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Strengthening Defence Posture

By Pravin Sawhney

Notwithstanding the purchase of Russian S-400 Air Defence Missile System, the BMD programme has neither been questioned nor its progress audited. India needs a technical audit by independent agencies or joint development with foreign partners to resolve glitches

There is something extraordinarily odd about the indigenous Indian Ballistic Missile Defence (BMD) programme. Given that the nuclear tipped missile threats have grown — and the indigenous BMD programme has little to show — the Government has now cleared the purchase of Russian S-400 Air Defence Missile System to protect New Delhi and other cities at the cost of Rs50,000 crore.

Notwithstanding this, the BMD programme has neither been questioned nor its progress audited or verified. It remains the preserve of a select senior Defence Research and Development Organisation (DRDO) scientists. It was started in 1995 under the project director, VK Saraswat.

In its 22-year existence, where nearly Rs10,000 crore (Rs8,000 crore for missile readiness and the remaining for its production) have been spent, not a single BMD deadline has been met. Moreover, unlike the other strategic missiles — the Agni series — whose status or capability is known to the National Security Advisor and the commander-in-chief, Strategic Forces Command (SFC), whose troops have test-fired the missiles, the status of the BMD is shrouded in secrecy.

For example, in February 2010, in a longish conversation with me, the then DRDO chief, VK Saraswat, had said that by 2013, phase I of the BMD shield would be ready to protect New Delhi from hostile missiles with 2,000 km range. And by 2016, according to him, the phase II of the shield would be operationalised to kill hostile missiles with 5,000 km range. Ironically, the inter-Governmental agreement for purchase of Russian S-400 was signed in 2016.

This, of course, has not dampened the zeal of DRDO scientists, who every six or nine months do an interception test all by themselves and declare it successful. Two recent test-firings were on February 11 of an exo (outside) atmospheric interception at 50 km altitude, and on March 1 of an endo (inside) atmospheric test.

A few technical issues about interception would help to place them in perspective. To begin with, all hostile missiles with 2,000 km to 5,000 km range would certainly have nuclear, and not conventional warheads. As a general rule, the nuclear chain reaction, which then cannot be controlled, gets activated about 10 km (airburst is achieved with proximity fuse for maximum casualties) above the earth. If the hostile payload, that has the nuclear warhead, gets a direct conventional warhead hit before the payload drops to this low height, the nuclear core will not get activated and it will not burst. It is evident that interceptor missiles with conventional warhead should be used only if it has 100 per cent accuracy to hit the bull's eye. Otherwise, the preferred option for interceptor missile warhead is a smaller-sized nuclear warhead, which while engaging the hostile missile ideally in exo-atmosphere, detonates its warhead by its blast (it need not be a direct hit), with the nuclear debris then suspended in space. In short, it should ideally be nuclear warhead for nuclear warhead to destroy enemy's long range missiles.

Moreover, 30 km height is the dividing line between the atmosphere and space — two mediums with different characteristics. Above 30 km is space. It is evident that both the interceptions (for outside and inside the atmosphere) should be designed to hit the hostile missile as high as possible so that the destroyed missile's debris falls as much away as possible from friendly territory. Thus, the exo interceptor should be able to engage at heights of 200 km plus with hypersonic speeds to hit long range hostile missiles with ranges up to 5,000 km coming at high speeds. If this hit is not achieved, the endo-interceptor should then kill the missile the moment it is at 30 km height and enters the atmosphere.

Given this, there are four main problems with DRDO interceptions. All interceptions have been claimed to be with conventional warheads and direct hits. Since a conventional warhead is always armed with proximity fuse, which will explode within 20 metres of the hostile missile, how can it do a direct hit? If the hostile missile with nuclear warhead does not get a direct hit, it will continue on its trajectory path and its nuclear warhead will detonate at designated height. Thus, the claim of direct hit seems to be doubtful and should be audited or verified independently.

Hypothetically speaking, since the trajectory and coordinates of both the interceptor and hostile missile are known beforehand, it is not difficult for the interceptor to bang at pre-determined location pretending a direct hit at an electronic or imaginary point (fixed or moving) which would appear as a real hit on the observation screen.

The second issue concerns the hostile missiles. In all test-firings by the DRDO, these have been Prithvi or enhanced Prithvi missiles, which have slow speed, very high radio contrast and small ranges. The maximum Prithvi range is 350 km, which is far less than the claimed 2,000 km or 5,000km range of hostile missiles. Moreover, there is no independent verification of whether the warhead of the hostile Prithvi missile was deliberately exploded or blown off by a direct interceptor hit or it burst by self-ignition. The need is clearly to use Agni series missile as hostile missiles and to allow the SFC to do the test-firing with DRDO as observers.

The third issue concerns the high-energy propellants which are needed to increase the interception altitude to more than 120 km; the higher it is, the better. While certain modifications have been claimed in the exo-interceptor, these are not enough. For example, the first stage of exo-interceptor, which was a liquid motor has been replaced by a solid motor stage with higher energy levels. The second stage has also been modified for higher interception accuracy by replacing the Radio Frequency seeker with Imaging Infra-Red seeker.

The fourth issue concerns the other components besides the interceptors of the BMD. These are the early warning system; the long-range tracking radar; the multi-functional fire control system; and the battle management system. All these components are nowhere near the desired capabilities to neutralise hostile 2,000km to 5,000km range missile.

This explains the likely purchase of S-400 systems. Indian Air Force or SFC should be convinced to not lose interest in DRDO efforts. While it is not suggested that the indigenous BMD should be shut down, what is needed is its technical audit by independent agencies or we need to seek joint development with foreign partners to resolve technology glitches. Since India has good relations with the US, Russia, Israel, and France (countries with advanced BMD technologies), the Government should review the programme. Spending money without clarity will not help India's defence posture.

(The writer is co-author with Ghazala Wahab of the recent book, Dragon on Our Doorstep)



Thu, 11 May, 2017

Sanjay Mitra to be next def secy

The government on Wednesday announced that Sanjay Mitra, a 1982 batch West Bengal cadre IAS officer posted as secretary of the road transport and highways ministry, will be the next defence secretary for a fixed two-year tenure after G Mohan Kumar retires on May 24.

Mitra, who served a seven-year stint in the Manmohan Singh PMO, will take over at a time when the defence ministry is trying to embark on far-reaching reforms to boost the country's defence industrial base, while also dwelling upon the crucial post of a chief of defence staff in the short-term as well as integrated theatre commands in the long term, as earlier reported by TOI. The armed forces are also grappling with operational gaps in several areas ranging from submarines and night-fighting capabilities to fighters and helicopters. The defence secretary plays a pivotal role as principle advisor to the defence minister. While a Service chief may be supreme within his force, a defence secretary deals with all the three forces, as also the Coast Guard, apart from virtually controlling the purse strings.

Thu, 11 May, 2017

India's stealth warship makes a splash in London

London: History merged with modernity on the deck of India's stealth frigate INS Tarkash as top naval personnel, navy historians and others came together to celebrate 200 years of an iconic Mumbai-made vessel and annual exercises between the Royal Navy and the Indian Navy.

Packed with weapons, sensors and a crew of more than 200, INS Tarkash arrived in the United Kingdom to join an exercise with the Royal Navy named Konkan-17.

Closely involved in anti-piracy operations off Somalia in recent years, INS Tarkash participated in an anti-hijack operation off Yemen on April 9 while on its way to Europe. It was also part of Operation Rahat in 2015, when it rescued 538 people from 18 countries from war-torn Yemen.

The Indian flag fluttered against a skyline of skyscrapers at West India Docks in Canary Wharf on Tuesday as defence secretary Michael Fallon, Indian high commissioner YK Sinha and INS Tarkash's captain Rituraj Sahu celebrated naval ties between the two countries. Sahu said: "Several joint exercises and manoeuvres, including exchange of Sea Riders personnel, were undertaken. We had interaction to promote cooperation."

Cricket icon Sachin Tendulkar was among the nearly 2,000 members of the Indian community who visited INS Tarkash during its stay in London.

Thu, 11 May, 2017

Navy to showcase stealth frigates, marine aircraft off coast of Singapore

New Delhi: The Indian Navy's top-of-the-line stealth frigates and Boeing P-8I anti-submarine and maritime reconnaissance aircraft will take part in a six-day advanced exercise with the Singapore Navy from Malacca Straits to South China Sea this month. The exercise begins on May 18 and will continue till May 24 off the coast of Singapore.

South Block sources said INS Sahyadri, armed with land attack Brahmos missiles, along with state-of-the-art Kamorta missile corvette will participate in the International Maritime Review to commemorate 50 years of the Singapore Navy.

This event will be attended by Navy Chief Sunil Lanba even as top Indian defence companies such as Mazagon Dock Limited (MDL), Garden Reach Shipbuilders and Engineers (GRSE), Goa Shipyard, Bharat Electronics Limited, Bharat Dynamics Limited, Ordnance Factory Board, Brahmos, and Larsen and Toubro participate in the International Maritime Defence Exhibition (IMDEX) to explore hardware export opportunities. The review and exhibition will be held between May 15-18.

On May 18, the two Indian ships will be joined by frigate INS Shivalik, tanker INS Jyoti and P-8I aircraft for bilateral exercises in the South China Sea with Royal Singapore Navy. The Singapore Navy will also field its top ships and maritime patrol fighter aircraft like F-15s in the event.

The exercises will be aimed at the defence of the strategic Malacca Straits, which is the main ingress to South China Sea. Expanding their naval footprint, the Indian warships will make port calls at Djakarta, Kuantan port (Malaysia), Port Moresby, Surabaya in Java and Freemantle port in Australia.

Meanwhile, three Indian warships, led by guided missile destroyer INS Mumbai have reached Haifa in Israel on a goodwill mission.

Indian Air Force: Batting for equality in the sky

IAF's new commercial inspires women to break free from traditional roles

By Sangeeta Tanwar

Giving wings to a million dreams, the Indian Air Force (IAF) in its latest campaign “*Ladki Hoon Main*” goes all out to highlight the prejudices that women continue to face and calls on all young girls to break their shackles and fly high by joining the force. In an attempt to attract and recruit more women, the IAF is championing the concept of equality in the skies. The television commercial (TVC) is a first-person account of an Indian woman fighter pilot overcoming personal, family and social barriers to become a part of the air force family. It is a story of pain and grit that sees her avoid the beaten track of taking responsibility of nurturing a family or sticking to safe professional choices. The first person narrative emphasises women’s ability to crack the toughest of jobs including flying fighter jets.

Having commissioned the first batch of women fighter pilots last year, the IAF has launched the new campaign to break the age-old stereotype of what women ought to do, professional choices that they traditionally need to make. The idea is to initiate a conversation around traditional roles that women are expected to play in society and at the workplace. The objective of the campaign is to promote the IAF as a space for equal opportunities given that it is by and large considered a male bastion. The “*Ladki Hoon Main*” TVC is part of the IAF recruitment campaign — A cut above (which was launched last year marking the 84th anniversary of the force) — which encourages people with valour, commitment and passion to do something extraordinary.

The campaign has been conceptualised by Grey Group India. What inspired the creative agency to come up with the idea of championing equality in the skies?

“The most inspiring insight was that at the IAF, the service of the nation knows no gender. In many ways, this is a definitive stamp of equality, coming from the Air Force — often perceived as a bastion of male-only bravado,” says Sandipan Bhattacharyya, chief creative officer, Grey Group India. For the IAF and team Grey Group there is poetic justice in the fact that women fighter pilots are taking to the skies at a time when gender barriers and stereotypes still abound on the ground.

For the creative team, this became a starting point and it shaped the first-person account around women pilots who are forcing us as individuals, society and a nation to rethink misconceptions and stereotypes around the role and place of women. “As a writing style, we thought a first-person narrative would bring authenticity and make the film more provocative and compelling,” says Bhattacharyya.

There are no actors in the TVC, but real women pilots who are bravely challenging gender stereotypes every day. They have been filmed in real time. The campaign showcases the IAF as a place which offers equal opportunities for both sexes. Be it the fighter pilots, helicopter and transport pilots, ground staff and technical staff, the Air Force has a place for everyone.

Competition in defence

Govt must find ways to implement this in reality

Through successive versions of the defence procurement policy, most recently DPP-2016, the defence ministry is gradually abandoning its practice of bestowing orders for indigenous military equipment without

competition on its 41 ordnance factories (OFs) and nine defence public sector undertakings (DPSUs). Today it embraces, at least in name, the notion that India's vibrant and technologically capable private firms must be permitted to compete for defence orders on a level playing field with the public sector. Yet, hurdles prevent this concept's full implementation. These include the belief amongst some defence ministry bureaucrats, particularly those whose annual assessment reports depend upon how much profit the DPSUs under them generate, that private firms should receive orders only after the manufacturing capacity of the DPSUs and OFs is fully availed. This perception overlooks the fact that the DPP does not provide for "nominating" DPSUs for production contracts, except in shipbuilding. All other contracts require competitive tendering in which the private sector can participate.

In contrast, the OFs, which are a department under the defence ministry rather than independent entities like the DPSUs, enjoy more regulatory protection. The Defence Procurement Manual, which regulates procurement carried out from the revenue budget, lays down that whatever is in the production range of the OFs must be procured from them rather than through competitive tendering. Now the defence ministry is seeking to dilute that protection by dividing the OFs' production range into "core" and "non-core" items. Core items, which include explosives, ammunition and guns that are not yet manufactured by the private sector, will continue to remain reserved for OFs while private firms will be permitted to supply noncore items. This dilution stems from a growing realisation within the defence ministry that private sector efficiencies will yield more bang for the buck.

Additionally, the defence ministry is attempting to create structures to govern competition between private defence companies. For over two years, it has struggled with the concept of "strategic partners", private firms selected on the basis of financial and technical criteria, which will be the government's designated nominees for foreign vendors to tie up production joint ventures. Since chosen strategic partners will benefit from overseas tie-ups and defence ministry orders for some 1015 years, there is heated debate over the modalities for selecting them. Understandably, bureaucrats worry that, as with the spectrum and coal block allocation processes, the grant of such financially remunerative benefits might place decision-makers in the cross-hairs of vigilance inquiries later.

The defence ministry has scheduled a key meeting next week to take a final view on the so-called "strategic partner policy". There is danger that the policy might be adversely shaped by the bureaucrats' wish to play it safe and eliminate the danger of charges of favouritism later. This could give birth to a policy that anoints several strategic partners for each technology realm — aircraft, warships and tanks — based on the calculation that competition for future contracts will keep all players straight and eliminate allegations of undue favour in choosing strategic partners. The danger, however, is that too much competition for too few orders will result in unviable business volumes. Even worse, loose criteria might open the floodgates, allowing in undesirable or unqualified companies without the required experience in high-tech defence manufacturing.

The logo for The Economic Times newspaper, featuring the text "THE ECONOMIC TIMES" in a large, serif font. Above the text, the website address "WWW.ECONOMICTIMES.COM" is written in a smaller font.

Thu, 11 May, 2017

Process Ready to Select Private Cos for Mega Defence Orders

By *Manu Pubby*

Defence ministry to unveil new policy this week; move to render memoranda of understanding signed between Indian companies and foreign players over the last three years infructuous

The defence ministry has finalised its roadmap for the selection of private sector companies for mega military production orders, with an elaborate procedure spelt out in a new policy to be unveiled this week. Financial strength, technical capability and existing infrastructure will be the main criteria for selection of the Indian companies while foreign partners will be selected in a parallel process on technical and commercial grounds.

ET has learnt that the defence ministry's new strategic policy (SP) model will create a pool of six Indian companies that will be accorded special status. Once the pool is created, the companies will be given the opportunity to bid for mega defence production orders, expected to be worth over \$20 billion.

The New Strategic Policy

PROJECTS SELECTED

Submarines, single-engine fighter jet, helicopters, armoured vehicles



INDIAN CO TO HAVE

- ▷ FDI cap of **49%**
- ▷ Minimum **₹4000-cr** turnover for last 3 yrs
- ▷ Crisil rating **A**



INDIAN CO'S SELECTION

- ▷ Invitation of bids, with cos indicating their preferred areas of mfg
- ▷ **STAGE 1** evaluation of financial & technical grounds
- ▷ Verification of infrastructure
- ▷ **STAGE 2** detailed evaluation of financial, technical strength
- ▷ Short-listing of 6 Indian cos

FOREIGN PARTNER'S SELECTION

- ▷ Request for information, preparation of qualitative requirements by services
- ▷ EoI to foreign vendors, followed by technical evaluation
- ▷ Field trials & staff evaluation
- ▷ Short-listing of qualified partners

FINAL STAGE

Indian cos to be issued tenders for selected project, along with list of foreign vendors who have qualified

Joint bids to be invited by defence min, each Indian co can submit only one bid

Selection to be made on commercial and technical grounds (80:20)

Selected winner to be declared strategic partner

As per the policy, in the first stage, the six Indian companies will qualify to bid for four upcoming projects – submarines for the navy, a single-engine fighter for the air force, helicopters and armoured vehicles for the army.

Interestingly, the new policy means that almost all memoranda of understanding (MoUs) that have been signed between Indian companies and foreign players over the last three years for these projects will be rendered infructuous, given the new model of selection.

“The defence ministry will shortly invite companies for the qualification process. The companies will be asked to give their priority preference for the four projects. A total of six companies will be selected based on financial parameters and capability,” a senior official told ET.

The ministry has an ambitious target of nine months to select the pool of Indian companies. The selection will be carried out in a five-step process, starting with financial and technical evaluation that will have certain criteria, including a Crisil A rating and a minimum turnover of ₹4,000 crore for the past three years.

Concurrently, the ministry will initiate work to identify foreign partners for the four identified projects. This selection will be based on technical evaluations and field trials. Once the foreign vendors are shortlisted, the Indian pool will be invited to plan collaborations and present joint proposals that will be the basis of a final selection.

As per the policy, one Indian company will be allowed to participate in only one strategic partnership project to avoid a monopolistic situation. With this model, the ministry is hoping to avoid questions about competitiveness and price discovery, given that a pool of both Indian and foreign vendors will be competing for collaborative projects. “Concerns that were raised from various quarters, including from within the ministry, have now been addressed,” the official said.

While the industry is relieved that the stalled process the SP model has been in the works for over two years has got back on track, top executives said that they are waiting for the fine print of the policy that will contain details about the selection process.

Tata arm pays price for making in India

AJAI SHUKLA
New Delhi, 9 May

The Prime Minister's Office (PMO) and the ministry of defence claim indigenisation — or replacing foreign-procured equipment with those built in India — is a priority. Yet, local firms that indigenised components suffer heavy financial losses after the defence ministry blocked payments.

In 2011, defence electronics innovator Tata Power-Strategic Engineering Division (SED) had bagged a ₹1,219-crore contract to modernise 30 Indian Air Force (IAF) and one Indian Navy airfields. But, the defence ministry blocked payments worth ₹275 crore after the company replaced an Australian component with the one made in India.

The component — runway visual range (RVR) — was to be sourced from an Australian firm MTECH Systems, according to an initial contract with Tata Power (SED). However, after MTECH Systems reported delivery problems, Tata

Power (SED), in consultation with the IAF, replaced it with Drishti RVR, manufactured in India by National Aerospace Laboratory.

Drishti has been installed at several civilian airfields under the Airports Authority of India, including the Bengaluru International Airport. It was also displayed during the Republic Day parade this year, as a showpiece of "Make in India". Even though, the defence ministry stopped payments to Tata Power (SED) on grounds of Drishti's induction. Modernising each IAF airfield would cost ₹37.5 crore. The unit replaced costs only ₹84 lakh, less than 2.5 per cent of the cost per airfield.

Despite dues piling up to ₹275 crore, Tata Power (SED) continued its work on 11-12 airfields. It lost an additional ₹12.56 crore in interest on outstanding dues. The interest charges cost Tata Power (SED) another ₹10.6 lakh.

Tata Power (SED) chief Rahul Chaudhry said, "We had proposed that the IAF could withhold ₹94 lakh for each RVR and give us the rest.

But this was not acceptable to the ministry of defence (finance) and our payments are stuck since then, leading to a large working capital interest burden of ₹10.6 lakh per day."

HARD HIT

- In 2011, Tata Power (SED) bagged a ₹1,219-crore contract to modernise 30 IAF and Navy airfields
- It replaced a runway visual range (RVR) to be sourced from Australia with local Drishti RVR
- Following this, defence ministry blocked payments of ₹275 crore
- Modernising each airfield would cost an estimated ₹37.5 cr. Unit replaced costs ₹84 lakh

THE HINDU

Thu, 11 May, 2017

Andhra University to start courses in defence sector

By Sumit Bhattacharjee

Varsity is in a position to earn about ₹100 crore in the next two to three years, says V-C

With the government support to the State-run universities dwindling with every passing year, the universities are looking out for sources of revenue apart from the traditional courses and the government grants.

Taking a lead in this direction, Andhra University has entered into a series of agreements with the defence sector for offering various courses and which would not only bring in additional revenue to the cash-strapped

90-year-old university, but also provide a good platform for the university students to interact with the professionals from the defence sector.

Win-win situation

According to AU Vice-Chancellor Prof. G. Nageswara Rao, it is a win-win situation both for the university and the defence establishments “On one hand we will be embarking upon new innovative courses that will benefit the servicemen and on the other the university will be earning good revenue and the peer influence will rise to a new-level,” he said.

According to him with the various tie-ups, AU will be in a position to earn close to about ₹ 100 crore in the next two to three years.

The university will offer close to 117 courses in the defence sector, covering disciplines ranging from engineering to sciences and humanities to law.

Giving details, the Vice-Chancellor said, “Recently we entered into an MoU with INS Viswakarma, Naval Dockyard, Eastern Naval Command, for offering courses in B.Sc (Naval Architecture) and B.Sc (Hull Maintenance). For Eastern Naval Command we are starting BE, B. Tech and MBA courses in the evening and we have entered into an MoU with the Air Force for offering courses in foreign languages like French, German, Japanese and Arabic.”

Diploma course in yoga

According to Prof. Rao, the foreign language courses have already begun at the campus and the Indian Air Force has also signed up for a diploma course in yoga.

Putting all the courses together, the university will be earning around ₹ 50 crore in the next two years, and we intend to scale it up to ₹ 100 crore subsequently, informed Prof. Nageswara Rao to *The Hindu*.

These apart, the university has also tied up with the Directorate General for Resettlement in New Delhi and the university will be offering short-term diploma courses or skill enhancement courses such as diploma in yoga, fire fighting, disaster management and marine engineering. “These courses are basically aimed at retired defence personnel and the intake in each course will be about 50 and the duration will be for three months,” said the V-C.

The annual budget is around ₹ 500 crore, and the block grant sanctioned by the State government is about ₹ 292 crore. This grant takes care of the annual salary and pension component of the university.

The remaining is met from internal sources, such as fees collection from students and affiliated colleges.



Thu, 11 May, 2017

Indian Army says will bring perpetrators to justice after Kashmiri officer abducted, shot dead by militants

The bullet-riddled body of a young Indian Army officer hailing from Kashmir was found in Shopian district on Wednesday morning, police said. The army officer was identified as Lt Ummer Fayaz, a resident of Kulgam who had come to Shopian for a wedding.

Suspected militants abducted and killed a Kashmiri army officer on leave for a relative’s wedding, police said on Wednesday, an attack the military called a “watershed moment” that will turn the tide against extremist violence in the region.

Villagers found Lieutenant Ummer Fayaz’s body on a road in Shopian early Wednesday, a day after the 22-year-old was snatched by unidentified men from his cousin’s wedding a few kilometres away. He was shot twice. In Kashmir, security forces are regularly targeted but militants singling out off-duty soldiers is rare. Army sources said the killing was to intimidate people and discourage local youngsters from joining the

government forces that have been fighting an Islamist insurgency that broke out in the region in 1989 and has since killed more than 40,000 people. The region has been battling an upsurge in violence since the killing of militant leader Burhan Wani by government forces last year.

Ummer's killing came about a week after a rogue Pakistani army team crossed the de-facto international border and beheaded two Indian soldiers, triggering outrage across the country and prompting the government to vow a strong response. Commissioned in December, Ummer was with the Rajputana Rifles in the Akhnoor sector. He was home on his first official leave.

Lt Gen Abhay Krishna of the Rajputana Rifles said the army stood "shoulder to shoulder" with the bereaved family. "This marks a watershed moment in Kashmir valley and people of Kashmir will decisively turn the tide against terrorism," he said.

In a separate statement, the army said it was committed to bringing "the perpetrators of this heinous act of terror to justice". Defence minister Arun Jaitley termed the killing as "a dastardly act of cowardice" and said in a tweet, "Lt Ummer Fayaz will continue to inspire youth from the Valley." Chief minister Mehbooba Mufti also condoled the death of the young officer. At the officer's village in Kulgam in south Kashmir – where walls are dotted with slogans of 'azadi' -- family members, neighbours and officials gathered at the lawns of his ancestral two-storey house to mourn the death.

"My son was born in 1994 and he would turn just 23 in a few weeks. He was a very good son, my only one..." said Ummer's father Fayaz Ahmed, an apple farmer, with tears rolling down his cheeks.

Family members said they were not aware of any threats to Ummer, who trained at the National Defence Academy near Pune and the Indian Military Academy in Dehradun. One of the relatives, Mohammad Ashraf, said quoting eyewitnesses that three gunmen climbed over walls and entered the house where the officer was attending his cousin sister's wedding. "The gunmen apparently went upstairs and specifically targeted Ummer." Jammu and Kashmir director general police SP Vaid said the family did not inform the police as "they thought they (the militants) would let him off".

The army described Ummer as a physically tough soldier who was part of the hockey team at the defence academy and also enjoyed volleyball.



Thu, 11 May, 2017

Slain Army officer Lt Fayaz excelled in training at NDA

By Sandip Dighe

Lieutenant Ummer Fayaz, who was murdered by militants in Kashmir's Shopian district on Wednesday, was an alumnus of the National Defence Academy (NDA) here, having passed out in 2015. The bullet-riddled body of the 22-year-old Fayaz was found in Harmen area of Shopian, south Kashmir, on Wednesday morning, hours after he was abducted by terrorists from Batpura village where he had gone to attend his cousin's wedding.

Faculty and course mates at NDA remember a cheerful, agile young man who was extremely fond of sports. Authorities at the academy told TOI that the young officer was from the Delta Squadron of the 129th course.

He was a member of the academy's volleyball and hockey teams during training from 2012 to 2015. "Fayaz was active in both sports. He was calm by nature. His records at the academy were also good," an NDA official said.

Lt Gen Abhay Krishna, the Colonel of Rajputana Rifles, grew emotional while paying tribute to the lieutenant. "We've lost a very good officer. Lt Fayaz was extraordinarily tough and highly motivated. He was always ready to take on challenges and believed in leading from the front," Lt Gen Krishna said. "He did three years with the NDA, one year with IMA, and then joined one of the best regiments. Speaks of his commitment to the country and the Army ... You felt good when he was around," the general said.

Expressing horror, Lt Gen Krishna said, “They killed a young and promising boy who was on leave to attend the wedding of his cousin and was unarmed. How does killing a young local boy square with the alleged freedom struggle they claim to be waging? This only proves once again that they are just a bunch of criminals.” The killing, he said, must serve as a wake-up call.

“People in Kashmir should think about the lives of promising kids that are being snuffed out. They should come out and take on terrorists and criminals for the sake of their own children,” he said. An officer under whom Fayaz trained at the NDA 's Army Training Team said, “Despite coming from a humble background, he was excellent in academics and managed to crack the tough NDA entrance. He was a hardworking cadet and would have had a successful career in the force. After passing out from the NDA in November 2015, Fayaz completed one year of training at IMA, Dehradun, and was commissioned into the 2 Rajputana Rifles regiment of the Army on December 10 last year. Fayaz was popular among the troops and was likely to go to Mhow to attend a course for young officers, Army sources said.



Thu, 11 May, 2017

Attempt to break social fabric in J&K'

First Unarmed Armyman Killed Since 1990s

The cold-blooded killing of Lt Ummer Fayaz, who was on leave to attend his cousin sister's wedding after being commissioned into the Army barely five months ago, is a grim reminder of the escalating battle being waged by terrorists to disrupt peach in south Kashmir.

The militants, aided and abetted by the Pakistan Army-ISI combine, have been regularly targeting Kashmiris serving in the J&K police and other government departments over the last few years. But this is the first time since the early-1990s that an unarmed Army officer on leave has been killed in the strife-torn state, in a clear attempt to intimidate the common people to have nothing to do with the state or Union governments.

“The attack is on Kashmiriyat and Sufiyat, a bid to destroy the social fabric in the state. For years, after all, common people with government jobs have peacefully co-existed with ones who sympathise with militants in villages,” said a senior Army officer.

Incidentally , there are 29 serving military officers and around 4,800 junior commissioned officers and soldiers in the Jammu & Kashmir Light Infantry regiment from the Valley , apart from over 8,100 ex-servicemen receiving pension in the state. Lt Fayaz, the son of a smalltime farmer in Kulgam district, knew that south Kashmir was reeling under a fresh surge in militancy . But the officer, who would have turned 23 on June 8, was “full of josh“ towards life.

“Eager to attend the wedding of his maternal uncle's daughter at Batopora, near Behibagh in Shopian district, he said he was after all going home to his own brethren. He had abiding faith in Kashmiriyat, though he was a bit wary of the violence being perpetrated by militants. His leave was till May 25,” said an officer. After joining the 129th course at the tri-Service National Defence Academy near Pune at the age of 18, where he excelled in sports like volleyball and proved to be a good sportsman and was even part of the academy's hockey team, Lt Fayaz was commissioned into the 2 Rajputana Rifles battalion from the Indian Military Academy at Dehradun on December 10 last year.

“He had joined his batta lion at Akhnoor on his first posting. His unit officers remember him as an honest, simple and enthusiastic officer, who gained the love of his soldiers in the short time he was there,” said a senior officer. Lt Fayaz had studied at Navodaya Vidyalaya at Ashmuquam in south Kashmir. “He was encouraged to join the NDA by the officers posted in the area under the Victor Force of Rashtriya Rifles, though his family had told some people that he was going for an MBBS course to Mumbai,” said another officer. The Army vowed to punish his killers. “I assure the family the perpetrators of this heinous crime and dastardly act will not be spared,” said Lt General Abhay Krishna, chief of the Army's South Western

Command at Jaipur and “Colonel“ of the Rajputana Rifles as its senior-most officer. Major Gen B S Raju, the Victor Force GoC directed all RR units in South Kashmir to launch a manhunt for the killers.



Thu, 11 May, 2017

Pakistan army walks back on charge against Nawaz Sharif

By Omer Farooq Khan

The Pakistan army retracted from its aggressive incursion into civilian domain by withdrawing from its earlier controversial tweet on Wednesday in which it had rejected Prime Minister Nawaz Sharif's directives on an inquiry report into Dawn Leaks, a news story about last year's high-level meeting revealing military's inaction against militant outfits.

The move came after a high-level civil-military meeting in Islamabad between Prime Minister Nawaz Sharif, army chief Qamar Javed Bajwa and ISI chief Naveed Mukhtar, among others. “The tweet on April 29, , was not against any go 2017, was not against any government office or person. Recommendations of the inquiry committee report, duly approved by the PM, have been implemented, which has settled the Dawn Leaks issue,” the Inter-Services Public Relations, army's media wing, said in a statement.

“Pakistan Army reiterates its firm commitment and continued resolve to uphold the Constitution of the Islamic Republic of Pakistan and support the democratic process,” Major General Asif Ghafoor, the army's spokesperson, later said.

On April 29, PM Sharif's office had issued directives to remove Syed Tariq Fatemi, special assistant to the PM on foreign affairs, from his post for his alleged role in Dawn leaks. Prior to that, information minister Pervez Rasheed had also been fired in connection to Dawn's story .

Pakistanis get blasphemy warnings - Millions of Pakistanis have been receiving text messages from the government warning against sharing “blasphemous“ content online, a move activists said would encourage vigilante attacks. “Uploading & sharing of blasphemous content on Internet is a punishable offense under the law. Such content should be reported on info@pta.gov.pk ,“ read the SMS sent by the Pakistan Telecommunication Authority to all mobile phone subscribers.



Thu, 11 May, 2017

Country Gets First ATR Simulator

Country's first ATR 72-500 full flight simulator inaugurated at Flight Simulation Technique Centre (FSTC) providing much relief to Indian aspiring pilots who had to wait for training slots in distant countries.

“Our young pilots had to go to other countries to get full flight simulator training and there were so much of inconvenience. Now, they will get training here at cheaper cost and also we will be able to train pilots from other countries,” said Civil Aviation Secretary RN Choubey on the launch of India's first state-of-the-art ATR 72-500 full flight simulator along with a second new Boeing 737 NG level D.

Over 40 ATR aircraft operate in the country including top carriers like Air India and Jet Airways and this number is growing continuously. IndiGo announced that it will be purchasing 50 ATR 72-600 aircraft while Air India's subsidiary Alliance Air is also planning to expand its fleet by leasing 10 ATR planes this year.

“There is so much of demand in India for ATR simulators for regular and recurrent training for airlines and pilots have to travel to Toulouse, Madrid and Bangkok for type-rating training. But now they will get the necessary training at 30 per cent less cost here in India. The induction and addition of the second B 737 NG

simulator by FSTC will enhance the capacity for training pilots by 100 per cent,” said FSTC CMD & Accountable Manager Capt Sanjay Mandavia.

“FSTC has trained over 500 pilots since 2012 who are inducted by all the major airlines like Indigo, Vistara, Jet airways, Spice Jet and Air India. We are already giving training to SpiceJet and Jet Airways pilots and are in talks with Air India to train even their pilots,” added Mandavia.

FSTC provides full flight simulators to the majority of airlines in India and conducts type rating program on B 737 NG, A 320 & ATR 72-500 for self-sponsored individuals as well.

THE ASIAN AGE

Thu, 11 May, 2017

Refrigerator for quantum computers discovered: Research

The research results published have suggested how harmful errors in quantum computing can be removed.

The global race towards a functioning quantum computer is on. With future quantum computers, we will be able to solve previously impossible problems and develop, for example, complex medicines, fertilizers, or artificial intelligence. The research results published today in the scientific journal, Nature Communications, suggest how harmful errors in quantum computing can be removed. This is a new twist towards a functioning quantum computer.

Even a quantum computer needs cooling fins

How quantum computers differ from the computers that we use is that instead of computing using normal bits, they use quantum bits, or qubits. The bits being crunched in your laptop are either zeros or ones, whereas a qubit can exist simultaneously in both states. This versatility of qubits is a needed for complex computing, but it also makes them sensitive to external perturbations.

Just like ordinary processors, a quantum computer also needs a cooling mechanism. In the future, thousands or even millions of logical qubits may be simultaneously used in computation, and in order to obtain the correct result, every qubit has to be reset in the beginning of the computation. If the qubits are too hot, they cannot be initialized because they are switching between different states too much. This is the problem Mikko Möttönen and his group have developed a solution.

A refrigerator makes quantum devices more reliable

The nanoscale refrigerator developed by the research group at Aalto University solves a massive challenge: with its help, most electrical quantum devices can be initialized quickly. The devices thus become more powerful and reliable. “I have worked on this gadget for five years and it finally works!” rejoices Kuan Yen Tan, who works as a post doctoral researcher in Möttönen’s group.

Tan cooled down a qubit-like superconducting resonator utilizing the tunnelling of single electrons through a two-nanometer-thick insulator. He gave the electrons slightly too little energy from an external voltage source than what is needed for direct tunnelling. Therefore, the electron captures the missing energy required for tunnelling from the nearby quantum device, and hence the device loses energy and cools down. The cooling can be switched off by adjusting the external voltage to zero. Then, even the energy available from the quantum device is not enough to push the electron through the insulator.

“Our refrigerator keeps quanta in order,” Mikko Möttönen sums up.

Next, the group plans to cool actual quantum bits in addition to resonators. The researchers also want to lower the minimum temperature achievable with the refrigerator and make its on/off switch super fast.