief of the Air Staff acknowledged the high degree of professionalism and hard work displayed by the Air Warriors of SWAC in achieving the assigned

goals. He highlighted the need for maintaining full operational preparedness with optimal utilization of available resources. He emphasised the need for Air Warriors to keep abreast with the latest technologies and to focus on the associated challenges while the Indian Air Force marches ahead with major upgradation of capabilities and infrastructure. The Chief urged every Air Warrior to exhibit immaculate discipline and unwavering integrity.

The annual conference is a forum for the Station Commanders to exchange views on operations, maintenance and administrative matters requiring deliberation with Senior Officers at Command Headquarters. During the conference, the Chief of Air Staff recognised the efforts of various units for their noteworthy performance in different spheres, by awarding various trophies. **SP**

AOC-in-C Southern Air Command flies Tejas

The induction and operationalisation of the indigenous fighter jet light combat aircraft Tejas received a major boost with Air Marshal R.K.S. Bhadauria, Air Officer Commanding-in-Chief of the Southern Air Command undertaking a solo flight for 30 minutes from HAL Airport, on November 14, 2017.

The Hindustan Aeronautics Ltd (HAL)



has established the state-of-the-art aircraft assembly line including second production line for LCA to meet the operational requirements of the IAF. Currently, HAL has the production capacity of eight LCAs per annum and is ramping up the capacity to 16. Major sub-assembly such as front, centre and rear fuselages and wings have been outsourced to the private players. The 45 Squadron of the IAF 'The Flying Daggers' was the first squadron to be equipped with LCA-Tejas in July last year.

The Squadron which is expected to move to its permanent location at Suler, near Coimbatore, next year is presently involved in training of air and ground crew, formulation of procedures and realisation of the operational potential of the aircraft. **SP**

Award of President's Standard to 223 Squadron and 117 Helicopter Unit

The President of India and the Supreme Commander of Indian Armed Forces, Ram Nath Kovind awarded the prestigious President's Standard to 223 Squadron and 117 Helicopter Unit during a ceremonial parade held at Air Force Station Adampur on November 16, 2017. The President's Standards were received by Group Captain Prabhat Malik, Commanding Officer of 223 Squadron, and Wg Cdr N. Batra Commanding Officer of 117 Helicopter Unit.

The ceremonial parade was commanded by Group Captain Tushar Vaidya. The President also released First Day Covers of 223 Squadron and 117 Helicopter Unit at the function. A Fly past consisting of MiG-29, ALH and Mi-17 helicopters was synchronized with significant events of the parade. The parade was followed by a spectacular display of precision and daredevilry by the Air Warriors Drill Team. The grand ceremony concluded with a breathtaking air show by the Sarang and Surya Kiran Aerobatic Team.

V.P. Singh Badnore Governor of Punjab, Rana Gurjeet Singh, Cabinet Minister for Irrigation and Power of the State of Punjab, Air Chief Marshal B.S. Dhanoa, Chief of the Air Staff, Air Marshal C. Hari Kumar, Air Officer Commanding-in-Chief Western Air Command along with other senior Defence and Civilian dignitaries were present on the occasion.

Speaking on the occasion, Ram Nath Kovind President of India congratulated both the awardee units and complimented all personnel for the excellent Parade. He said that the nation is proud of the capability and competency of the IAF. Excellent performance of its personnel in International exercises, both at home and abroad, is indeed a glowing testimony to the level of training and preparedness of our Air Force. The Indian Air Force, besides safeguarding the sovereign skies of our Nation, has also been at the forefront of



all humanitarian aid and disaster relief operations. The resilience and tenacity displayed by our valiant air warriors is a great source of pride for the nation. **SP**

Politicising defence procurement...continued from page 16

Unfortunately, aspirations of the IAF were shattered as the contract negotiations got bogged down over some issues that proved to be insurmountable. In the seven years that the UPA Government was responsible for this project while it was in power, the contract for 126 Rafale jets could not be finalised possibly on account of the indifferent approach of the establishment towards the erosion of the operational capability of the combat fleet of the IAF and its implications for national security. As a result, in 2014, the NDA Government inherited the MMRCA project that had actually run aground with practically no possibility of its revival. The responsibility now lay on the NDA government to fulfil the aspirations of the IAF to be able to induct modern combat aircraft to enhance its operational potential to the level required for it to be in a position to be able to successfully confront challenges looming large over the horizon.

In less than six months after assuming office, Prime Minister Narendra Modi broke the logjam with the MMRCA contract with an alternative proposal to purchase 36 Rafale jets (equivalent of two squadrons) through an Inter-Governmental Agreement (IGA). Thereafter the tender for 126 MMRCA was cancelled as it had reached a dead end. Described as a "masterstroke", the IGA for 36 Rafale jets was duly processed in accordance with the provisions of the Defence Procurement Procedure (DPP) and the contract was signed in September 2016 by the Defence Ministers of the two nations involved. Delivery would commence three years later i.e. from September 2019 and be completed by 2022. Through the pro-

curement of 36 Rafale jets, the NDA Government has fulfilled the mandate, at least partially, of restoring the operational potential of the combat fleet of the IAF. Integral to the agreement is the option with the Government of India to place orders for additional aircraft in the future. Action is also in hand to have a foreign OEM set up a production facility in India to manufacture in collaboration with an Indian partner a proven single-engine combat aircraft in large numbers to restore the full operational potential of the IAF.

The Final Word

Whether there is any truth in any of these allegations or not, what is notable is that the contract for 36 Rafale jets was signed more than a year ago, but there had been no comment from the Congress party till last week. The timing of the move to target Prime Minister Narendra Modi, in all likelihood, appears to be aimed at influencing the forthcoming elections in Gujarat and later in the national elections two years later. In the final analysis, it appears nothing more than blatant politicisation of defence procurement. Such political machinations would ultimately be detrimental to the effort by the IAF to upgrade operational capability in the future and in the final analysis, would impinge on national security as well. Unfortunately, such conduct will also erode the level of confidence that the IAF ought to have in the political leadership of the country who apparently are quite prepared to compromise even national security for political gains. A sad state of affairs indeed! **SP**

General Atomics acquires assets of Surrey-US, LLC

General Atomics announced on November 13, 2017, that it has acquired the majority of the assets of Surrey Satellite Technology US LLC (Surrey-US), an Englewood, Colorado-based provider of innovative small satellite technologies, systems and services.

The assets and workforce will be integrated into General Atomics' Electromagnetic Systems Group (GA-EMS) to support the organization's growth initiatives focused on the development and delivery of small satellite and advanced payload systems.

"We look forward to the Surrey-US team joining us as we continue to expand our portfolio of small satellite and mission-support capabilities," stated Scott Forney, president of GA-EMS. "The Surrey-US team's expertise in designing and deploying small satellites and end-to-end mission solutions is complementary to ours."

We are excited that GA-EMS now will offer ground-to-space solutions utilizing nano, micro and small satellites from 3U to 500 kg with a high degree of modularity and payload flexibility."

Surrey-US was established in 2008 as a wholly-owned subsidiary of UK-based Surrey Satellite Technology Ltd. (SSTL) to address the US market and its core capabilities include the complete design, manufacture, launch and operation of small satellites. SSTL is a world-renowned leader in the design, development and deployment of small satellites, with a 35-year legacy of successful launches, and a proven track record in pioneering and delivery of small satellite and complete mission solutions for defense, telecommunications, earth observation, and technology demonstrations. **SP**

IAI and Hankuk Carbon in agreement



Israel Aerospace Industries and Hankuk Carbon from Korea signed an agreement for establishing a joint venture company in the Republic of Korea. The signing ceremony was held during the International Aerospace and Defense Exhibition (ADEX) 2017 in Seoul. The new joint company, which was named Korea Aviation Technologies (KAT), will focus on development and manufacturing of unmanned aerial vehicles (UAVs) with vertical takeoff and landing (VTOL) capability that will target the military and civilian Korean market.

Moon-Soo Cho, CEO from Hankuk Carbon said, "both companies have established a firm relationship within a short period of time, and the result will be passed on to the HC-IAI joint venture. The UAS system with innovative hybrid propulsion system produced under KAT's name will set up a new standard of the UAV industry. Also, Hankuk Carbon's composite material and aircraft components business will create a synergic effect with KAT."

Shaul Shahar, IAI EVP and General Manager of IAI's Military Aircraft Group, said: "IAI is excited about the establishment of the joint company. Hankuk Carbon brings to the venture strong manufacturing capabilities and know-how. Together with IAI's UAVs and aircraft design capabilities, the new company will be able to meet Korean military and civilian VTOL requirements. I

am confident the collaboration will spur the growth of VTOL systems in Korea."

The FE Panther hybrid - powered vertical take off and landing UAV uses three electrical motors for vertical lift and an internal combustion engine for horizontal flight. It can endure eight hours of flight time, carry 6 kg of payload and fly over a maximum radius of 130 km. **SP**

GA-ASI signs MoU with Korean companies

General Atomics Aeronautical Systems, Inc. (GA-ASI) has signed a Memorandum of Understanding (MoU) with Huneed Technologies Co. Ltd. establishing potential areas of future collaboration. GA-ASI is the leading manufacturer of Remotely Piloted Aircraft (RPA) systems.

Huneed is a Korean developer and manufacturer of airborne systems, defense communication systems, and commercial IT systems. GA-ASI and Huneed are looking to identify common areas of technology, manufacturing, and strategic interests. Execution of this MoU positions Huneed to become a key in-country strategic supplier for GA-ASI in Korea.

"Huneed has a long track record of building successful business relationships with its industrial collaborators," said Joseph Song, vice president of international strategic development for GA-ASI. "We are pleased to begin our strategic relationship with Huneed in developing business opportunities in the Republic of Korea."

"RPA technology is of strategic importance to global security and commerce," said Eugene Kim, chairman of Huneed. "The opportunity to collaborate with GA-ASI, a leader in the medium-altitude long-endurance RPA market, is a testament to Huneed's capabilities."

General Atomics Aeronautical Systems, Inc. (GA-ASI), an affiliate of General Atomics, is a leading designer and manufacturer of proven, reliable Remotely Piloted Aircraft (RPA) systems, radars, and electro-optic and related mission systems, including the Predator RPA series and the Lynx Multi-mode Radar.

Founded in 1968, Huneed Technologies is a Korean developer and manufacturer of airborne systems, defense communication systems, and commercial IT systems. Huneed is a key provider of harnesses and electrical panels for airborne systems as well as key tactical wireless communication backbone (Huneed HCTRS) and control systems for the Republic of Korea military, along with an array of other solutions and services. **SP**



Trump Twitter account shut down by employee on last day of work

Company initially blamed human error for @realdonaldtrump account's 11-minute outage but then revealed it was done by worker on final day in job. November 3, 2017 02.26 GMT

A Twitter employee deactivated Donald Trump's personal account on their last day of work, the company said on Thursday, likely meaning the action was deliberate.

"Through our investigation we have learned that this was done by a Twitter customer support employee who did this on the employee's last day. We are conducting a full internal review," the new statement said.

The company did not immediately reply to Guardian requests to clarify the process. Trump tweeted about the incident on Friday morning, hailing it as vindication that his tweeting was "having an impact": There have been continuing calls for Twitter to suspend Trump's account, particularly when he made threats to North Korea. However, when Twitter does this it typically marks the profile with the message "account suspended".

Before Twitter's statement, some speculated that Trump himself may have deactivated his account or he may have been hacked. He has been criticized in the past for having poor security standards, continuing to use an old, unsecured Android phone when he moved into the White House instead of trading it for a secure, encrypted device approved by the Secret Service. **SP**

Ranji Trophy halted after mystery car breaches Palam's security

Play during day three of the Ranji Trophy game between Delhi and Uttar Pradesh at the Palam Air Force Ground was halted because a car was driven into the middle of the pitch. After inspections, no damage was reported on the pitch and on the outfield.

It was learnt that the main gate of the Airforce ground, which only allows entry of cars after proper checking remained open with the security not in his position. This allowed the man free access inside the complex and instead moving towards the designated parking lot, which is behind the main pavilion. He took a detour entering from the Palam B complex into the field of play and took couple of rounds of the pitch before trying to leave the ground.

The security personnel at the ground swung into action after this and closed the gate in order to stop the man from fleeing. He was stopped at the gate. He was then detained for questioning by Delhi Police.

Delhi police said they received a call from the security officials at the Palam airforce ground about a man in his thirties, who had driven his Wagon R car inside the ground. An investigating official said when police reached the spot, the security officials had caught Girish Sharma, 32, for driving inside the ground.

Deputy Commissioner of Police Southwest, Shibesh Singh said Sharma has been detained and is being interrogated at the Delhi Cantonment police station.

Sources said that at the police station, Sharma showed signs of being abnormal and got hysteric. Police informed his parents and called them at the station. Sharma's family told police he was depressed and disturbed after his wife left him a few months ago. **SP**

Man enters Delhi airport using fake ticket to see wife off, held

A man has been apprehended for entering the Delhi airport allegedly using a fake travel ticket to see his Moscow-bound wife off. S Bhojwani was apprehended when the CISF personnel, deployed for airport security, found him roaming suspiciously inside the Terminal-3 (T3) building of the Indira Gandhi International Airport (IGIA), a senior official involved in the airport security said.

Bhojwani told the Central Industrial Security Force (CISF) personnel that he had entered the terminal to see off his wife, who was travelling to Moscow, the official said, adding he told them that he used a cancelled ticket to enter the airport.

The man was subsequently handed over to police, he said. Entering airport terminal without a valid ticket is illegal under Indian aviation rules. **SP**



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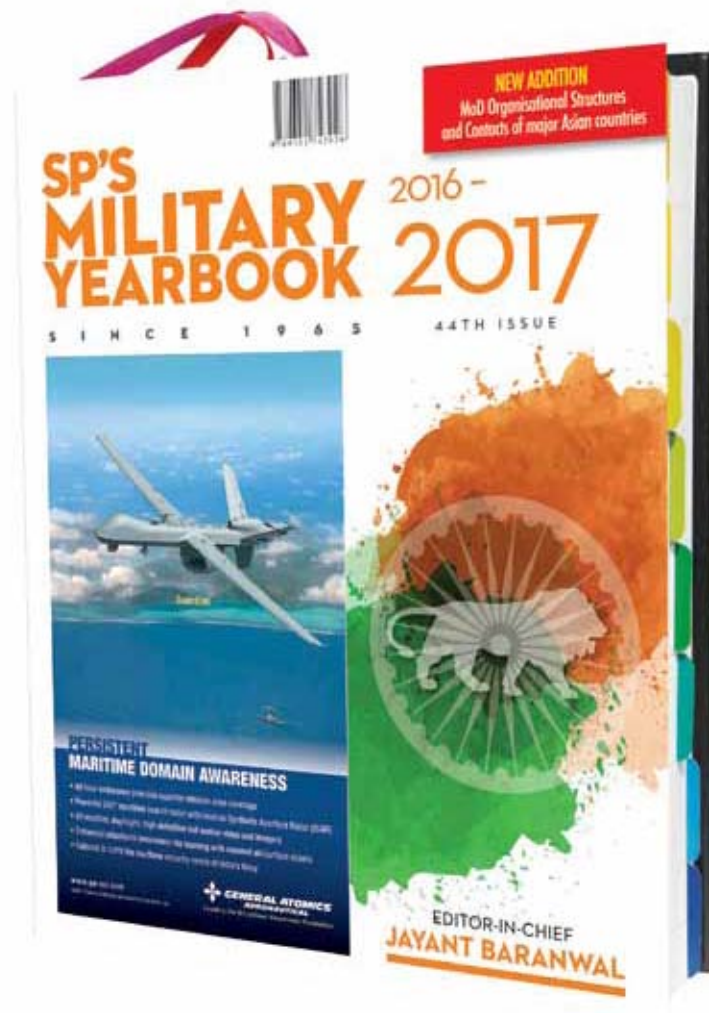


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