June 2020

समाचार पत्रों से चयित अंश
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Volume: 45 Issue: 137 13 June 2020

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जागरण

Sat, 13 June 2020

डीआरडीओ ने पुलिस को दी वर्दी और सैनिटाइज मशीन

रक्षा अनुसंधान और विकास संगठन (डीआरडीओ) ने शुक्रवार को नई दिल्ली पुलिस को दो सैनिटाइजेशन मशीन उपलब्ध कराई हैं।

नई दिल्ली : रक्षा अनुसंधान और विकास संगठन (डीआरडीओ) ने शुक्रवार को नई दिल्ली पुलिस को दो सैनिटाइजेशन मशीन उपलब्ध कराई हैं। इनमें से एक मशीन जर्मीक्लीन है, जिससे पुलिसकर्मियों की वर्दी और कागजात को सैनिटाइज किया जाएगा। दूसरी मशीन, सैनिटाइज टनल है जो पुलिसकर्मी और आगंतुकों को सैनिटाइज करेगी। मशीनों को विशेष तौर पर डीआरडीओ तैयार किया है। जर्मीक्लीन टीएम मशीन और सैनिटाइजिग टनल संसद मार्ग थाना और पुलिस उपायुक्त कार्यालय में लगाई गई है। टनल के जरिये पुलिसकर्मी और आगंतुकों को पूरी तरह से सैनिटाइज किया जा सकेगा। जर्मीक्लीन टीएम मशीन एक सूखे और गर्म कमरे की तरह है।

रक्षा अनुसंधान और विकास संगठन (डीआरडीओ) ने शुक्रवार को नई दिल्ली पुलिस को दो सैनिटाइजेशन मशीन उपलब्ध कराई हैं।

इसे कोरोना वायरस से फाइल, कपड़े और स्टेशनरी आदि को गर्मी के माध्यम से सैनिटाइज करने के लिए डिजाइन किया गया है। डीआरडीओ के मुताबिक कोरोना वायरस तापमान के प्रति अत्यधिक संवेदनशील है। विभिन्न तापमान पर कोरोना वायरस की स्थिरता का अध्ययन किया गया है और यह उच्च तापमान पर निष्क्रिय पाया जाता है। 70 डिग्री सेल्सियस पर वायरस निष्क्रियता का समय 5 मिनट पाया गया। इसलिए 15-30 मिनट के लिए 70-80 डिगी सैल्सियश के तापमान का सामना कर पाने वाले कागजात का शुष्क ताप उपचार कोरोना वायरस के खिलाफ किया जा सकता है।

https://www.jagran.com/delhi/new-delhi-city-drdo-gave-uniform-and-sanitary-machine-to-police-20384109.html

Business Standard

Sat, 13 June 2020

DRDO develops 'GermiKlean' to sanitise uniforms of police, security forces

The sanitising chamber has been set up at Parliament Street Police Station

New Delhi: Defence Research and Development Organisation (DRDO) has developed a sanitizing chamber named 'GermiKlean' to sanitise uniforms of security forces. The sanitizing chamber has been set up at Parliament Street Police Station.

In view of the coronavirus pandemic and risks faced by frontline personnel, the Defence Research and Development Organisation (DRDO) has developed a sanitising chamber named 'GermiKlean' to sanitise uniforms of security forces.

The sanitising chamber has been set up at Parliament Street Police Station.

DRDO's move came after Delhi Police gave their requirement for sanitising their uniforms, canes, cane shields, helmets, etc.

"We can keep our uniforms and other items to be sanitised inside the chamber and it has proved to be really beneficial for us. I am really thankful to DRDO for taking this initiative on our request. DRDO has also designed a sanitisation tunnel for us and they have also designed a mat for us for foot sanitisation," said Eish Singhal, DCP, Parliament Street Police Station.

DRDO designed and developed a dry heat treatment chamber named "GermiKlean". This chamber is designed to sanitise 25 pairs of uniforms within 15 minutes, said DRDO officials.

https://www.business-standard.com/article/current-affairs/drdo-develops-germiklean-to-sanitise-uniforms-of-police-security-forces-120061300128_1.html

DRDO Technology News

DefenceNews

Sat, 13 June 2020

How the BrahMos missile has evolved since it was test fired for the first time on this day in 2001

On 12 June 2001, a relatively unknown missile, jointly developed by India and Russia, blasted off from its canister at the Integrated Test Range in Orissa's Chandipur and roared majestically into a clear sky breathing out orange plume and leaving behind a cloud of smoke. It was perhaps the first time that the defence minister and all the service chiefs were present to witness the test launch of a missile.

Nearly 19 years later, this relatively unknown missile — BrahMos — has evolved, as its makers say, into a 'brahmastra', becoming a critical component of the offensive firepower of the Indian Army and the Indian Navy. The Indian Air Force is close to inducting its air-launched version, and the missile may even find a foreign buyer soon.

On Land

The Block-I of land-based version of the BrahMos was tested in the mid-2000s. By June 2007, the Indian Army had inducted the first missiles into its arsenal.

According to BrahMos Aerospace, one land-based weapon complex of the cruise missile has four to six mobile autonomous launchers, a mobile command post and a mobile replenishment vehicle. Each autonomous launcher has three canisters.

“The missiles can be fired in single or salvo of 2 to 3 seconds within four minutes of receiving command,” the maker of the missile says.

As Block-I version of the missile did not have the desired precision, owing to its inferior seeker, a new version of the missile — Block-II — was developed. This version, which has a more precise guidance system, was first test-fired in 2008.

In 2010, a new version of the missile, based on the army’s need for precision targeting in mountainous terrain, where targets are often located behind natural barriers, was tested for the first time. The changes required for this in the missile’s guidance software were incorporated in Block-III of the missile.

This version of the missile is capable of steep diving into valleys after flying over ridge lines, making it suitable for use along India’s mountainous border. By 2016, the version was tested for 65-degree steep dive. In 2019, it was tested for vertical steep dive.

India reportedly has three regiments of the BrahMos with Block-I and II missiles. In 2018, the government gave a go-ahead for the induction and deployment of a fourth regiment of the BrahMos in Arunachal Pradesh. This regiment of BrahMos will be equipped with the steep dive version of the missile.

At Sea

The Indian Navy was the first to identify the potential of the BrahMos missile. In 2003, destroyer INS Rajput was fitted with four missiles, two on each side in inclined configuration. It was inducted by the navy in 2005.

The navy uses both anti-ship and land-attack versions of the cruise missile. The land-attack version of the missile was test-fired for the first time by the navy from INS Rajput in 2008, giving it the capability of hitting coastal installations of the enemy.

Apart from some Rajput-class destroyers, the navy uses BrahMos cruise missiles on Talwar-class, Shivalik-class, and Nilgiri-class frigates, Kolkata-class and Visakhapatnam-class destroyers for both anti-ship and land-attack roles.

The navy has demonstrated the capability to fire the missile in salvo mode, “in which warships carrying the BrahMos can fire eight missiles at an enemy flotilla, two seconds apart, each targeting a different enemy warship”.

BrahMos Aerospace has also developed a submarine-launched variant of the missile, which was test-fired for the first time in 2013. The submarine-launched version, the maker says, can be launched from a depth of 40 to 50 metres.

In Air

The Indian Air Force (IAF) test-fired the missile from a modified Su-30MKI three times — first in 2017, second in May 2019 and the third in October 2019.

The air-launched version of the missile, lighter than other versions, weighs around 2.5 tonnes. The SU-30MKI fighters of the IAF, which will carry the missile, will have to be modified. Avionics of the fighter will have to be modified and the aircraft structure strengthened.

Earlier this year, the IAF deployed No. 222 Squadron 'Tigersharks' at Air Force Station Thanjavur in Tamil Nadu. The squadron is being equipped with SU-30 MKIs capable of carrying BrahMos missiles.

BrahMos Aerospace is also developing an ‘NG’ version of the missile for the IAF. According to Livefist, Su-30MKIs will be capable of three BrahMos-NGs.

Increased Range and Indigenisation

After India became a member of the Missile Technology Control Regime, BrahMos Aerospace has been working on increasing the range of the missile.

A new version of the missile, called BrahMos-ER (ER for extended range), was tested in 2017. In 2019, the firm said that a new missile with a range of up to 500 kilometres is ready. Another version, with a range of 800 kilometres, is under development.

A large part of the missile has also been indigenised. By 2018, the missile had reached 65 per cent indigenisation by value from 10-12 per cent in early years.

"In another six months, we would be close to 75 per cent," BrahMos Aerospace managing director and CEO Sudhir Mishra said in May 2018.

In March 2018, BrahMos was tested with an indigenous seeker developed by BrahMos Aerospace in partnership with the Defence Research & Development Laboratory and made by Electronic Corporation of India Limited. Two private companies were also part of the development of the indigenous seeker.

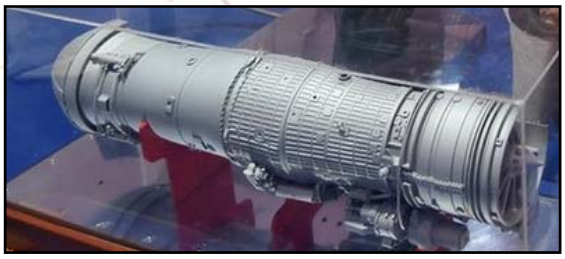
High Energy Materials Research Laboratory of the Defence Research and Development Organisation (DRDO) is developing a special solid propellant to be used as fuel by BrahMos. Work on the programme was started in view of Russia's reluctance to share the technology for solid propellants with India.

https://www.defencenews.in/article/How-The-BrahMos-Missile-Has-Evolved-Since-It-Was-Test-Fired-For-The-First-Time-On-This-Day-In-2001-841087

Sat, 13 June 2020

DRDO making plans to develop two jet engines?

IUCAV-UHF20 engine under development for the Ghatak unmanned combat aerial vehicle (UCAV) in the next phase will conduct a study on core enhancement of the same engine once it begins testing phase in the next 3 years said informed sources close to idrw.org.



In the first phase, IUCAV-UHF20 engine which is a non-afterburning engine with 52 KN thrust class will be developed for Ghatak UCAV program and in the second phase, an afterburning version will be developed with 85-90 kN thrust class so that it can be offered to replace F404-GE-IN20 engines at a later stage in Tejas Mk1A fleet.

India's 5th generation AMCA fighter jet program requires an engine which has Dry thrust of around 60-65 kN and wet thrust of 110 kN for which core enhancement of IUCAV-UHF20 engine will not be sufficient but if DRDO can demonstrate IUCAV-UHF20 engine and its afterburning version successfully then it will be cleared to develop a new engine for AMCA Mk2 which will enter production in 2035 which is still 15 years away from now.

IUCAV-UHF20 engine can also be used for HAL's SPORT Trainer jet based on Tejas Mk1 Trainer and also in the upcoming wingman concept which DRDO plans to offer to IAF soon.

https://idrw.org/drdo-making-plans-to-develop-two-jet-engines/#more-229060

DefenceNews

Sat, 13 June 2020

Govt extends deadline for defence contracts for Indian vendors

In view of the ongoing COVID-19 pandemic, the ministry of defence has extended the delivery period for all existing capital acquisition contracts with the Indian vendors by four months. The ministry believes the measure was needed due to supply chain disruptions arising out of COVID-19 preventive measures.

However, with respect to the foreign vendors, the ministry maintained that they can approach the Indian government, which may consider cases on the basis of the situation prevailing in their respective countries.

Multiple ongoing acquisition programmes from abroad have been affected due to the global pandemic, including delivery of Rafale fighter jets from France. The first lot of Rafale jets, which were scheduled to arrive in India by May, are now expected to come latest by end of July.

According to a statement issued by the ministry, "an order to this effect issued today by the acquisition wing of the ministry, duly approved by the Defence Minister Rajnath Singh, states that the “Force Majeure shall be applicable for a period of four months i.e., 25th March 2020 to 24th July 2020."

It adds that the “Duration of this Force Majeure will be excluded while calculating the delay in delivery of contracted equipment/service and imposition of liquidated damages charges.”

Ministry officials claim that the measure would bring much-needed relief to the domestic defence industry, whose production schedules have been adversely affected by COVID-19 situation.

The MoD order, however, adds that the "Indian vendor is free to deliver the contracted items well within the extended delivery period." Further as per the order, "no separate contract-specific amendments" are required to be made to give effect to this decision, the ministry explained.

Projects like the LCA Tejas are also hit by the pandemic. Hindustan Aeronautics Limited (HAL), the manufactures of Tejas, was under lockdown from March 24 to April 27 due to COVID-19 pandemic and re-opened on April 28. The pandemic has affected the production activity of various programmes, including LCA Tejas programme, according to a senior HAL official.

"Due to the unavoidable lockdown, valuable one month is lost. The supply chain is facing problems. Even subsequent to starting of the operations, the manpower in the divisions was restricted to maintain social distancing," said an HAL official, adding that manufacturing of the detailed parts of LCA Tejas is largely outsourced to many private vendors across India.

"However, many of the vendors have partially started or are in the process of resuming their operations due to lockdown relaxations. The travel restrictions have further heightened the situation. Further, some of the major foreign vendors responsible for supply of line-replaceable units (LRUs) for LCA Tejas are still under lockdown due to COVID-19 pandemic. Since the sea route and the air route are yet to be opened, the items, which were to be shipped to HAL, are also not yet delivered," the official further said.

He added that there will be a significant delay from the suppliers from countries like US, UK and France, which have been severely affected by COVID-19 pandemic and plans for restarting of industries is still not known.

"All this has affected the LCA Tejas programme. However, HAL will make all out efforts to minimise the impact to the extent possible," claimed another official.

HAL had planned to deliver all the 16 Tejas fighters with FOC (final operational clearance) configuration by 2021-22. "HAL is regularly communicating with its partners regarding starting of

their operations and their plan for supply of items to HAL. Vendors are yet to communicate their revised schedules. The new timeline can be worked out only after receipt of delivery schedules from various suppliers from within India and aboard," this official added.

https://www.defencenews.in/article/Govt-extends-deadline-for-defence-contracts-for-Indian-vendors-841072

Defence News

Defence Strategic: National/International

DefenceNews

Sat, 13 June 2020

Defence budget up by 11.9% amid tensions with India

The federal government on Friday proposed an 11.9 per cent increase in the defence budget despite the earlier announcement that military spending would remain unchanged in view of the grave economic situation compounded by the Covid-19 pandemic.

The budget document shows that the defence outlay for 2020-21 would be Rs1,289 billion as compared to Rs1,152 billion earmarked for the ongoing fiscal year. The increase, however, is 5% if compared with the revised spending of Rs1,227 billion in 2019-20.

Part of the excess defence spending in the ongoing fiscal year has been attributed to the continued tensions between Pakistan and India. Relations between the two countries have been spiralling downwards ever since the Pulwama attack in Indian Occupied Jammu and Kashmir in February 2019.

The two countries were on the brink of war when India sent its fighter jets inside Pakistan following the Pulwama attack. The Indian incursion invited a tit-for-tat response from Pakistan.

The Pakistan Air Force jets locked several targets inside India but dropped the missiles in empty spaces in order to show that Pakistan had the will and capacity to hit back.

Earlier this year, India raised its defence spending by around 6%. However, the size of Indian defence budget is six times bigger than the total outlay of Pakistan's defence. In fact, India's defence budget is equal to Pakistan's total budget outlay.

In its annual report released in April, the Stockholm International Peace Research Institute (Sipri) said India had the world's third-biggest military budget only behind the United States and China.

India's military spending grew by 259 per cent over a 30-year period stretching from 1990 to 2019 and by 37 per cent over the 2010-19 decade.

The military sources said that Pakistan spends $9,000 per solider, India $18,000, Turkey $37,000, China $70,000, Saudi Arabia $360,000 while the United States allocates $425,000 per solider annually. The difference, however, between Pakistan and other countries is that the size of their economies is far bigger than Pakistan.

Meanwhile, a closer look at the budget details revealed that Rs1,289 billion figure does not include Rs369 billion allocated for pensions of retired military personnel and Rs324 billion for the armed forces development programme.

According to the budget document 2020-21, of Rs1,289 billion, Rs475 billion has been allocated for employees-related expenses, Rs301 billion for operating expenses, Rs357 billion for local purchases and import of arms and ammunition and Rs155 billion for civil works.

The defence spending has always been the subject of discussions with some seeking greater transparency and open debate about the military's budget.

In recent years, the government provided more details about the defence budget. However, there has never been an open debate in parliament on the subject.

Apart from fighting militancy, Pakistan's defence spending is Indian centric given the animosity between the two nuclear-armed neighbours.

https://www.defencenews.in/article/Defence-budget-up-by-119-percent-amid-tensions-with-India-841082

INDIAN DEFENCE RESEARCH WING

Sat, 13 June 2020

Delayed Procurements will hurt India against China

By Joydeep Ghosh

As India and China stare down each other in various locations in Ladakh and various other locations across LAC, it is all about how well Indian tiger is prepared to take on the Chinese dragon. Not only is China numerically at advantage against India, in terms of troops but its weapons systems are also vast and numerically more than that of India.

Situation

Add to that that the physiological advantage of having captured over 38000 sq. kms of Indian territory in Aksai Chin and being gifted 5200 sq. kms of territory in Shaksgam valley Karakoram tract by Pakistan. Not to mention the slow creeping capture of territory in Arunachal Pradesh and Sikkim by first sending in the nomads to graze cattle and sheep and then moving in the troops to permanently capture the grazing lands.

However, none of these make China 9 feet tall, India has the resolve and its troops have the capability to inflict not only serous damage but actually seize territory inside China occupied Tibet and China occupied Xinjiang (my previous article http://idrw.org/zorawar-singh-kahluria-dogra-general-who-conquered-ladakh-and-raided-tibet/ on Zorawar Singh who marched 550 miles into Tibet)proves if calculated and well calibrated offensive operations are launched we can give real bloody nose to China. But to affect that India needs to equip its Army and Air Force with latest weapons and systems that we are lacking

Glaring Lack of Critical Weapon System

India needs to equip its Air Force and Army with numerous types of weapons and systems whose procurement plans have not been started yet. These are: –

1. Plans for IAF to procure 11 AEW & CS platforms.
2. Plans for procure 10 MRTTs.
3. Plan to procure 814 155mm/52-cal MGS (Mounted Gun Systems).
4. Replace Prithvi SS-150 SS-BSMs with Pralay SS-BSMs.

5. Procure ULH (Ultra-Light Howitzers) in large numbers (at least 350-400) that can be transported by helicopters.
6. Procure Single-engine LUHs for both IAF & IA.
7. Procure 9-10 belly-mounted SAR-equipped ISTR platforms.
8. Procure turbofan-powered HALE-UAVs capable of operating on LAC.
9. Procure up to 150 attack helicopters & up to 60 CH-47F-type heavy-lift helicopters.
10. Procure troop transport planes in large numbers.

Summary

All these procurements should have been completed by 2020 or some at least started by 2020. However only a couple of them have been started that too in small numbers to be effective. Add to it the building of new cantonments & ALGs (Advanced Landing Grounds) in Himachal Pradesh & Uttarakhand to house troops of IBGs (Integrated Battle Groups) that are actually part of MSC (Mountain Strike Corps) and specialize in high-altitude plateau warfare have yet to start.The absence of these critical weapons or delay in their procurement can hinder India's defense preparedness the prospects of India mounting a credible and effective offensive or counter offensive campaign inside China occupied Xinjiang and China occupied Tibet. Hopefully all these procurements are started by 2025 and completed by 2030 only the India can think of putting a war fighting machine to counter China in the 2030s. Let's hope for the best.

(this is another in series of China Tibet Aksai Chin Ladakh related article)

https://idrw.org/delayed-procurements-will-hurt-india-against-china/#more-229090

Greater Kashmir

Sat, 13 June 2020

Rajnath reviews situation in eastern Ladakh

Defence Minister Rajnath Singh on Friday reviewed India's overall military preparedness in eastern Ladakh and several other sensitive areas along the Line of Actual Control in Sikkim, Uttarakhand and Arunachal Pradesh even as commanders of the Indian and Chinese armies held another round of talks to end the current standoff, official sources said.

The defence minister was given a detailed account of the overall situation in eastern Ladakh by Army Chief Gen MM Naravane at a high-level meeting which was also attended by Chief of Defence Staff Gen Bipin Rawat, Navy Chief Admiral Karambir Singh and Air Chief Marshal RKS Bhadauria.

The Indian and Chinese armies are locked in an over five-week standoff in Pangong Tso, Galwan Valley, Demchok and Daulat Beg Oldie in eastern Ladakh.

The two sides have deployed additional troops along the Line of Actual Control (LAC), the de-facto Sino-India border, in North Sikkim, Himachal Pradesh, Uttarakhand and Arunachal Pradesh in the last few days, the sources said.

In the review meeting, Singh told the top military brass to continue to deal with the situation in eastern Ladakh and other areas with "firmness", at the same time insisting that the two sides must resolve the row through talks, they said.

It is learnt that the Chief of Air Staff conveyed in the meeting that the Indian Air Force is keeping a close eye on all the air activities by China along the LAC while the Navy Chief talked about the situation in the Indian Ocean region where the Chinese Navy has been trying to increase its presence.

"The defence minister carried out a comprehensive review of the situation in eastern Ladakh and other areas along the LAC," said a senior official on condition of anonymity. Military sources said the two armies held another round of Major General-level talks on Friday to find a way out to defuse the tension in eastern Ladakh.

https://www.greaterkashmir.com/news/national-2/rajnath-reviews-situation-in-eastern-ladakh/

APN NEWS
Friday, June, 2020| Today's Market | Current Time: 09:39:04

Sat, 13 June 2020

India was alert to Chinese tactics, increased Army on Arunachal border, Army ready to respond to every move of China

By Bhupen Goswami

Guwahati: Indian Army personnel were seen patrolling the Long Range on the Indo-China border in Lohit district of Arunachal Pradesh.

The Long Range Patrolling is part of the Army's combat exercise and is believed to have started after the Chinese Army's presence on the Arunachal border.Despite the military-level talks between India and China, tensions still remain. China maintains an army around the Line of Actual Control (LAC) with China in eastern Arunachal Pradesh. In view of this, India has also deployed its army.Chinese troops are engaged from Ladakh to Arunachal Pradesh, so India has also deployed a large number of its troops in response to this.India has also sent a reserve army to the region in view of the border dispute. India is increasing its artillery strength along the Line of Actual Control (LAC) with China in Arunachal Pradesh. Some similar preparations from India are also in Arunachal Pradesh. The Mountain Strike Corps has been deployed in the eastern sector to deal with any situation.

Sources said that China is increasing the number of military without any reason on that side of Arunachal, so India does not want to leave a decrease in military activity without losing any opportunity. Let me tell you, since May 4, the activeness of the army on LAC has increased because China has been sending its army continuously for many days. Further, if the situation worsens, the Army has asked 33 Corps of Sukna, 4 Corps of Tezpur and 17 Mountain Strike Corps in Ranchi to be deployed for which M777 ultra light howitzer guns purchased from the US will be deployed. 145 M777 are being purchased from USA. The army will deploy these cannons in the northern sector of Ladakh and the eastern sector in Arunachal Pradesh.Indian Army coordinator military intelligence officials said that artillery regiments deployed in eastern Arunachal Pradesh are being trained to operate M777.

One officer said, "These guns will greatly increase the strength of the army. They will be deployed by the end of the year. These cannons can be deployed in areas such as Tawang, Kameng and Waleong in Arunachal Pradesh. Another important cannon deployed on the border is to carry the Bofors to the place of deployment by road.For the last few years, the Army is finding it

difficult to transport Bofors cannons on the LAC in Arunachal Pradesh as the roads are not wide in this area.

To overcome this difficulty, the cannon is moved away from its vehicle. The Bofors cannon weighs 30–40 tonnes with its vehicle. The army is firing low caliber cannons like 105 mm. Cannons with more firepower are being replaced in their place. The army has developed the weapon detection radar 'Swati' in the country itself.This will help in timely detection of cannon shelling from the Chinese region. It is mentioned here that Chinese eyes have always been on the Tawang area of Arunachal Pradesh.

They consider Tawang as part of Tibet and say that there is a lot of cultural similarity between Tawang and Tibet. Tawang is also a major shrine for Buddhists. Therefore, it is said that China wants to take Tawang with it and take hold of major Buddhist sites like Tibet.Even when the Dalai Lama visited Tawang's Ministry, China was strongly opposed to it.

https://www.apnnews.com/india-was-alert-to-chinese-tactics-increased-army-on-arunachal-border-army-ready-to-respond-to-every-move-of-china/

hindustantimes

Sat, 13 June 2020

Chinese diplomat tweets a twist to Ladakh standoff, sees link to Article 370

"India's actions of unilaterally changing the status quo of Kashmir and continuing to exacerbate regional tensions have posed a challenge to the sovereignty of China and Pakistan and made the India-Pakistan relations and China-India relations more complex," Wang tweeted

By Rezaul H Laskar

New Delhi: The spokesman of the Chinese embassy in Pakistan created a flutter in diplomatic circles by appearing to suggest the standoff between Indian and Chinese border troops was linked to New Delhi's decision to scrap Jammu and Kashmir's special status last year.

Wang Xianfeng, whose Twitter bio describes him as press officer at the Chinese mission in Islamabad, included in his tweet a link to an article by a scholar from an influential think tank affiliated with China's ministry of state security or main intelligence agency, which also suggested a connection between the border tensions and the change in Kashmir's status.

"India's actions of unilaterally changing the status quo of Kashmir and continuing to exacerbate regional tensions have posed a challenge to the sovereignty of China and Pakistan and made the India-Pakistan relations and China-India relations more complex," Wang tweeted.

People familiar with developments said Wang is responsible for liaising with the Pakistani media. Though the tweet could represent his personal opinion, this is the first time a Chinese official has sought to link the border standoff with the change in Kashmir's status, including the creation of the union territory of Ladakh, which particularly angered China.

India and China are currently engaged through diplomatic and military channels for an "early resolution" of the border standoff after what Indian officials have described as a "limited military disengagement" along the Line of Actual Control (LAC) in Ladakh, the focus of the tensions.

When India scrapped Jammu and Kashmir's special status on August 5 last year, the Chinese foreign ministry had issued two statements criticising the development, including one that focused on the splitting of the state into union territories.

This statement, while urging India to be "cautious" on the border issue and to avoid "actions that further complicate the border issue", said: "China has always opposed India's inclusion of Chinese territory in India's administrative jurisdiction in the western part of the Sino-Indian

border." This was a reference to the area in Ladakh that New Delhi claims but is controlled by Beijing.

Wang's tweet linked to the article by scholar Wang Shida of the China Institutes of Contemporary International Relations, which began by saying India had since last August "taken constant actions to unilaterally change the status quo of Kashmir and continued to exacerbate regional tensions".

The article, titled "India blinded by 'double confidence'", said India's move to change the status quo in Kashmir "constitutes a serious threat to regional peace" and "posed a challenge to the sovereignty of Pakistan and China".

"On the Chinese side, India 'opened up new territory on the map', incorporated part of the areas under the local jurisdiction of Xinjiang and Tibet into its Ladakh union territory, and placed Pakistani-administered Kashmir within its so-called union territories of Jammu and Kashmir," the article said.

"This forced China into the Kashmir dispute, stimulated China and Pakistan to take counter-actions on the Kashmir issue, and dramatically increased the difficulty in resolving the border issue between China and India," it added.

The article noted that China's foreign minister Wang Yi had conveyed his country's position on these issues to external affairs minister S Jaishankar when he visited Beijing last year – that "India's moves challenged China's sovereign rights and interests and violated the agreement on maintaining peace and tranquillity in the border areas between the two countries".

At the time, Jaishankar had informed the Chinese side that India's action was a purely internal matter with no consequences for the country's external boundaries.

Amitabh Mathur, a former special secretary in the Research and Analysis Wing (RAW), questioned the timing of the Chinese official's tweet and said it underscored the complex issues involved in the ongoing standoff.

"It seems as if the Chinese are leaning on us and the situation isn't as simple as some are making it out to be. It's also strange that such a tweet emanated from a Chinese official in Islamabad. There is a Pakistani connection to it and it's almost as if the Chinese are trying to reassure the Pakistanis," he said.

https://www.hindustantimes.com/india-news/chinese-diplomat-links-ladakh-standoff-to-scrapped-art-370-creates-a-flutter/story-Jn0zkpbBFql6pcsdfKe82K.html

Sat, 13 June 2020

US will always stand with India in pushing back against Chinese probing of Indian sovereignty: Top US diplomat

Alice G Wells, Former Principal Deputy Assistant Secretary (PDAS) has said that the US will always stand with India in pushing back against constant Chinese probing of Indian sovereignty.

This statement by Wells comes after the Chinese military started a build-up along the Line of Actual Control in May first week along with the Ladakh sector and Sikkim where they came to the Naku La area and had a face-off with the Indian troops there.

"External rebalancing is critical. At the end of the day, it will be the US that stands with India in pushing back against constant Chinese probing of Indian sovereignty. #USindia dosti #india," she tweeted.

Provocative and disturbing behaviour: Alice Wells

The two countries have held military and diplomatic talks to resolve the stand-off in Eastern Ladakh peacefully with military Commander-level talks on June 6 between 14 Corps Chief Lt Gen Harinder Singh and Chinese Maj Gen Liu Lin at Moldo opposite Chushul.

Following the first round of talks, Chinese and Indian Armies disengaged by going back by 2-2.5 km from their stand-off positions at Galwan Nala, PP-15 and Hot Springs.

On Friday, Defence Minister Rajnath Singh held a meeting with Chief of Defence Staff (CDS) General Bipin Rawat and the services chiefs to review the situation in Ladakh.

'India-US must work together to make authoritarian China follow the rule of law'

While interacting with Rahul Gandhi former US diplomat Nicholas Burns said that India and the US must work together to make the "authoritarian" China follow the rule of law and called China-US tussle a battle of ideas against the fearful Chinese leadership that has been suppressing voices of its own people.

Burns further said what China lacks is the sophistication and openness of a democratic country like India or the United States and lashed at the Communist regime saying it has "a fearful leadership and fearful men are trying to preserve their own power, increasing the grip that they have on their own citizens."

https://www.defencenews.in/article/US-will-always-stand-with-India-in-pushing-back-against-Chinese-probing-of-Indian-sovereignty-Top-US-diplomat-841086

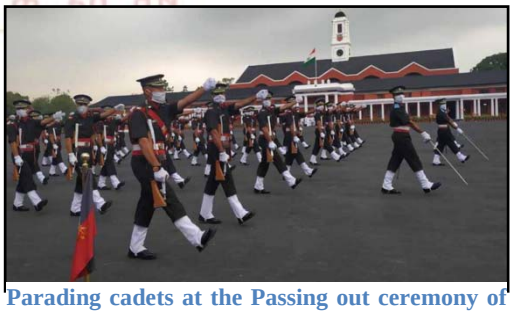
DNA
DAILY NEWS & ANALYSIS

Sat, 13 June 2020

IMA passing out parade takes place under COVID-19 shadow; event streamed live

This year, however, the parents of the cadets will unfortunately not be able to attend the ceremony due to the coronavirus disease (COVID-19) threat, quite literally, in the air

The Indian Military Academy (IMA) on Saturday morning held the Passing out Parade (PoP) for the 146 Regular Course and 129 Technical Graduate Course. This year, however, the parents of the cadets will unfortunately not be able to attend the ceremony due to the coronavirus disease (COVID-19) threat in the air. For the same reason, this is also set to be the first PoP that will be broadcast live across the country on the Indian Army's YouTube channel - ADGPI Indian Army - from 6 AM onwards.



Parading cadets at the Passing out ceremony of the Indian Military Academy

The 28th Chief of the Army Staff (COAS) General Manoj Mukund Naravane is the reviewing officer this year, who will see the 333 Indian and 90 Gentlemen Cadets from nine foreign countries becoming army officers.

Earlier, releasing a teaser for the parade, the Indian Army showed impressive visuals of the cadets lined up to graduate, ready to shoulder the nation's responsibility.

Concerning the COVID-19 pandemic outbreak, the IMA had said that all precautionary measures to cut the virus spread have been taken for the June 13 event, and, this is the reason that for the first time, parents and relatives of the cadets have been advised to watch the live coverage of all POP events on media to feel part of the celebration and the pride associated with it.

This was one of the major reasons why the Indian Army decided to broadcast the parade live on social media.

The parents or relatives of cadets usually pip-in the ranks on the shoulders of cadets after the passing out parade. This year, the ranks would be put on by instructors or families residing within the academy premises.

The passing out parade symbolizes the culmination of rigorous training and transformation of a gentleman cadet into a young officer. This time a significant part of their training was conducted with new rules and precautions.

An emphasis was provided on increasing the immunity of these cadets. They were also given the occasional allowance to watch television for a while and to talk to the housekeepers on the phone to reduce their mental stress.

Due to the IMA's discipline and resolve, it is said that here has not been a single case of infection at the academy. This year there will also be eight groups of cadets instead of the usual 10, who will stand two metres apart instead of the normal half a metre distance.

Every six months, the IMA organises a passing out parade for its cadets who join different arms and services of the Indian Army while the foreign cadets go onto join the armies in their respective countries.

https://www.dnaindia.com/india/report-ima-passing-out-parade-takes-place-under-covid-19-shadow-event-streamed-live-2827834

ZEENEWS

Sat, 13 June 2020

भारतीय सेना को कल मिलेंगे 333 नए अफसर, इस बार कैडेट्स को खलेगी ये बड़ी कमी

इस बार कुल 333 भारतीय और 90 विदेशी कैडेट्स आईएमए से प्रशिक्षण पूरा कर अपने देशों की सेना में कमान संभालने को तैयार होंगे। ऐसा पहली बार होगा जब आईएमए कैडेट्स अपने माता-पिता और रिश्तेदारों की अनुपस्थिति में अंतिम पग भरेंगे।

कुलदीप नेगी

देहरादून: भारतीय सेना को शनिवार को 333 नए अफसर मिल जाएंगे। कड़े प्रशिक्षण में खरा उतरने के बाद ये जांबाज कैडेट्स 13 जून को देहरादून की भारतीय सैन्य अकादमी (Indian Military Academy) में अंतिम पग भरेंगे। इसके साथ वह भारतीय सेना का हिस्सा बनेंगे। परेड में सेनाध्यक्ष जनरल मनोज मुकुंद नरवणे बतौर रिव्यूइंग ऑफिसर भाग लेंगे।

इस बार भारत के 333 और 90 विदेशी कैडेट्स POP में आएंगे नजर

इस बार कुल 333 भारतीय और 90 विदेशी कैडेट्स आईएमए से प्रशिक्षण पूरा कर अपने देशों की सेना में कमान संभालने को तैयार होंगे। ऐसा पहली बार होगा जब आईएमए कैडेट्स अपने माता-पिता और रिश्तेदारों की अनुपस्थिति में अंतिम पग भरेंगे। कैडेट्स पासिंग आउट परेड (Passing Out Parade) मुंह पर मास्क पहनकर करेंगे।

कोरोना के चलते कैडेट्स के परिजन इस बार POP में नहीं होंगे शामिल

कोरोना महामारी की वजह से इस बार पीओपी (Passing Out Parade) में माता-पिता को नहीं बुलाया जाएगा। परेड के बाद होने वाले पीपिंग सेरेमनी में माता-पिता ही कैडेट्स के कंधों पर लगी रैंक से कवर हटाते हैं। लेकिन इस बार ऐसा नहीं होगा। इस बार गुरु-शिष्य परंपरा के अनुसार प्रशिक्षक (Ground Training Instructor) कैडेट्स के कंधों पर लगी रैंक से कवर हटाएंगे।

सबसे ज्यादा यूपी के 66 और हरियाणा के 39 युवा बनेंगे सैन्य अफसर

इस बार उत्तराखंड के 31 युवा सैन्य अधिकारी बनेंगे, तो उत्तर प्रदेश के 66 युवा भी सेना में अफसर बनेंगे। बिहार के 31, तो हरियाणा के 39 युवा सैन्य अफसर बनेंगे। हिमाचल प्रदेश के 14 और जम्मू-कश्मीर के 14 युवा इंडियन आर्मी में अफसर बनेंगे। पंजाब के 25, महाराष्ट्र के 18, मध्य प्रदेश के 13 युवा भारतीय सेना में अधिकारी बनेंगे।

https://zeenews.india.com/hindi/india/up-uttarakhand/indian-army-will-get-333-new-officers-tomorrow-this-time-the-cadets-will-miss-their-parents-in-pop-ceremony/694965

THE HINDU

Sat, 13 June 2020

Biswajit Dasgupta takes charge as ENC Chief of Staff

By Sumit Bhattacharjee

Vice Admiral Biswajit Dasgupta took charge as the Chief of Staff of Eastern Naval Command (ENC) on Friday. Vice Admiral S.N Ghormade, the outgoing Chief of Staff, has been transferred as the Controller Personnel Services at the Integrated Headquarters, Ministry of Defence (Navy), New Delhi.

Vice Admiral Biswajit Dasgupta

An alumnus of the National Defence Academy (NDA), Vice Admiral Dasgupta was commissioned into the Indian Navy in 1985 and is a specialist in navigation and direction. He has commanded frontline ships including the missile corvettes INS Nishank, INS Karmuk, stealth frigate INS Tabar and the aircraft carrier INS Viraat.

He has held other operational, training and staff appointments such as Commander Work Up at Headquarters at Indian Naval Work-up Team (Kochi), Directing Staff at the Defence Services Staff College (Wellington), Officer-in-Charge of the Navy's Navigation and Direction School, Naval Assistant to the Chief of the Naval Staff and Fleet Operations Officer of the Western Fleet.

He has also served as the Chief Staff Officer (Operations) at Western Naval Command headquarters in Mumbai.

Vice Admiral Dasgupta also held the command of the Eastern Fleet in Visakhapatnam and was thereafter appointed as the Additional Director General at NCC Headquarters, New Delhi.

Vice Admiral Dasgupta is a graduate of Defence Services Command and Staff College, Bangladesh, Army War College, Mhow and National Defence College, New Delhi.

He is a recipient of Ati Vishisht Seva Medal, Vishisht Seva Medal, and Yudh Seva Medal for coordinating evacuation operations from strife-torn Yemen in 2015 under Operation Raahat.

https://www.thehindu.com/news/national/andhra-pradesh/biswajit-dasgupta-takes-charge-as-enc-chief-of-staff/article31816000.ece

ZEENEWS

Sat, 13 June 2020

Mikoyan-Gurevich MiG-35 fighter to get 'Rita', a voice assistant help for pilots

The Russians claim that MiG-35 is a completely new 4++ Generation combat jet comparable to its top rivals in service with different air forces around the world

Mikoyan-Gurevich MiG-35, Russia's 4++ Generation multirole fighter, is adding new features to help its pilots fly in different and difficult situations with ease. One such feature being incorporated in MiG-35 is voice assistant help which can provide various recommendations to the pilot during a difficult and potentially dangerous situation.

Russian Aircraft Corporation MiG Test Pilot Dmitry Selivanov told Sputniknews.com that the new voice assistant, which is unofficially called Rita, can suggest and even direct the pilot about the measures required during a particular situation.

"Everything in the new fighter is aimed at helping the pilot. In a critical situation, it can even suggest what should be done. Apart from that, an expert system is being developed, which will direct the pilot in difficult situations. We call her Rita, the voice communicant. Her voice remains pleasant and calm even if a fire hits the engine. She does not talk all the time; she just makes recommendations if the plane approaches some restrictions. Hints are also provided during combat usage," Dmitry Selivanov was quoted as saying by Sputniknews.com

According to Selivanov, the demonstration of the new voice assistant on the latest MiG combat aircraft being developed in single-seater and twin-seater versions has been progressing smoothly. The most difficult situation which a pilot is likely to face up in the air being currently being tested on the ground using simulators. Some of the situation being replicated include the cut-off of one engine or failure of a key system.

"Of course, no one would test such emergencies during flights. The most important thing is that the test pilot is always ready for any developments. To ensure this, he should be well versed in the technical equipment. Nothing serious has happened to MiG-35 yet. There were only some routine issues, which were later adjusted." claimed Selivanov.

Unveiled at the 2007 Aero India show in Bengaluru, the Russian fighter also entered the race for Indian Air Force (IAF) Medium Multirole Combat Aircraft deal for 126 jets. But the MiG-35 was later ruled out of the competition due to several shortcomings pointed out the IAF.

The Russians now claim that the current MiG-35 is a completely new combat jet comparable to its top rivals in service with different air forces around the world.

IAF test pilots Group Captain BS Reddy and Wing Commander FL Roy had in August 2019 flown the MiG-35 fighter at the International Aviation & Space Salon MAKS 2019 air show held at Zhukovskiy International Airport outside Moscow, Russia.

https://zeenews.india.com/world/mikoyan-gurevich-mig-35-fighter-to-get-rita-a-voice-assistant-help-for-pilots-2289483.html

INTERNATIONAL
THE NEWS

Sat, 13 June 2020

India: a prisoner of history - Part III

India for decades, more so with its pre- and post-Covid-19 economic downturn, has critically lacked resources to modernize its forces. This is compounded by severe equipment shortages.

In 2012, General VK Singh, the then Indian Chief of army staff, wrote a letter to Prime Minister Manmohan Singh, asserting that the Indian Army could not fight a war beyond three days'. It went on to say that "India's security may be at risk as tanks are running out of ammunition; air defence is 97 percent obsolete and the infantry lacks critical weapons".

General Singh also revealed India's Chanakayan duplicity about the formation of a China-specific top secret military force in Northeast India at a time when the then Chinese president Hu Jintao was a state guest in New Delhi. The same general is quoted in Myra Macdonald's 'Defeat is an orphan' while talking about the 1874 non- combat Indian casualties in the post Mumbai attack 2001 Operation Parakram troops buildup on Pakistani borders. The general says: "After a while we seemed to be at wars with ourselves"; sane generals and analysts insist that things are far worse now.

In an August 2009 address on National Security Challenges organized by the National Maritime Foundation, the then Indian naval chief and chairman, Chiefs of Staff Committee, Admiral Suresh Mehta said: "India needs to grow out of its Pakistan-centric approach when it comes to strategic planning. Common sense dictates that cooperation with China would be preferable to competition or conflict; the gap between the two is just too wide to bridge and getting wider by the day."

On July 21, 2017, India's comptroller and auditor general (CAG) presented a report in the Indian parliament raising serious concerns over India's defence abilities. It stated that the air force required 42 squadrons of jets (around 750 aircraft), to defend against a two-pronged attack from China and Pakistan but "with the bulk of obsolete jets like MiG-21 (flying coffins) due to retire soon, India would only have 22 squadrons by 2032". The CAG report found that "out of 80 missile systems received from Bharat Electronics Limited, 30 percent failed the basic tests".

The report went on to note that "India had announced in 2016 that it would deploy Akash missiles at six designated sites near the Indo-China border; it has failed installation at even a single site". On the other hand, China has deployed the latest missile systems at 39 locations aimed at the north Indian heartland targeting Delhi, Kolkata and other major Indian cities with no counter-measure deployments to counter it as major Chinese cities remain impenetrable for India.

A report submitted by Major General (r) BC Khanduri (BJP MP and senior member) in March 2018 to the Parliamentary Standing Committee on Defence also exposes the fallacy of India's misplaced jingoistic military might. It states: "[the] Indian army has enough stocks to last for only 10 days of fighting ... there are huge deficiencies and obsolescence of weapons, stores and ammunition with 68 percent of the (Indian) army inventory as obsolete".

A former Indian naval Chief Admiral Arun Prakash drew attention to the existing rules of business in the government of India, wherein "the service chiefs are three invisible men and the responsibility of the defence of India is vested in the bureaucracy".

Within India too, the much vaunted Indian military superiority is largely deemed an accounting subterfuge. Lt-Gen DS Hooda, former Northern Army Commander, recently said: "We need to first address our current hollowness in depleting war wastage reserves and ammunition shortages". On the other hand Pakistan, battle-hardened by years of sacrifices in fighting militancy, has excelled in logistic supply chain, missile delivery systems, nuclear technology, equipment and spares along with latest cyber and drone warfare – the hallmark of Pak China friendship and cooperation.

Moreover, decades of mutual cooperation with China in terms of technology transfer, training (starting aggressively in 2004 with the first Pak-China joint military exercises in Xinjiang), equipment sales, and a common bellicose adversary in India, has entailed our classic military interoperability with China – the capability of the Pakistan Army and PLA to execute joint missions against a common target.

India has not even been able to integrate its three services; an imperative of effective modern warfare. Ghazala Wahab and Praveen Sawhney are the authors of Dragon on our doorsteps: Managing China through Military Power', an excellently researched book that covers virtually every aspect of India's post-independence defense policy. It states: "Military power is an important part of the mix of any country's geopolitical perspective but India has diluted this aspect and suffered the consequences and will continue to do so till it changes its approach". It warns those who advocate a two-front war with China and Pakistan (or a two and a half one) that "even a one-front war is not an option".

Another sobering analysis sees military power heavily stacked in favour of China as it dwarfs India in all military aspects. China has nearly one million more troops than India, five times as many tanks and submarines with state of the art and more than double fighter jets (including 5th generation stealth capable J-20) and navy. China also has three times more nuclear warheads than India and a $178 billion defence budget against India's $57 billion. Pakistan too has transformed all its defence capabilities by continuously upgrading its missile system along with heavy armour and producing the JF-17.

Having said that wars and battlefields are glorified by only those who have never seen the horrors and brutalizing events first hand. The two World Wars saw over 107 million perish, over 50 million were civilians; since then at the turn of the millennium, wars have taken over 215 million lives. A nuclear war spurred by any Indian mis-adventure could unleash far greater horrors.

Rudyard Kipling, whose poem 'The White Man's Burden' was about British racial superiority and their 'responsibility of civilizing the savages' has since been dubbed as a 'vulgar rabble rouser' and 'mouthpiece of the (British) empire'. The New Yorker remembers him as "an imperialist zealot who prostituted his prodigious genius for propaganda and politics". At the outbreak of the First World War his son, John, failed to clear the army medical examination because of poor eye-sight. Kipling, the youngest Nobel Laureate, was a celebrity and a friend of Lord Roberts, Chief of the British Army and colonel of the Irish Guards. Using his influence, Kipling ensured that his son got commission in the Irish Guards.

The Battle of Loos was a major Allied offensive against the Germans on the Western Front. Among those killed in action, was Second Lieutenant John Kipling. The remains of Kipling's 'dear boy' were not officially discovered until 1992. His death left Rudyard Kipling an utterly devastated man. In his 'Epitaphs of the War', a couplet reads: "If any question why we died, tell them, because our fathers lied". He also wrote: "To be blanched... by fumes, to be cindered by fires/ To be senselessly tossed and re-tossed in stale mutilation/ From crater to crater, for this we shall take expiation/ But who shall return us our children?"

This is the question Indian jingoes need to ask themselves over and over again – 'who shall return us our children'? The 'Histories of Herodotus' speak of the agony as war reverses the order of nature: "Croesus, who told you to attack my land?' The King replied, 'It was the fault of the Greek gods, who with their arrogance encouraged me to march onto your lands. During times of peace sons bury their fathers, but in war it is the fathers who send their sons to the grave".

(The writer is a freelance contributor.)

https://www.thenews.com.pk/print/671820-india-a-prisoner-of-history-part-iii

The Indian EXPRESS

Sat, 13 June 2020

Military digest: Pink's war, Applying the principles of air control

The emerging technological capabilities of the aeroplane presented a more efficient, less expensive, and comparatively more humane way of enforcing its will to the government and a better way of imposing discipline

By Mandeep Singh Bajwa

The air operations in Waziristan on the North-West Frontier in the first half of 1925 were an important step in the development of aerial warfare; in particular the principles of air control. The campaign came to be known as Pink's War after the operational commander Wing Commander RCM Pink. This was the only campaign ever to be named after a Royal Air Force (RAF) officer.

In the period between the two world wars the theory of air warfare was propelled by such thinkers as Mitchell and Douhet. The RAF did not lack its own progressive theorists. They propounded the ideas of air control, blockage and stand-off bombardment. The force was looking for relevance in peacetime, planning for future wars and securing its own prospects against a backdrop of a post-World War One struggle between the three Services for means. This was a period of austerity.

The RAF did not lack its own progressive theorists. They propounded the ideas of air control, blockage and stand-off bombardment. (Source: wikipedia.org)

The use of air power for colonial policing presented a unique opportunity of testing the utility of air control. This seemed an attractive and intelligent option to the use of ground troops in expensive, lengthy and costly (in terms of casualties) campaigns. After the successful use of aerial bombardment in the Fifth Somaliland Expedition (against the armed Dervish movement putting up resistance to the colonialists) in 1920 the fledgling RAF was keen to further establish its military credentials as a force capable of power projection.

The opportunity presented itself in 1925 on the North-West Frontier of India. Ever since the British closed up to the borders with Afghanistan in the first half of the 19th Century the restless, freedom-loving Pashtun tribes of the region were a source of never-ending trouble – none more so than the Mahsuds of South Waziristan. Their belligerent, pugnacious behaviour coupled with the remoteness and inaccessibility of Waziristan made them an enduring cause of unrest. The region's terrain was as if made for insurgency.

Elaborate, costly and time-consuming punitive expeditions had to be mounted periodically by infantry, cavalry and artillery to subdue and suppress the Mahsuds at the same time maintaining a strategic footprint in the region. Large, ponderous columns requiring elaborate flank protection were required for what were known (not without reason) as Butcher and Bolt or Burn and Scuttle missions.

Air Vice Marshal (later Marshal of the RAF) Sir Edward Ellington, Air Officer Commanding, India made the unprecedented offer to quell the Mahsuds' defiance by conducting air operations without using the Army. He was a strong advocate of Salmond's policy of air control with greater RAF employment on the Frontier. Marshal of the RAF Sir John Salmond was an influential thinker on the use of air power in the inter-wars rising to become Chief of Air Staff in 1930.

The emerging technological capabilities of the aeroplane presented a more efficient, less expensive, and comparatively more humane way of enforcing its will to the government and a better way of imposing discipline. Air power presented an easy way to reach remote, mountainous

regions. It meant the selective use of force including minimum deterrence and calibrated, planned escalation. The use of aircraft enabled a swifter, more graduated reaction to provocations.

The strategic aim was to blockade the tribesmen out of their territory instead of into it. Tactics planned aimed to compel a tribe to abandon their villages and grazing grounds and prevent harvests and routine agricultural activity. The Mahsuds were to be prevented from fighting the Army on equal terms. No opportunity was to be afforded to loot weapons and ammunition, a prime motivation for raiding activity.

Air control meant interrupting the normal pattern of life of the tribes to such an extent that a continuation of hostilities become intolerable in the face of mounting economic losses. The Army's operational aim was always the military defeat of the tribesmen through causing casualties and physical control of territory. In contrast the RAF wanted to undermine their morale and sap their fighting spirit through denial and judiciously applied pressure. This was an appealing objective in political quarters hoping for the long-term establishment of stability and pacification.

By the end of February 1925 events were building up to a climax. Meanwhile the RAF's staff planned for the intervention looking more and more on the cards, allocating the force to be employed. A final warning in the shape of leaflets in Pashto and Urdu were dropped over the tribal areas on 25th February. The force to be deployed was No. 2 (India) Wing based at Risalpur (now in Khyber-Pakhtunkhwa) commanded by Wing Commander Richard Pink, a seasoned aviator and commander. After coordinating conferences with Army commanders and staff at Northern Command headquarters at Rawalpindi, Pink set about deploying his forces and arranging his logistics.

No. 5 Squadron with ten Bristol F2B two-seat biplane fighter and reconnaissance aircraft (colloquially known as the 'Brisfit') was deployed to Tank airstrip adjoining Waziristan. The other aircraft type employed was the de Havilland DH-9A single-engine light bomber. These were flown by Numbers 27 and 60 Squadrons (with 8 aircraft in each) and stationed at Miramshah forward operating base in North Waziristan. A flight ex-No. 20 Squadron deployed to Tank on 18th March to reinforce No. 5 Squadron. The Wing's operational HQ was also established there.

Conditions were issued in no uncertain terms to the Abdur Rehman Khel, Guri Khel, Fatidai and Maresai sub-tribes to ensure compliance including the usual payment of fines, surrender of a token number of weapons, cattle and recovery of abducted persons failing which air action was threatened. The Mahsuds were neither impressed nor subdued. They apparently didn't think very highly of operations by aeroplanes. The stage was now set for the launch of the first successful air control campaign in military aviation history at dawn on 9th March 1925.

Action was based on the tribal principle of collective responsibility for crimes committed. The rationale behind this approach was that each tribe, sub-tribe, village and Malik (tribal leader) was responsible for all that went on in its area. No distinction was made between combatants and non-combatants or those who were guilty or innocent. The area of operations was around 50-60 square miles of mountainous terrain ranging in height from 3,000 to 6,000 feet above sea level. This necessitated aircraft with full bomb-loads to restrict fuel capacities to approximately 60% in order to attain bombing heights.

Targets for bombing ranged from villages with mud-houses and fortified watch-towers to inaccessible cave dwellings to isolated huts and enclosed compounds. Tribesmen themselves and their cattle in the open were legitimate targets too for strafing. The tactical formation employed was a flight of three machines. The targets being small in size it was not considered economical to attack with more than such a small number. Bombing runs were usually from a height of 3,000 feet above the targets. After a number of experiments, the best bomb-load for the purpose on the DH 9A was found to be eight 20-lb bombs under each plane and two 112-lb bombs under the centre section. The 20-lb bombs were used generally for harassing action and the 112-lb bombs against any major targets which were observed. Except in the morning and evening atmospheric conditions made accurate bombing problematic.

Tactics used were intensive air attack, air blockade and night bombing. Attacks from the air consisted of a series of coordinated raids. The power of attacks varied across time and place. Intensive air attacks were conducted by a series of coordinated raids. Air blockade consisted of constant raids on targets of opportunity creating continual harassment giving rise to a general feeling of uncertainty, insecurity and apprehension. By preventing cultivation or grazing of flocks the economic base of the tribes was hit hard.

On 30th March a Bristol fighter from No. 31 Squadron fitted out for night-flying arrived at Tank. Night bombing used moonlight for navigation. Flares were of great help. The first such sortie occurred on 4th April with ground crew employing searchlights and paraffin landing flares to recover the aircraft. This was a significant development. The Mahsuds considering themselves safe at night now faced round the clock aggression. Buoyed by the success of this game-changing tactic RAF headquarters ordered two more Bristol night-fighters flown from Ambala to Tank to augment the bomber force.

By 20th March, RAF operations had forced the majority of hostiles into hiding and completely upset their normal routine of life. On 21st March, Flying Officers NC Hayter-Hames and EJ Dashwood from No. 27 Squadron flying a de Havilland DH-9A biplane were forced to crash-land in hostile territory. The cause was probably accurate rifle fire, something that the tribesmen were noted for. Hayter-Hames was killed immediately. Dashwood heroically leapt into the flames of the burning aircraft to extricate the pilot and was severely burnt. He was taken into the care of friendly Guri Khel tribesmen who lavished care on him but to no avail. That bodies of both downed airmen were returned augured well for hope of a negotiated settlement.

Despite a number of minor successes, it was becoming clear to the commanders and staff by this stage that operations were likely to become drawn-out. The speedy victory initially sought was not visibly in sight. The campaign now developed into an air blockade enforced by a pair of aircraft patrolling a designated area ready to bomb and strafe targets of opportunity or call up reinforcements. Their very presence kept the hostiles' heads down and under cover. The tactics were working.

To achieve a greater effect and give evidence of the force that backed up the government's resolve a large offensive was mounted on 4th April prior to the first night-raid with some 38 sorties being flown during the day time. In the meanwhile, Jirgas had on and off appeared before officials with suggestions for terms. Nothing came out of these approaches though.

Squadron Leader TF Hazell, commanding officer of No. 60 Squadron made a forced landing at Sorarogha emergency landing strip after his engine cowling came loose on 4th April. His DH-9A was a total write-off though he and his gunner escaped with minor bruises. In the only incident of a large body of tribesmen being encountered in the open, a gathering of the Faridai sub-tribe was attacked on 9th April with bombs and machine-gun fire. Reinforcements were called in to turn it into a rout but the weather played spoil-sport.

Despite momentary lulls because of negotiations operations continued into the third week of April. Ultimately three days of exhausting, frustrating negotiations beginning 28th April brought results. The tribesmen having been 'softened-up' by the ruthless air offensive terms were finally agreed upon by all parties on 1st May. Fifty-four days of unremitting air action came to an end with all government terms accepted by the hostile tribes.

The Times of London, the British Empire's gold standard as far as journalism was concerned, having ignored the campaign till now suddenly work up to state, 'The operations of the RAF in Waziristan have been crowned with success'. Tribal casualties could not be computed correctly but were believed to be high. More important was the fact that the usual suppression and punitive aim was achieved without deploying ground forces and with negligible losses. As we already know only two British Servicemen (the unfortunate Flying Officers Hayter-Hames and Dashwood) were killed in action their plane being the only one lost to suspected enemy action. Squadron Leader Hazell's DH-9A, as we already know was lost in an accident.

The operational statistics and comparison with earlier operations made an interesting study. Pink's pilots flew 1,222 sorties to drop 154 tons of bombs and fire 100,000 rounds of ammunition on the hostiles. A total of 2,713 hours of flying time were used to unload all this ordnance. In sharp contrast ground action in 1919-20 to suppress the Mahsuds and punish them for transgressions cost 1,800 killed in action, 3,675 wounded and 40,000 sick (the overwhelming majority succumbing to the worldwide Spanish 'flu epidemic). The financial cost of Pink's operations was negligible compared to those which occurred five years earlier.

Utter helplessness and inability to retaliate against air attack wrought great psychological damage on the tribesmen and brought about their speedy capitulation.

Delay in initiating operations meant that warming weather made conditions easier for tribesmen and their families to stay out of doors or in caves. Passes into Afghanistan being free of snow and therefore open the tribesmen could take refuge there with ease.

A number of lessons were learnt by the RAF. Wear and tear on aircraft and engines from the ongoing training season resulted in the overall shortage of 27 planes and 40 engines. By 1st May the shortage had grown to 85 planes and 44 engines. Despite crippling shortages 2,700 hours of flying were done over a 54-day period

All pilots due to be rotated out of India on completion of their tenures had already left. Their replacements needed training and experience in flying in Indian conditions.

Pink was a dynamo of energy throughout the operations. His leadership undoubtedly played a vital part in ensuring success.

What was the impact of No. 2 Wing's campaign on future operations? Firstly, the use of offensive sir support became a regular feature factored into all futuristic planning. The all-important task of road opening or securing communication routes for through traffic against raids, ambushes and sniping now featured fighter support. Transportation of troops and logistic support by air made their debut in Frontier warfare.

The tribesmen considered the use of aircraft rather 'unsporting' of the British. No rifles or ammunition could be recovered from aircraft. One Malik said, 'Hostilities against aircraft were poor sport resulting in few casualties'. The Pashtuns had no anti-aircraft weapons or even machine-guns. They used rifle fire to try and stave off attacking aircraft. At times it was very accurate in keeping with their reputation for marksmanship. A young RAF officer wrote in 1928 that 'The Mahsuds' rifle fire was uncomfortably like that of a machine-gun and almost as effective'.

What lessons does Pink's War hold for us in India now? The threshold of minimum force required for counter-insurgency operations in free India cannot obviously be crossed in the manner that the British could when dealing with a population other than their own. That much must be clear from the panicky decision of our government to sanction the use of air strikes on Aizawl in the beginning of the Mizo insurgency in March 1966. The misjudged action rankles to this day among the people of Mizoram and played a major role in recruitment to the insurgents' ranks.

The entire technology and scope of air power have changed over the last century with the latest stand-off weapons, smart munitions, unmanned combat aerial vehicles and air-launched Cruise missiles. These provide a golden opportunity to launch aerial attacks from safe locations on our side of the Line of Control (LOC) on terrorist training camps, launchpads and support infrastructure in Pakistani-Occupied Kashmir, West Punjab and Khyber Pakhtunkhwa. We made a start with the Balakot airstrike. Time to take it to the next level now.

Lastly, during his many flights over the area of operations, Richard Pink composed a piece of rhyme titled 'Waziristan 1925'. The chorus ran –

Don't you worry there's nought to tell
'Cept work and fly and bomb like hell,
With hills above us and hills below
And rocks to fill where the hills won't go,
Nice soft sitting for those who crash

But war you call it?—don't talk trash!
War's a rumour, war's a yarn,
This is the peace of Waziristan

https://indianexpress.com/article/india/military-digest-pinks-war-applying-the-principles-of-air-control-6456139/

THE DIPLOMAT
Read The Diplomat, Know the Asia-Pacific

Sat, 13 June 2020

Amid escalating tension with China, Australia and India strengthen partnership

A new Australia-India agreement is a sign of regional cooperation to halt Chinese aggression across the Asia-Pacific

By Joshua Mcdonald

The China-Australian relationship is at an all-time low. Over the past six months, disputes typically kept behind closed doors have leaked into public view. It began with Australia pushing for an independent investigation into the origins of the coronavirus. China responded with threats of economic coercion, and then placed tariffs on Australian barley and banned beef from four major Australian exporters.

In this handout photo provided by the Press Information Bureau, Indian Prime Minister Narendra Modi speaks during a virtual meeting with Australian Prime Minister Scott Morrison, in New Delhi, India, Thursday, June 4, 2020.

Then came warnings from Beijing that Chinese travellers and students should avoid Australia, stating it is unsafe due to racist attacks against Asians during the pandemic. "That's rubbish. It's a ridiculous assertion and it's rejected," Australian Prime Minister Scott Morrison told 3AW. A recent survey has, however, identified an increase in racist incidents, including abuse, physical intimidation, and spitting across the country.

As Australian and Chinese officials continued to battle it out verbally, high up in the Himalayan mountain range, tension between the armies of the world's two most populous nations, India and China, had also reached a simmering point.

Clashes along the disputed border aren't unusual but a few days after one particularly fierce fight, in which troops from both sides were injured and had to be evacuated, reports emerged of Chinese troops confronting Indian soldiers across several other checkpoints and of Chinese troops amassing inside Indian territory.

India responded by sending thousands of military personnel to reinforce the area. "Our build up matches the Chinese deployment, if not more, in terms of troops, support elements, force multipliers and aerial support," said an Indian official. A senior officer stationed in the region told News18 that: "China stabbed us in the back. In the middle of a pandemic, this was not expected."

Beijing and New Delhi have since agreed to "peacefully resolve" the situation while the Australian government has made it clear that it will not be escalating its confrontation with China by entering into a trade war with its largest two-way trading partner.

But Chinese aggression is not limited to border incursions in the Himalayas or diplomatic spats with Australia. In recent weeks, the Chinese Coast Guard rammed and sank a Vietnamese fishing vessel, swarmed and harassed a Malaysian oil rig, and threatened a Philippine Navy ship, all while the Chinese air force continued to exercise close to Taiwan and the government moved to pass laws that restrict Hong Kong's autonomy and freedoms.

With China's ditching of soft power, the idea of regional cooperation among its neighbors has begun to pick up momentum. Just last week, Australia and India raised their relationship to a "Comprehensive Strategic Partnership" and issued a joint declaration on a "Shared Vision for Maritime Cooperation in the Indo-Pacific."

Ahead of the virtual summit between India's Narendra Modi and Australia's Scott Morrison, adjunct professor of Asian Studies at the University of Adelaide Purnendra Jain wrote: "While it is unlikely that the 'C' word will figure in the talks between Morrison and Modi, China will no doubt loom large in both leaders' minds."

"Both countries are members of the so-called 'Quad,' a security dialogue framework comprising Japan, India, Australia and the United States," he wrote. "After being hesitant initially, both have now committed to it. India has signalled a desire to become more involved as Modi has pushed back against China's influence in the region."

While much of the new partnership is focused on economic cooperation, with Australia trying to shift its economic dependence away from China and India wanting greater access to Australian goods and services, the maritime cooperation is a key component to both nations' efforts to respond to China's intensified interest in the Indian and Pacific Oceans.

Late last year, Indian Navy Chief Admiral Karambir Singh expressed concerns about China's "presence in the Indian Ocean increasing." Some of the Chinese vessels are reportedly deploying drones for oceanographic research, potentially gathering critical information needed for submarine deployment. China has carried out similar operations in the Pacific.

The joint declaration states that: "Both countries share a view that many of the future challenges are likely to occur in, and emanate from, the maritime domain." The agreement will allow Indian and Australian military ships and aircraft to refuel and access maintenance facilities at each other's bases.

Some regional security experts have flagged the possibility of the maritime agreement growing to include the mutual use of India's Andaman and Nicobar Islands and Australia's Cocos Islands for military purposes. This would give both countries the ability to expand their surveillance and security presence beyond their current reach. Such an agreement would give India better access to the Pacific Ocean and Australia better access to the Indian Ocean.

In 2007, under the Quad alliance, Australia participated in exercises with the Indian, American, and Japanese navies but withdrew after China expressed concerns. The U.S., Japan, and India continued the exercises. Australia has reportedly been lobbying to re-join the exercises since as early as 2015. Since then, and much to Australia's dismay, India has not invited Australia back in, but it seems much more likely with this new maritime agreement now in place.

(Joshua Mcdonald is an award-winning multimedia journalist based in Melbourne, Australia.)

https://thediplomat.com/2020/06/amid-escalating-tension-with-china-australia-and-india-strengthen-partnership/

the pioneer

Sat, 13 June 2020

The journey to space

Russians are proud with their achievements in various spheres including space exploration. The first two cosmonaut dogs' real names were Albina and Markiza, but the country's leadership did not like foreign-sounding names, so named them Belka and Strelka. In August 1960, they became the first living creatures to orbit the earth. Their space voyage lasted a little over 24 hours, during which their spaceship circled the earth 15 times. Both dogs lived to a ripe old age and died natural deaths. Their stuffed bodies are now at the Cosmonautics Memorial Museum in Moscow.

The Soviet Union launched the first artificial earth satellite Sputnik-1 on October 4, 1957, ushering in the space era. News of the launch stunned the world, as Western propaganda believed the Soviet Union was technologically way behind the West. The satellite emitted a radio signal that could be heard by any amateur radio fan.

The Americans may have been the first to land on the moon, but Soviet pennants had been dropped there on September 14, 1959, by the Soviet space station Luna-2, which was the first probe to reach the moon. That same year, the Soviet Luna-3 station photographed the dark side of the moon.

The first full-pressure spacesuits were made in the Soviet Union in late 1959. On April 12, 1961, Soviet cosmonaut Yuri Gagarin became the first human being to fly into outer space, making him possibly the most famous person on the planet at the time.

The world's first moon rover, Lunokhod-1, was created in the Soviet Union. It was intended for studying the moon's surface, radioactive and space X-ray radiation, the chemical composition and properties of moon rocks. It was delivered to the moon's surface on November 17, 1970, and worked for 10 months — three times longer than its designed lifespan — covering a total of 10.5 kilometres and transmitting 211 panoramic lunar pictures and 25,000 photographs.

Soviet scientists were also the first to land a workable piece of space apparatus on another planet — Venus. Venera-7, an automatic space research station, landed on the surface of the planet in mid-December 1970. The body of the landing module was made of titanium to withstand the pressure of 100 atmospheres and 500-degree heat.

In March 1965, Soviet cosmonaut Alexei Leonov became the first person to walk in space. He spent 10 minutes in free flight at a distance of more than five metres from the spaceship — a long way when you consider that the spaceship was hurtling at a speed of more than seven km per second.

Valentina Tereshkova (known as Chaika or Seagull) was the first woman cosmonaut. She spent nearly three days in space aboard the Vostok-6 spacecraft. Tereshkova later married cosmonaut Andrian Nikolayev. Their daughter Yelena became the first child born to a 'space' family.

The Mir space station was the first consistently inhabited long-term research station in outer space. The main module was put into orbit on February 20, 1986. Over the next 10 years, six modules were added to it. The Mir station covered a distance slightly longer than that from earth to uranus. In 2001, the station was brought back down to earth, landing in the Pacific.

Today, Russia uses several rocket launching sites. Among them are Vostochny, Plesetsk and, of course, Baikonur, which celebrated its 65 years on June 2, 2020. It was built as a test range for the

first intercontinental ballistic missile R-7. The first ballistic missile was test-fired from Baikonur on May 15, 1957. The testing range was transformed into a spaceport on October 4, 1957, when the first satellite was put into orbit.

Russia will not stand still. This year, two new missiles will be tested, and next year a Lunar programme to be resumed. And, of course, international cooperation is crucial in the means of successful space exploration activities. Thus, we are glad that Gagarin Research and Test Cosmonaut Training Center (GCTC) on May 12 resumed training of the Indian cosmonauts under the contract between Glavkosmos, JSC (part of the State Space Corporation Roscosmos) and the Human Spaceflight Center of the Indian Space Research Organisation (ISRO).

All four Indian cosmonauts undergoing training in Russia are in good health. The health of Indian cosmonauts is carefully protected: GCTC continues to observe anti-epidemic regulations according to which sanitary and hygienic measures are carried out, social distancing measures are applied and the presence of unauthorised person is restricted. All employees and cosmonauts must wear medical masks and gloves.

https://www.dailypioneer.com/2020/world/the-journey-to-space.html

THE TIMES OF INDIA

Sat, 13 June 2020

Amid Covid, India-Japan Moon mission takes shape, ISRO to lead lander tech

By Chethan Kumar

Bengaluru: Even as both the countries continue to battle Covid-19 pandemic, Japan, which will be launching a joint lunar mission with India — Lunar Polar Exploration (LPE) — that hopes to put a lander and rover on Moon's surface has, for the first time, spelled out details of the project that will see Isro lead the lander development.

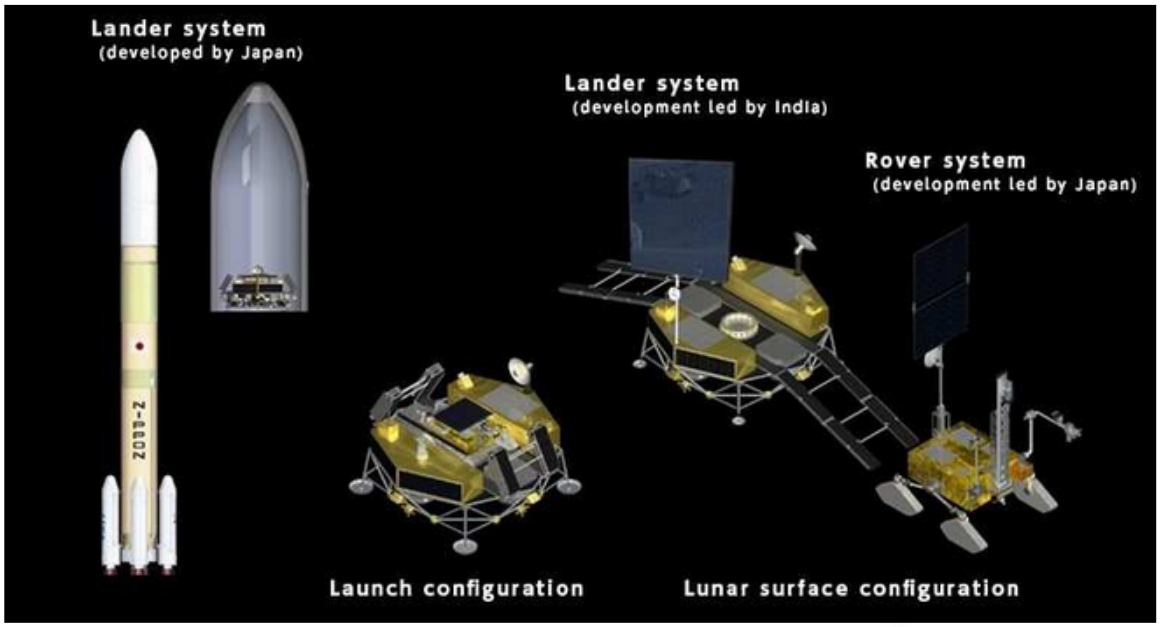
Project Details:

Launch Year	After 2023
Launch Vehicle	H3 Rocket
Launch Mass	6 tonne+
Payload Mass	350kg+ (including rover)
Operating Period	More than 3 months
Landing Point	Southpole region of Moon
Major Mission Equipment	Water Detector, Science Instrument & Environment measuring instrument

Source: JAXA

As per details shared by Japanese space agency JAXA, the mission will be launched after 2023 — Isro currently has its human spaceflight programme (Gaganyaan) scheduled for 2022 — and will involve a lander and a rover. JAXA diagrams show that the Japanese would be building the overall landing module and the rover, while Isro would develop the lander system.

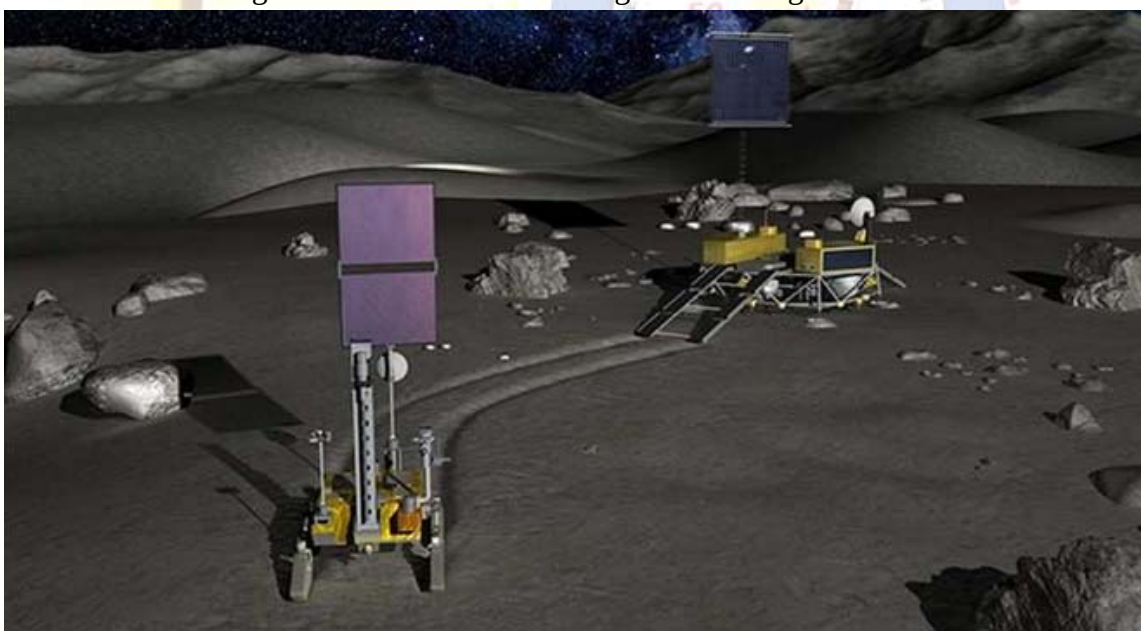
Now, a pre-project team established earlier this year is working on developing a comprehensive management plan for the collaborative mission; investigate the spacecraft system requirements and the various interface specifications in collaboration with ISRO.



Lunar Polar Exploration Mission Overview | Credit: JAXA

The mission will be launched from Japan, and the designated launch vehicle is the H3 rocket, manufactured by Mitsubishi Heavy Industries.

The first thinking of this mission was made public in 2017, during a multi-space agencies' meeting in Bengaluru and it was then also part of the inter-governmental discussions during PM Modi's visit to Japan in 2018. TOI had reported in September 2019, that the project had since moved forward and both agencies were keen on landing on Moon together.

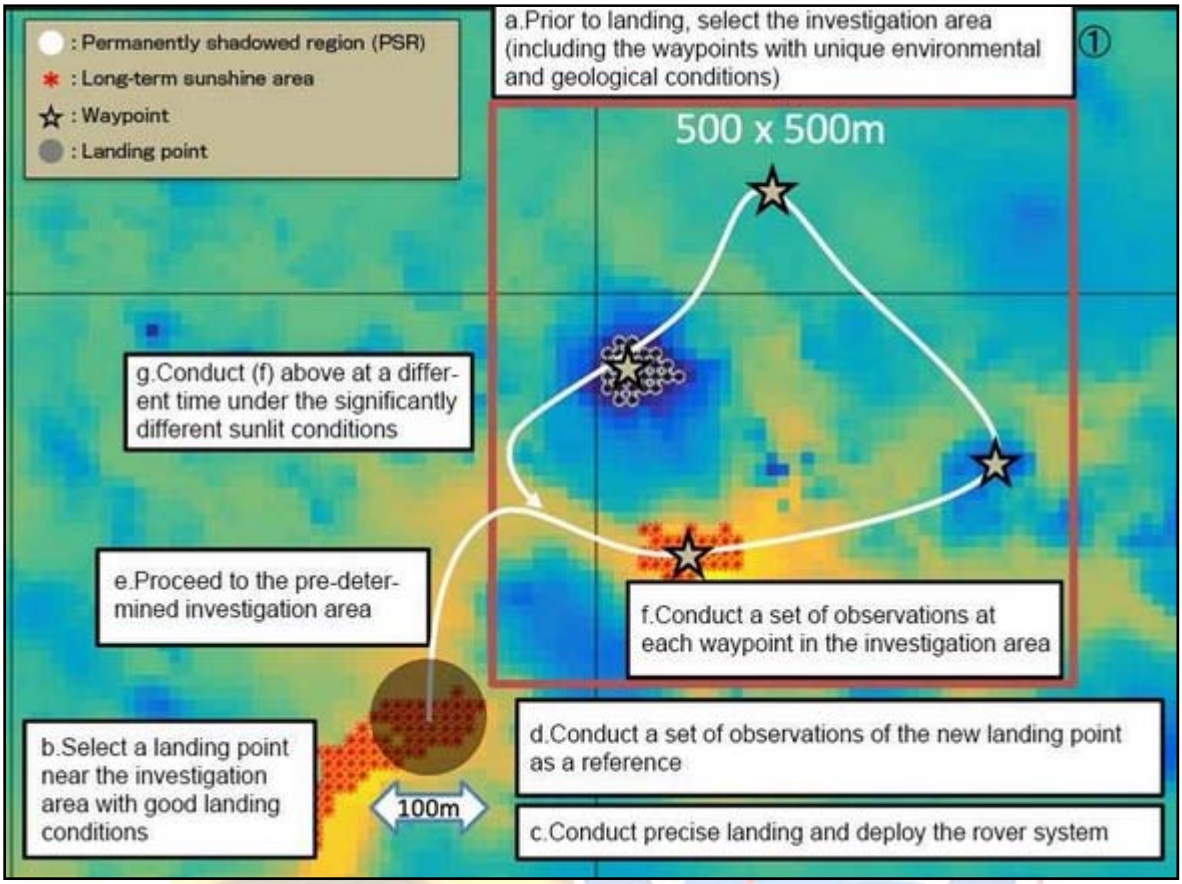


Lunar Polar Exploration Mission | Credit: JAXA

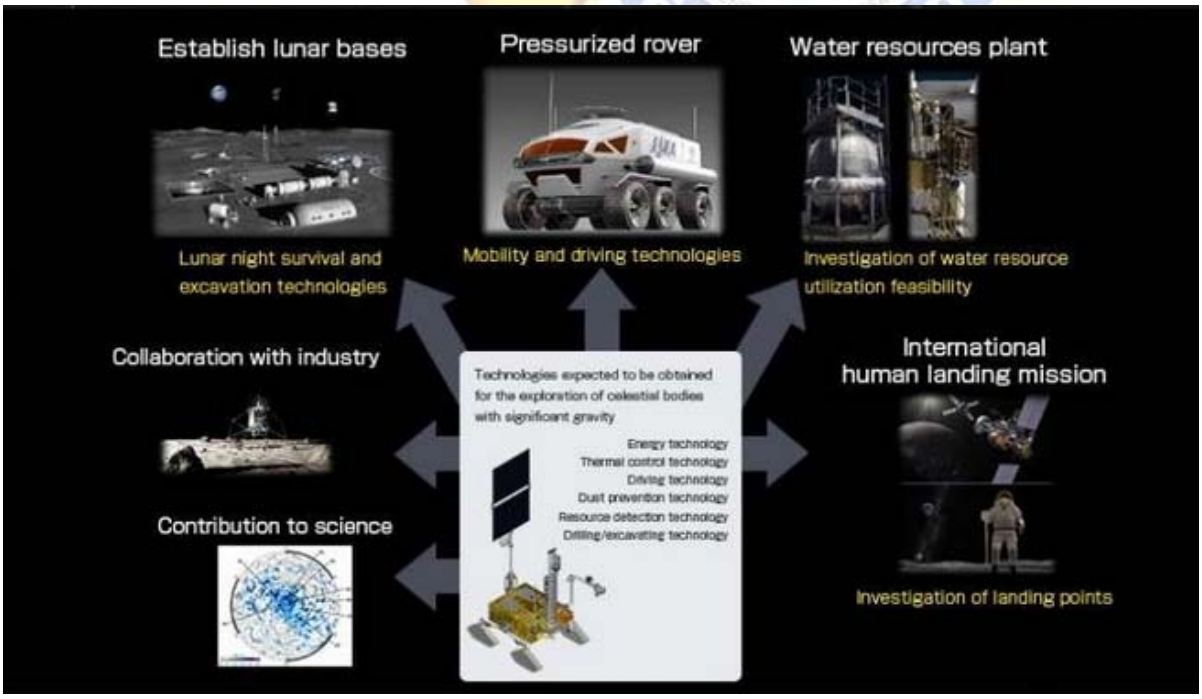
"...Analysis of observational data suggests the existence of water in the polar regions of Moon. JAXA is working with Isro to plan an international collaborative mission to obtain data on the quantity and forms of water resources present, in order to determine the feasibility of utilizing such resources for sustainable space exploration activities in the future," JAXA said.

The mission's aim is to obtain actual data regarding the quantity of water from in-situ observations of areas where water is anticipated to exist, based on the available past observational data. It also seeks to understand the distribution, conditions, form and other parameters of the lunar water resources in the polar regions.

"Through this mission, we also seek to improve the technology needed to explore the surface of low-gravity celestial bodies in order to support future lunar activities. These advancements include technology for mobility, lunar night survival and mining excavation," JAXA added.



Investigation Sequence | Credit: JAXA



Expected Results of Lunar Polar Exploration Mission | Credit ..

While recent observational data suggests that it is highly likely that water does not sublimate at 'permanently shadowed regions' (PSRs) — an example of a PSR would be an area that is lower

than the surrounding ground, such as the inside of a crater — and remains near the lunar surface, the details about the water quantity, distribution and its form are still a mystery.

The investigation area and observation points (waypoints) with unique environmental and geological conditions will be selected prior to landing. The lander will land at a location near the investigation area that has long sunlit hours, and deploy the rover.

During operation, the rover will observe up to 2m underground, allowing the detection of possible water resources in the area. The rover will simultaneously observe the Moon surface.

"Rover will be equipped to conduct observations of the chemical elements present in areas where water may possibly be distributed. If hydrogen is detected, the rover will mine the surface to collect samples. Samples will then be heated to vaporize the volatile substances in order to determine the chemical composition, analyze the quantity of water and conduct isotopic analysis," JAXA added.

https://timesofindia.indiatimes.com/home/science/amid-covid-indo-japan-moon-mission-takes-shape-isro-to-lead-lander-tech/articleshow/76348152.cms

GIZBOT ENGLISH

Sat, 13 June 2020

ISRO opens doors for private sector: Will it help?

By Sharmishte Datti

ISRO is now opening its door for private sectors to use its facilities to improve their field. The announcement comes from Minister of State for Space, Jitendra Singh, who noted that private companies would now be provided a level playing field in satellites, launches, and other space-related activities.

Private Players At ISRO Soon

This means that ISRO facilities and other relevant assets will be available for interested private companies, notes PTI. Additionally, future space projects lined up will also be opened for the private sector. This includes ISRO's plans for planetary exploration and outer space travel.

The new announcement comes as a follow-up to Finance Minister Nirmala Sithraman's statement of the private sector's investment and research in the space sector. She had noted that the government was working on providing them a level playing field, by giving them a 'predictable policy and regulatory environment to private players'.

Not to mention, ISRO has many facilities, research and development centers, communication setups, and more across the country. This also includes sites where Earth observation satellites and rockets are developed to carry up to six tons of payloads to outer space.

At the same time, ISRO is already gearing up for the first manned mission to the outer space. However, there might be a slight delay in ISRO's schedule for the Gaganyaan mission. Presently, the ISRO Gaganyaan mission is scheduled to liftoff in 2022, but there could be a delay in the trials.

The premier space agency has also planned more than sixty missions over the next five years, which includes sending a man to space, another attempt at Moon landing with the Chandrayaan-3, and also the deep space missions to Mars and Venus.

Private companies in the space sector have been thriving over the past decade. The most recent success story is SpaceX, which carried two NASA astronauts to the International Space Station aboard the Falcon 9 rocket. Having private players in the Indian space sector might further boost research and development. Considering ISRO has a couple of ambitious missions lined up, a push from the private sector might certainly help.

https://www.gizbot.com/news/isro-opens-doors-for-private-sector-068257.html

Fri, 12 June 2020

Moderna COVID-19 vaccine appears to clear safety hurdle in mouse study

Chicago - A series of studies in mice of Moderna's COVID-19 vaccine lent some assurance that it may not increase the risk of more severe disease, and that one dose may provide protection against the novel coronavirus, according to preliminary data released Friday.

Prior studies on a vaccine for SARS — a close cousin to the new virus that causes COVID-19 — suggests vaccines against this type of virus might have the unintended effect of causing more severe disease when the vaccinated person is later exposed to the pathogen, especially in individuals who do not produce an adequately strong immune response.

Scientists have seen this risk as a hurdle to clear before vaccines can be safely tested in thousands of healthy people.

While the data released by the U.S. National Institutes of Allergy and Infectious Disease (NIAID) and Moderna offered some assurance, the studies do not fully answer the question.

"This is the barest beginning of preliminary information," said Dr. Gregory Poland, an immunologist and vaccine researcher at the Mayo Clinic who has seen the paper, which has yet to undergo peer review.

Poland said the paper was incomplete and disorganized and that the numbers of animals tested were small.

The authors said they have submitted the work to a top-tier journal. Moderna's vaccine is in midstage testing in healthy volunteers. Moderna said Thursday that it plans to begin final-stage trials enrolling 30,000 people in July.

In the animal studies, mice received one or two shots of a variety of doses of Moderna's vaccine, including doses considered not strong enough to elicit a protective immune response. Researchers then exposed the mice to the virus.

Subsequent analyses suggest "sub-protective" immune responses do not cause what is known as vaccine-associated enhanced respiratory disease, a susceptibility to more severe disease in the lungs.

"Subprotective doses did not prime mice for enhanced immunopathology following [exposure]," Dr. Barney Graham of the Vaccine Research Center at NIAID and colleagues wrote in the manuscript, posted on the bioRxiv website.

Further testing suggested the vaccine induces antibody responses to block the virus from infecting cells.

The vaccine also appeared to protect against infection by the coronavirus in the lungs and noses without evidence of toxic effects, the team wrote.

They noted the mice that received just one dose before exposure to the virus seven weeks later were "completely protected against lung viral replication," suggesting a single vaccination prevented the virus from replicating in the lungs.

"At first glance, it looks promising in inducing neutralizing antibody protection in mice," Dr. Peter Hotez, a researcher at Baylor College of Medicine, said in an email. He had not reviewed the paper in detail.

Poland, who was not involved with the research, said the paper leaves out "important parameters" that could help scientists judge the work.

"The results, such as they are presented, provide interesting data that are reassuring. ... This needs to be replicated and it needs to be peer-reviewed," he said.

https://www.voanews.com/covid-19-pandemic/moderna-covid-19-vaccine-appears-clear-safety-hurdle-mouse-study

hindustantimes

Sat, 13 June 2020

'Existing polio vaccine shows promise, could protect against Covid-19': Study

According to experts, the stimulation of innate immunity by live attenuated vaccines in general, and oral poliovirus vaccine (OPV) in particular, "could provide temporary protection against coronavirus disease 2019"

Several major players in the global race for a coronavirus vaccine took steps to move their research forward this week.

While scientists and experts continue to bolster the effort to arrive at the much-awaited vaccine for Covid-19, some experts are looking at the potential of existing drugs and vaccines in fighting the virus.

A latest study published in the medical journal Science explains if existing live vaccines can help prevent Covid-19.

The study talks about oral polio vaccine (OPV) which comprises live attenuated viruses and can reduce the incidence of other infections.

"An increasing body of evidence suggests that live attenuated vaccines can also induce broader protection against unrelated pathogens likely by inducing interferon and other innate immunity mechanisms that are yet to be identified," the study reads.

According to the researchers, the stimulation of innate immune system by live attenuated vaccines in general, and oral poliovirus vaccine (OPV) in particular, "could provide temporary protection against coronavirus disease 2019"

The research also points to the efficacy of certain vaccines against tuberculosis and whooping cough in fighting infections.

"Attenuated bacterial vaccines such as Bacillus Calmette–Guérin (BCG) against tuberculosis, as well as experimental live attenuated vaccine against pertussis (whooping cough), were also shown to protect against heterologous infections," it added.

Medical reports and scientific research suggest that Covid-19 may result in suppressed innate immune responses. Therefore, stimulation of innate immunity by live attenuated vaccines such as the OPV could increase resistance to infection by "the causal virus, severe acute respiratory syndrome–coronavirus 2 (SARS-CoV-2)".

"If the results of randomized controlled trial (RCTs) with OPV are positive, OPV could be used to protect the most vulnerable populations," the study concluded.

https://www.hindustantimes.com/world-news/covid-19-vaccine-update-existing-polio-vaccine-shows-promise-could-protect-against-covid-19-study/story-wAFnAe9VTOZ6vgKa98RX3H.html

NBC NEWS

Fri, 12 June 2020

Coronavirus vaccine: Human trials advance, Army selects top drug candidate

Here is a roundup of the most notable vaccine news of the second week of June.

By Sara G. Miller and Jane Weaver

Several major players in the global race for a coronavirus vaccine took steps to move their research forward this week.

Pharmaceutical companies developing potential vaccines, including Moderna and Johnson & Johnson, announced start times for various phases of clinical trials in humans. In addition, a U.S. Army lab announced the selection of a lead vaccine candidate, along with two backups that they plan to pursue.

While most researchers are looking forward to new therapeutics, others are considering old vaccines to provide a temporary boost.

Here's a roundup of the most notable vaccine news of the week.

Pharma companies announce plans to advance trials

Moderna, a Cambridge, Massachusetts-based biotech company, said Friday that it plans to start its phase III trial in July. The trial, the last step needed to determine whether a vaccine is effective at preventing coronavirus, will include 30,000 volunteers. Moderna was the first company to start coronavirus vaccine trials in humans, giving the first dose of their experimental vaccine on March 16. Moderna initially tested several different doses of the vaccine in volunteers, but will use a 100 microgram dose in the final trial.

On Thursday, Johnson & Johnson, which is also working on a vaccine, announced that it expects to start its human trials in July, after initially planning a September start date.

Pentagon picks vaccine candidates

The Defense Department's largest biomedical research lab, the Walter Reed Army Institute of Research, selected a vaccine candidate for further study, and aims to start trials in humans later this year. The vaccine candidate was chosen from more than two dozen prototypes that were tested in preclinical studies. The top pick was the one that elicited the most promising antibody response. The Defense Department also selected two backup candidates.

Could the polio vaccine offer temporary protection?

Scientists from the Global Virus Network, an international coalition of virologists aimed at preventing and eradicating viral diseases, argued in a perspective piece published Thursday in Science that the oral polio vaccine could potentially provide a temporary immune system boost, which could help protect against the coronavirus until a vaccine is available.

The idea, which hasn't been tested in clinical trials, is that the live vaccine could stimulate the immune system, allowing it to fight viruses that it wasn't designed to protect against, Dr. Konstantin Chumakov, a member of the Global Virus Network, told NBC News.

Chumakov and co-authors of the Science piece are calling for funding and approval to start clinical trials to test this hypothesis.

https://www.nbcnews.com/health/health-news/coronavirus-vaccine-human-trials-advance-army-selects-top-drug-candidate-n1230186

Fri, 12 June 2020

मिल गई कोरोना की दवा! पतंजलि योगपीठ का दावा अब तक हज़ारों कोविड-19 पॉजिटिव के ठीक होने के सबूत

आचार्य बालकृष्ण ने कहा कि पतंजलि रिसर्च इंस्टीट्यूट दुनिया के प्रतिष्ठित साइंस जनरल्स में पेपर भी पब्लिश करवाने जा रहा है।

हरिद्वार: कोरोना से संघर्ष में लगी दुनिया के लिए यह ख़बर शायद सबसे काम की ख़बर है। पतंजलि योगपीठा का दावा है कि उसने कोरोना की दवा खोज ली है और यह कारगर भी साबित हुई है। दुनिया भर में कोरोना वायरस, कोविड-19, की कारगर दवा खोजने और वैक्सीन बनाने पर रिसर्च चल रही है। भारत में कोरोना अब गति पकड़ चुका है और लॉकडाउन खुलने की वजह से कोरोना संक्रमण के मामले भी बढ़ रहे हैं ऐसे में अगर पतंजलि योगपीठ का दावा सही है तो अर्थव्यवस्था के साथ ही देश भी वापस पटरी पर लौट सकता है।

सफल प्रयोग

कोरोना वायरस, कोविड-19, की दवा बनाने का दावा पतंजलि योगपीठ के महामंत्री व योगगुरू बाबा रामदेव के सहयोगी आचार्य बालकृष्ण ने किया है। आचार्य बालकृष्ण का कहना है कि कोरोना वायरस इस वक्त भयानक स्थिति में है। जबसे कोरोना वायरस का पता चला तब से ही पतंजलि रिसर्च इंस्टीट्यूट के वैज्ञानिकों की टीम इसकी दवा खोजने में जुट गई थी।

न्होंने कहा कि गिलोय, तुलसी, अश्वगंधा के साथ ही कई तरह के रसों द्वारा दवाई बनाई गई इस दवा का प्रयोग कई हज़ार कोरोना पॉजिटिव लोगों पर किया गया है। उन्हें ट्रैक किया गया और यह पाया गया कि वे सभी लोग ठीक हो गए हैं।

दुनिया के सामने रखेंगे दावा

आचार्य बालकृष्ण ने कहा कि पतंजलि रिसर्च इंस्टीट्यूट ने अब तक उनकी दवा से ठीक होने वाले सभी कोरोना पॉज़िटिव मरीज़ों का डाटा तैयार किया गया है। कोरोना की अलग-अलग स्टेज और हर उम्र के लोगों का डाटा है। इसके साथ ही सैकड़ों लोगों पर क्लीनिकल ट्रायल भी शुरु कर दिए गए हैं।

उन्होंने कहा कि पतंजलि रिसर्च इंस्टीट्यूट जल्द ही दुनिया के प्रतिष्ठित साइंस जनरल्स में पेपर भी पब्लिश करवाने जा रहा है। इसके लिए तैयारी शुरु की जा चुकी है। मेडिकल साइंस से जुड़े लोग जो भी सबूत मांगेंगे, उन्हें उपलब्ध करवाए जाएंगे।

https://hindi.news18.com/news/uttarakhand/haridwar-medicine-for-corona-found-patanjali-yogpeeth-claims-to-have-proofs-of-successful-treatment-of-thousands-ukrd-3149342.html

THE TIMES OF INDIA

Fri, 12 June 2020

Australian clot-busting drug holds hope for Covid-19 treatment

Sydney: An experimental drug developed by an Australian researcher could help prevent deaths from COVID-19 by controlling the formation of blood clots responsible for breathing difficulties, organ failure, stroke and heart attack.

Professor Shaun Jackson from the University of Sydney and the Heart Research Institute is leading a team of researchers developing a new anticlotting medicine to treat stroke.

About three in four of critical COVID-19 patients in Intensive Care Units (ICUs) develop clots with their recovery rate critically low, Jackson said. COVID-19 is the respiratory disease caused by the novel coronavirus.

"If our medicine can control these clots, then organ failure and death in many thousands of cases could be avoided. We want COVID-19 patients reaching for the tissue box, not hooked up to ventilators," Jackson said.

Following successful phase-1 trials in 72 healthy patients, the researchers now want to urgently move into phase 2 trials by testing the effectiveness and safety of the drug in critically ill COVID-19 patients.

"It could then be a matter of months before doctors around the world can use the novel anti-clotting drug to protect patients with COVID-19, potentially saving thousands of lives," Jackson said.

More than 7.53 million people have been reported infected with the novel coronavirus around the world and 420,808 have died, a Reuters tally showed as of 0504 GMT on Friday.

Australia reported about 7,300 cases and 102 deaths with some parts of the country now claiming to have eliminated the virus.

Jackson said phase-2 trials of the drug, which is administered intravenously, will need to be done overseas because there were not enough severely ill patients on ventilators in Australia.

https://timesofindia.indiatimes.com/world/rest-of-world/australian-clot-busting-drug-holds-hope-for-covid-19-treatment/articleshow/76335900.cms