

समाचार पत्रों से चयित अंश Newspapers Clippings

दैनिक सामयिक अभिज्ञता सेवा

A Daily Current Awareness Service



रक्षा विज्ञान पुस्तकालय
Defence Science Library
रक्षा वैज्ञानिक सूचना एवं प्रलेखन केन्द्र
Defence Scientific Information & Documentation Centre
मेटकॉफ हाऊस, दिल्ली 110054
Metcalf House, Delhi-110054

In a first, HAL assures 75% availability of Dhruv fleet

AJAI SHUKLA
New Delhi, 30 March

In 2013, during the Uttarakhand floods, an embattled army and the air force conducted relentless rescue operations for two weeks with 22 Dhruv Advanced Light Helicopters (ALH), flying more than 1,000 sorties to save thousands of lives.

Elsewhere, the Dhruv's robust Shakti engine, optimised for high altitude flying operations, services the Indian Army's daunting, 20,000 feet-high pickets on the Himalayan border, including the Siachen Glacier sector.

Yet, the Indian military has one problem with this high-performance, indigenous machine that will form the bulk of its light chopper fleet in the coming decades. It is that only six-seven out of 10 Dhruvs are available to fly at any moment.

That "fleet availability" figure of 60-70 per cent is set to improve. On Thursday, the Dhruv's manufacturer, Hindustan Aeronautics Ltd (HAL), signed a contract with the defence ministry (MoD) that binds HAL to ensure a Dhruv availability of at least 75 per cent for the next five years.

The MoD says this unprecedented PBL contract relates to 32 Dhruv choppers being bought for ₹8,000 crore for the navy and the Coast Guard. It will also extend to an impending contract for 41 more Dhruvs for the army.

This is the first time an Indian manufacturer is guaranteeing the performance of a weapons platform to a buyer through a "performance based logistics" (PBL) contract. HAL is charging roughly half the purchase price of each helicopter for providing the services, maintenance, spare parts and inspections needed to keep 75 per cent of the contracted fleet fly-worthy at all times.

"PBL is the purchase of logistics support as an integrated, affordable, performance package designed to optimise system readiness and meet performance goals for the product through long-term support arrangements with clear lines of authority and responsibility", said HAL chief, T Suvarna Raju.

Calling PBL a "preferred acquisition strategy for defence acquisitions", the MoD said on Thursday: "PBL ensures the availability of products to the customer while the responsibility gets transferred to the contractor. The PBL envisages rewards or penalties based on the performance [of the fleet]".

While this is the first indigenous PBL contract, India has similar contracts in place for foreign aircraft like the C-17 Globemaster III and the Rafale fighter.

Now this PBL contract will expand HAL's maintenance responsibility substantially. The Dhruv currently operates off 15 aviation bases, which will go up to 40

bases by the time the new order is executed.

On a visit to HAL, Bengaluru in January, Business Standard learnt that HAL would set up a maintenance, repair and overhaul

(MRO) hub in the north and another in the east, from where repair teams could react to maintenance requests from aviation bases in their vicinities.

The Dhruv is the military's primary light helicopter. This year, HAL will complete delivery of an earlier contract for 159 Dhruvs, of which 83 are utility versions and 76 are an armed version called the Rudra.

Production capacity is being ramped up for the new contract for 73 Dhruvs (Army: 41; Navy: 16, Coast Guard: 16). In addition to production at Bengaluru, a new plant will come up at Kanpur to build Dhruvs.

In the past, HAL, under pressure to build and deliver Dhruv helicopters, had not focused adequately on maintenance and spares, say aviation analysts. The low availability this caused eroded customer confidence in an otherwise superb machine.

At one stage, the secretary in charge of defence production was monitoring the spare parts position for Dhruvs in the MoD every month. The PBL contract will henceforth put the onus squarely on the manufacturer, HAL.

A Fat Chance of Growth for Obese in Army

By Manu Pubby

Instructions sent to units across the nation to maintain records on fat soldiers from June

The army will start implementing a stringent set of new rules from June to cut down on obesity in the ranks, with a ban on promotions, foreign postings and distinguished awards for soldiers not found to be in shape.

Getting on with its action plan on 'Reducing Obesity in the Indian Army', instructions have been issued by HQ to all units across the country to maintain records of soldiers and officers who are found to be over 10% of their ideal body weight.

Senior officers have been asked to conduct spot checks, surprise visits and scrutinize records "if the individual appears to be obese". The detailed set of instructions accessed by ET also require the army to now maintain photographs of soldiers in their annual appraisal reports that will have a 'side profile' for visual records.

Soldiers not meeting the ideal weight criteria will not be allowed to go for any foreign postings, including to the much coveted United Nations peacekeeping forces and, according to the new rules, any plum posting will not be given to the identified individuals.

Officers and soldiers will also need to cut flab to pick up promotions that they would have otherwise qualified for. "If an individual is found more than 10% beyond ideal body weight, records office will not issue promotion order till such time as the individual comes within laid down weight parameters," the instructions state. The rules are also applicable to other non combat streams of the army including the army medical corps, defence security corps and the Territorial Army, empowering 'commanders in the chain' to conduct random checks to identify obese personnel. The only exception to the rules is for soldiers who have received wounds in combat and individuals certified as having heavy muscle or bone density.

Obese soldiers will also no longer be visible at public functions and events like awards ceremonies. While gallantry award winners would be allowed, any other awardees or escorts deemed to be obese would not be permitted to take part in the prestigious investiture ceremonies.

MAIL TODAY https://twitter.com/mail_today <https://facebook.com/mailtoday>

Fri, 31 Mar, 2017

Army tightens belt on fitness & health

With a number of officers and men looking out of shape in their uniforms and failing in physical tests, the Indian Army has waged a war against obesity in the force warning that such personnel would miss out on promotion, foreign postings and career enhancement courses in the force. As per the new policy issued by Army last week on reducing obesity in the force, there would no place to hide for obese officers and men as senior officers have been granted powers to carry out random checks during their visits and medically downgrade such people after a thorough check up.

"We don't want people to look shabby due to obesity and that is why, this policy aimed at cutting down waist and fat bellies has been issued after taking inputs from all the command headquarters," a senior Army officer told MAIL TODAY here. "We don't want our men to suffer from life style diseases caused due to obesity and anyways, such men would also impact operational effectiveness of men in field areas also," they said.

The policy letter, accessed by MAIL TODAY, mentions that the increased weight beyond the acceptable limits would also be mentioned in the annual confidential records of the officers as their front and side-on pictures would be attached with the service documents by the senior officers. Moreover, Commanding officers have

now been given powers to refer officers to military hospitals, if they feel that any officer or jawan is looking obese or over-weight. “Personnel, who are otherwise in shape 1 (medically fit) but are found to be overweight at the time of interview (for appointment at important posts) are liable to be graded as rejected at the discretion of the screening committee and appropriate ban can be imposed on them till they regain their shape,” Army officers said. As per the policy, all directorates involved in deployment of officers for foreign postings have to make sure that no overweight officer is sent there.

“The commanding officer would be responsible for all personnel under his command in ensuring that no individual, who is obese, is permitted to go abroad unless he is in a specifically-exempted category, battle casualties or war wounded,” the policy states. The force is coming down heavily on obese officers who are getting re-employed in Army after retirement. Such officers are given not many important tasks but many persons holding such offices don’t care about maintaining fitness, sources said.

“Officers who are obese will not be granted re-employment in the Army. Applications for re-employment will be accompanied by a certificate from the officer concerned that the individual is not 10 per cent over his weight and in absence of such a certificate, the application would be rejected,” the policy states. The Army is also working to keep such over-weight persons away from award ceremonies. “Personnel who are obese will be debarred from receiving unit citation or escorting recipients who have to receive awards. In case of such officers or JCOs, the next senior fit person would receive those awards,” the policy said. However, the weight restriction would not be applicable on persons receiving gallantry awards. For awarding distinguished service awards, Army headquarters has clearly stated that recommendations for such officers would not be initiated unless they are in the exempt category.



Fri, 31 Mar, 2017

Chances of an India-Pak nuke war are remote

The social context of the tensions between the neighbours has meant that hostilities are more in the form of ‘riots’

The latest edition of the Carnegie Nuclear Policy Conference in Washington that just ended featured American and foreign nuclear specialists chasing, as usual, the elusive nuclear catastrophe they are convinced is round the corner. There was also the obligatory alarm raised about South Asia. This year, the India-Pakistan “nuclear flashpoint” thesis was tweaked to claim that India has abandoned its No First Use (NFU) commitment and adopted a strategy, in case of an “imminent” launch, of a pre-emptive “comprehensive strike” against Pakistan. Such a course is being contemplated, it was argued, to spare the country the “iterative tit-for-tat exchanges” and prevent the “destruction” of Indian cities.

This hair-raising conclusion was not supported by other than extremely flimsy evidence — three unrelated statements by separate persons. Let’s examine and contextualise these statements in turn. The erstwhile defence minister Manohar Parrikar stated not long after taking office that India would “not declare one way or another” if it would use or not use nuclear weapons first. This was said expressly to inject ambiguity of response that is crucial for the credibility of the Indian nuclear posture. This credibility was lost in 1999 when the previous BJP government of Atal Bihari Vajpayee mindlessly made the draft-nuclear doctrine public, and later compounded the problem by replacing “proportional response” in the draft with “massive retaliation”. Incidentally, Parrikar’s avowal was in light of Prime Minister Narendra Modi’s political decision to not initiate a formal revision of the doctrine promised by the ruling party in its 2014 election manifesto.

The second reference is to the former national security adviser (NSA) Shivshankar Menon’s observation in his recent book that the Indian nuclear strategy has “far greater flexibility than it gets credit for”. The doctrine drafters in the first National Security Advisory Board (NSAB) intended and so shaped the doctrine, especially Section 4, to make it “elastic”, to enable escaping the limitations of “minimum” deterrence imposed by the prime minister in his suo moto statement to Parliament on May 28, 1998, before the constitution of the NSAB. The NFU declaration makes for fine rhetoric, distancing India from the hair-trigger situation Pakistan strives

for the world to believe exists in the subcontinent. It is in Pakistan's interest to talk up Hindu animus and predatory India, because it justifies not just its nuclear arsenal but its emphasis on first use of tactical nuclear weapons. In the event, treating NFU as a conditional constraint is what Menon hints at.

The third piece of proof trotted out is the views of retired Lieutenant General BS Nagal, a former strategic forces command (SFC) commander, particularly his view that a democratically-elected government cannot morally risk the decimation of the Indian people by sticking literally to the NFU pledge. It was during Nagal's tenure at the SFC, it may be recalled, when the then NSA MK Narayanan publicly revealed that the military was not in the know of nuclear arsenal details and, by implication, that the SFC was not in the nuclear loop. It may therefore be safely deduced that the views Nagal has developed was outside the SFC ambit.

However, certain developments in the nuclear weapons sphere do indeed make possible an Indian first strike. Such as the ongoing process of canisterising Agni missiles, including presumably the 700-km range Agni I meant for the Pakistan and Tibet-Chengdu contingencies. It, in fact, provides the country not only with a capability for launch-on-warning but also for striking pre-emptively should reliable intelligence reveal an adversary's decision to mount a surprise attack. Nuclear missiles in hermetically sealed canisters are ready-to-fire weapons and signal an instantaneous retaliatory punch to strongly deter nuclear adventurism. Thus, all nuclear weapon states keep a part of their strategic forces in ready state, there being no guarantees that a confrontation or conflict with another nuclear power will keep to a sub-nuclear script. Having the wherewithal for pre-emptive action and launch-on-warning then is only a reasonable precaution. Whatever their capabilities to fight nuclear wars, the chances of either India or Pakistan initiating a nuclear exchange for any reason are remote for the very good reason that western governments and analysts rarely acknowledge, because most of them are unaware or wilfully ignore the social context of India-Pakistan tensions, namely, the fact, whether anybody likes it or not, of these South Asian countries being organically linked.

Divided communities, continuing kith and kinship relations, shared religion and culture, mean that the so-called India-Pakistan "wars" are less wars, more "riots" — short periods of hostilities in geographically constrained spaces, hence the famously apt description of these by the late Major General DK Palit, originally of the Baloch Regiment, as "communal riots with tanks".



Fri, 31 Mar, 2017

China's 2nd jet carrier set for April launch?

China hinted at commissioning its first indigenously built aircraft carrier next month, even as earlier reports had said it might take years to become operational.

The news is a shot in the arm for the navy that plays a dominant role in projecting the nation's power overseas. The "outfitting work" is going on smoothly, military spokesman Colonel Wu Qian said on Thursday. Asked whether the aircraft carrier would be launched on the 68th anniversary of the PLA navy on April 23, he said, "We won't be kept waiting for long."

China currently has one aircraft carrier, which is a refurbished vessel from former Soviet Union. A third is in the pipeline. Reports also said China had started building a new generation of large amphibious assault vessels, including a helicopter carrier. The 075 Landing Helicopter Dock is now under construction.

Official media reports this month said China had operationalised its first stealth aircraft, the J-20. Once commissioned, it will have major implications for India as it was earlier tested near the border in Tibet for its endurance in high altitude.

Soon, observation station in Tibet

China will build a new observation station in Tibet to assist research and monitoring of the ecological system in the southeast of the autonomous region. The station, which will cover 2,600 square metres, is expected to be constructed in October in Deshing village of Metok County, the Chinese Academy of Sciences (CAS) said.

Nuclear bids on track, says Westinghouse

By Varghese K George

'Bankruptcy not to affect Asia operations'

Westinghouse's operations in Asia will not be affected by its decision to file for bankruptcy in America, the nuclear power company that is in talks to set up six reactors in India, said on Wednesday. "We are continuing with our India bids," Sarah Cassella, External Communications Manager of the company told *The Hindu* by email.

Ms. Cassella did not respond to a question on the possibility of the talks between the company and Nuclear Power Corporation of India Ltd. (NPCIL) meeting a June deadline for conclusion.

"Westinghouse's operations in its Asia and Europe, the Middle East and Africa (EMEA) Regions are not impacted by the...filings. Customers in those regions will continue to receive the high-quality products and services they have come to expect in the usual course," the company said in a statement. The company has obtained \$800 million in debtor-in-possession (DIP) financing from a third-party lender to help fund and protect its core businesses. Asian operations will also benefit from this financing, the company said.

Reorganisation plan

"Today, we have taken action to put Westinghouse on a path to resolve our AP 1000 financial challenges while protecting our core businesses," said Interim President & CEO José Emeterio Gutiérrez. "We are focused on developing a plan of reorganisation to emerge from Chapter 11 (bankruptcy) as a stronger company while continuing to be a global nuclear technology leader."

AP 1000 is the pressurised water reactor design developed and owned by the company. Westinghouse has been in talks with the NPCIL to build six AP 1000 reactors in Andhra Pradesh. This was the first commercial agreement to be concluded under the India-US civil nuclear deal signed in 2008.

While the U.S government has also taken the view that bankruptcy filing will have no impact on the ongoing commercial negotiations, India has taken a benign view of the developments.



Crunch times in Korean peninsula

By Ravi Velloor

Last week's missile test launch from the east coast of North Korea, deemed a failure by monitoring stations in the South and at the US Pacific Command, underscores the deteriorating situation on the Korean peninsula and heightened panic in Pyongyang's ruling elite.

That this year's Foal Eagle and Key Resolve exercises, as the US-South Korean wargames are known, have caused unprecedented consternation in Pyongyang is no secret. It comes as two US aircraft carrier battle groups are in Asian waters and the deployment of B1-B strategic bombers with munitions perfected for tasks such as taking out nuclear assets, or the regime itself.

The US is also rapidly installing the Thaad missile defence system in South Korea, a development that directly affects the strategic balance in that part of the world and worries not just Mr Kim Jong Un, the North's ruler, but also China, his protector and ally. Russia is uncomfortable as well.

Political statements of the past three months would suggest a moment heading towards a tipping point. The new American President has said North Korea is a “big, big problem and we will deal with that very strongly”. Mr Donald Trump also subsequently sallied forth with his famous tweet: “North Korea just stated that it is in the final stages of developing a nuclear weapon capable of reaching parts of the US. It won’t happen!”

Just last Friday, before he travelled to Beijing, US Secretary of State Rex Tillerson pronounced an end to the American policy of strategic restraint and said a “comprehensive range of capabilities” was being developed to tackle the situation caused by North Korea.

With so much noise, you would have thought that an attack on North Korea’s nuclear capabilities, if not an attempt at regime takedown, is imminent. It most likely is not.

Asia and the world, which waited and watched as Syria comfortably breached the “red lines” set by the Obama administration, should be prepared for *deja vu* in the time of Mr Trump. Indeed, tweeter Tony Posnanski’s acid response on the President’s Twitter handle to Mr Trump’s “it won’t happen” remark was probably the right question to ask: “Was this over dinner with Kim Jong Un?”

That is because the situation does warrant abundant caution. Bringing down the Kim regime, or launching an attack on North Korean nuclear pods, is no easy matter. For one thing, all those nuclear toys that threaten the South and Japan are not in one place but scattered around. Some are surely underground and others perhaps mounted on rail wagons to ensure they are not sitting ducks.

An equal worry is that there is no clear knowledge of the command and control mechanism employed by Mr Kim. Western news reports that the US managed to penetrate the North’s computer systems to thwart some missile tests would certainly not have been missed in Pyongyang, which would have taken countermeasures. Even if some of it was classic propaganda, delinking control systems would be a natural reaction.

Who knows to what level the power to launch has been devolved, and in what circumstances buttons will be pressed. Besides, a leader who has apparently assassinated his half-brother in the most public of places, using a nerve gas labelled a weapon of mass destruction, orchestrated by an intelligence service that has the guile to recruit foreign nationals as assassins, cannot be taken lightly. Japanese remember the gas attack on the Tokyo subway system in 1995. Mounted by the home-grown Aum Shinrikyo movement, it left 12 dead and affected thousands.

And of course there is also no knowing how China will react. Beijing has always viewed US reluctance to engage Pyongyang as emanating from a strategy of keeping the pot boiling on the Korean peninsula so it can station strategic arms on China’s periphery. Last week, Chinese spokesman Hua Chunying stuck fast to Beijing’s “suspension for suspension” position - that the US cancel the military exercises and the North suspend testing in tandem.

Beijing’s official position is to welcome eventual Korean reunification but it is no secret that while the current generation of South Koreans no longer shares the sentimental attachment to the North of their parents, China cannot chance an unexpected and sudden unification that could potentially see US troops move all the way up to the Yalu River, facing China’s underbelly.

For this reason, despite Beijing’s evident distaste for Mr Kim - high-level contacts between Pyongyang and Beijing are a third of what they used to be during his father Kim Jong Il’s time - they are stuck with each other. Indeed, there is a theory that it deliberately lowered its protection of Mr Kim’s half-brother to assuage his fears that China may betray him in order to placate Mr Trump.

It is fashionable in some quarters to portray Mr Kim as an attention-seeking renegade running an isolated nation mired in poverty and staring at possible regime collapse. Recent remarks on North Korea by Ms Nikki Haley, the US Ambassador to the United Nations, confirm that Washington thinks Mr Kim is not in control of his mind.

Some of this may well be accurate, who knows. Yet, who can deny that Mr Kim has shown surprising resilience and an ability to play a bad hand of cards rather well, skilfully employing brinkmanship while steadily advancing his nuclear programme. Previous Kims have proved durable and have died in their beds. As

for rampant poverty, those who think the North's economy is tottering would find it useful to know that food production in the North last year was significantly higher than in 2015. This is not soup kitchen time, not yet anyway.

This is presumably what Chinese President Xi Jinping and his Foreign Minister Wang Yi educated Mr Tillerson on during his stay in Beijing. Declining to have a posse of accompanying American media, Mr Tillerson has escaped close questioning but there is reason to surmise that he may have struck a deal on Korea with his interlocutors. Foreign Ministry spokesman Ms Hua's remarks on Wednesday reflect evident Chinese satisfaction: "The two sides arrived at a clear consensus on ensuring a sound development of China-US relations at a new starting point in the spirit of non-conflict, non-confrontation, mutual respect and win-win cooperation."

What possibly was the "give" on Washington's part? History may offer a clue.

The 1962 Cuban Missile Crisis was sparked by the Soviet Union installing missiles in Cuba, in the wake of America stationing Jupiter nuclear-tipped missiles in Italy and Turkey. The American naval blockade of Cuba that ensued was lifted only after both sides backed off - it was originally seen as the Soviets having "blinked" and President John F. Kennedy got much credit for his resoluteness at the time. Only years later was it revealed that Mr Kennedy had also agreed to remove the Jupiters. The Thaad anti-missile system is the probable clue here. But any such deal could offer only temporary respite.

The North's nuclear weapons programme will not be stopped, even if the US agrees to negotiate. Ambassador Kim In Ryong, North Korea's Deputy Permanent Representative to the United Nations, is reported to have said that "if the purpose is making us give up our nuclear programme, North Korea is not interested in any kind of dialogue".

Mr Kim would doubtless have drawn lessons from Mr Trump's attacks on the Obama administration's nuclear deal with Iran and stated intention to draw away from it. Indeed, he may reckon his security will be diminished, not enhanced, by standing still on his own programme.

Without rushing in either direction, the US would be wise to keep its options open. And whatever it decides it must keep South Korea fully in the loop, and have its buy-in.

An opportune time for a Korea policy review is perhaps not now, therefore, but after South Korea's presidential polls.

Badly handled, the result might not be a choreographed Hollywood-style script but more like a Russian novel such as War and Peace, with an untidy ending that does not have all the ends tied up.



*Fri, 31 Mar, 2017
(Online)*

NASA's Mars probe completes 50,000th orbit

NASA's Mars Reconnaissance Orbiter (MRO) has completed its 50,000th orbit this week, continuing to compile the most sharp-eyed global coverage ever accomplished by a camera at the red planet

The orbiter continues diverse science observations of Mars and communications-relay service for two active Mars rovers, Curiosity and Opportunity.

MRO's Context Camera (CTX) exploits a sweet spot in the balance between resolution and image file size.

With a resolution of about six metres per pixel in images of the Martian surface, it has provided a library of images now covering 99.1 per cent of Mars.

That is about equivalent to the land area of Earth. No other camera ever sent to Mars has photographed so much of the planet in such high resolution.

The Context Camera has taken about 90,000 images since the spacecraft began examining Mars from orbit in late 2006.

Each one reveals shapes of features down to sizes smaller than a tennis court, in a swath of ground about 30 kilometers wide.

"Reaching 99.1 per cent coverage has been tricky because a number of factors, including weather conditions, coordination with other instruments, downlink limitations, and orbital constraints, tend to limit where we can image and when," said Michael Malin, Context Camera Team Leader of Malin Space Science Systems in the US. In addition to observing nearly the entire planet at least once, the Context Camera has observed 60.4 per cent of the planet more than once. These observations aid science directly and also certify the safety of future landing sites.

"Single coverage provides a baseline we can use for comparison with future observations, as we look for changes," Malin said.

"Re-imaging areas serves two functions: looking for changes and acquiring stereoscopic views from which we can make topographic maps," he said.

A dramatic type of change the Context Camera has documented more than 200 times is a fresh impact crater appearing between the times of two observations.

These images enabled scientists to calculate the rate at which small asteroids, or bits of comets, are colliding with Mars. Some of the fresh impacts reveal white material interpreted as water ice.

The spacecraft was launched in 2005. It entered an elongated orbit of Mars in March 2006, then spent several months using friction with Mars' upper atmosphere to revise its orbit.

Since beginning its science operations in November 2006, MRO has been flying near-polar orbits lasting about two hours, at altitudes from 250 to 316 kilometers. The mission completed its 50,000th orbit on March 27.

"After 11 and a half years in flight, the spacecraft is healthy and remains fully functional," said MRO Project Manager Dan Johnston at NASA's Jet Propulsion Laboratory, Pasadena, California.