

# समाचार पत्रों से चयित अंश Newspapers Clippings

दैनिक सामयिक अभिज्ञता सेवा  
A daily Current Awareness Service

Vol. 42 No. 257 20 November 2017



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

## ‘Tejas world-class fighter jet, plays defined role’

*Modifications carried out: HAL chief*

The indigenously developed Tejas Light Combat Aircraft is a world class fighter jet and can effectively play its “defined” role in securing Indian skies, its manufacturer Hindustan Aeronautics Ltd (HAL) said on Sunday as the Indian Air Force looked at acquiring a fleet of foreign single-engine jets.

HAL chairman and managing director T. Suvarna Raju said most of the 42 modifications in Tejas sought by the IAF, including weaponisation of the aircraft, had been carried out and asserted that the production of the jet could be stepped up depending on the requirement.

“Tejas is a four-and-half generation world class fighter jet. There is no doubt about it. We can improve its various parameters. We are proud of Tejas. We will ensure enhancement in its quality and performance,” Raju said in an interview.

His remarks came amid views in the IAF that the aircraft was not enough to maintain its combat readiness and it needed to quickly procure a fleet of foreign single engine fighters to deal with any possible security challenges, in the backdrop of the dwindling size of its fighter fleet.

## Missile woman Tessy Thomas ready to launch summit address

Hyderabad: Tessy Thomas, the 'missile woman of India', who was project director (mission) for India's much celebrated nuclear-capable intercontinental ballistic missile Agni-V, will address 1,800 participants at Global Entrepreneurship Summit (GES), which is scheduled to be held from November 28-30 in the city.

From the list of speakers announced so far, 54-year-old Tessy Thomas is perhaps the only person based in Hyderabad who has made it to the panel of GES speakers. Tessy Thomas is currently the director of Advanced Systems Laboratory (ASL) of the Defence Research and Development Organisation (DRDO) at Hyderabad.

The 'Agni Putri' may not really talk about missiles at the Global Entrepreneurship Summit but from the introduction that has been given about her, it would be about how she mentored and nurtured scientists.

"As project and technology leader, she has played a major role in mission design and infrastructure development. She has developed production teams from various industries for process and product development," introduction about Tessy Thomas reads. Tessy Thomas has been described as a person who carried out continuous nurturing and mentoring of scientists and ensured a collective learning atmosphere and also created a knowledge sharing platform.

# Come Up With Indigenous Solutions for Modernisation Of Defence Forces: Sitharaman To Industry

By Anupama Airy

## Snapshot

- *Defence Minister Nirmala Sitharaman is batting for indigenous solutions for the defence forces.*
- *She assured the industry that on issues pertaining to other ministries, she was happy to take up their cases with the concerned ministers.*

In a big encouragement for the Indian defence industry, Defence Minister Nirmala Sitharaman on Saturday (18 November) asked the industry to come out with indigenous solutions for the defence forces and assured that teams from the three services (Army, Navy and Air Force) along with Defence Research and Development Organisation (DRDO) and Ordnance Factories would visit across regions to interact with the industry on their requirements for both the short and the long term.

Sitharaman was in Chennai on Saturday and met with a host of defence companies including L&T, Reddy Group, MRF, TVS, LMW, EEYES, besides several micro, small and medium enterprises (MSMEs) at an event organised by the Confederation of India Industry (CII) in Chennai.

She assured that the Defence Ministry was open to ideas and indigenous solutions for modernisation of the defence forces.

Society of Indian Defence Manufacturers (SIDM) shall facilitate the meeting of industries with the services, DRDO and the Defence Public Sector Undertakings. The Principal Adviser of CII has been asked to prepare a report on research and development projects of the academia (Indian Institutes of Technology and academic institutions like Amrita University and others) that could be potentially commercialised by the defence industry.

India has been looking at expanding its defence manufacturing base under the Make in India programme, and small and medium scale industry has been identified as a special component under it.

The Defence Minister said that MSMEs can play a big role in providing solutions, and asked SIDM to look at opportunities for MSME besides simplification of processes for the MSME to be able to contribute meaningfully.

While stressing on the need for indigenisation of military hardware, Sitharaman assured the industry that on issues pertaining to other ministries, she was happy to take up their cases with the concerned ministers and, if required, even go along with the delegation to address these issues.

Further, in order to push defence manufacturing under the 'Make in India' initiative of the government, the Sitharaman spoke about the government initiative over according faster approvals on issuance of industrial licenses that are needed to start production.

These licences would be considered as "deemed approved" if security clearance from the Home Ministry is not received in a "reasonable" amount of time. Simply put, if a licence remains pending for two months, or any decided period after its due date for approval has passed, it will be considered as "deemed approved" in certain cases. In addition, another measure being undertaken by the ministry to push defence manufacturing is over creation of a master list of defence technologies developed by the DRDO and that can be commercialised by giving it to the government or private sector companies for manufacturing and exports.

## Ministry of Defence scraps \$500 million Israeli missile deal, wants DRDO to make in India

By Sushant Singh

*The deal, seen as another proof of growing Indo-Israel defence cooperation, was expected to be signed after price negotiations with Rafael Advanced Defence Systems of Israel were completed last year.*

Asking the Defence Research and Development Organisation (DRDO) to indigenously develop and produce a Man-Portable Anti-Tank Guided Missile (MPATGM) for the Army, the Ministry of Defence (MoD) has decided to cancel the \$500 million deal for Spike ATGM with Israel. The deal, seen as another proof of growing Indo-Israel defence cooperation, was expected to be signed after price negotiations with Rafael Advanced Defence Systems of Israel were completed last year.

In anticipation of this deal, Rafael had entered into a joint venture with Kalyani group for missile production in India. The missile sub-systems manufacturing facility, based near Hyderabad, was inaugurated in August.

Ministry sources told The Indian Express that the decision to cancel the deal was based on the consideration that importing a foreign ATGM at this stage would adversely impact the programme for indigenous development of the weapon system by DRDO. Earlier, India had also rejected an offer from US-based Raytheon-Lockheed Martin for Javelin ATGM in favour of the Israeli weapon system.

“DRDO has successfully produced the Nag and Anamika ATGMs. It is confident about providing the Army with an MPATGM of 3rd generation missile technology, at par with Spike, within three to four years. It won’t also need any transfer of technology,” sources said.

The decision to retract the Request for Proposal (RFP), however, will be a setback to the modernisation programme of the Army. In letters to the MoD, the Army headquarters had highlighted “the operational urgency of the equipment”, arguing that the Spike “gives a major capability impetus to troops deployed on the Line of Control, especially in the current operational scenario”.

Spike MR missile is a 3rd generation, fire and forget, top attack, ATGM with a range of 2.5 km, which can operate both during the day and night. The Army is currently using 2nd generation ATGMs — Konkurs and Milan 2T — which do not have night-fighting capabilities. Moreover, the Army currently has a shortage of around 68,000 missiles, with no missiles held as War Wastage Reserves against a government stipulation to build up stocks to last for at least 10 days of intense fighting.

In 2009, the MoD accepted the requirement of buying 321 ATGM launchers and 8,356 missiles, with 30 per cent offsets and a transfer of technology clause. An option of approaching the US for buying Javelin ATGM was also explored, but the US government was not amenable to transfer of technology. Only Rafael of Israel responded, and Spike missiles underwent trials in 2011-12. The ministry accepted the trial evaluation in 2013 and gave clearance for procuring from a single vendor. The US government later tried to offer the Javelin ATGM with transfer of technology but India chose to go ahead with the Israeli system.

Ministry sources said that trials highlighted a problem with one of the two homing devices in the launcher which led to constitution of a study group. The study group presented its report in August 2014, and the ministry agreed in October 2014 to procure the missiles from Rafael.

Price negotiations between Rafael and the MoD started in March 2015. After the prices were finalised in June 2016, then Defence Minister Manohar Parrikar constituted an experts committee to review the evaluation report and explore the possibility of an indigenous missile system. There was divergence in the views of the DRDO representatives and Army representatives in the experts committee over the case. The matter was

eventually resolved earlier this month with Army headquarters agreeing to retract the RFP for ATGM launchers and missiles.



*Mon, 20 Nov, 2017*

## **Army's air defence deal hangs fire**

*By Dinakar Peri*

The Army's attempts to upgrade its short range air defence systems continues to hang fire with the tender for Very Short Range Air Defence (VSHORAD) systems stuck again after recent re-trials.

"Re-trials have been completed and two of the three contenders failed to comply with the requirements. The deal is before general staff evaluation and a technical oversight committee is being constituted to look into it," a source said. The Army has been attempting to avoid a single vendor situation arising out of non-compliance of some vendors, which would result in cancellation of the tender as per the Defence Procurement Procedure (DPP).

The Request for Information (RFI) was issued in 2010. Three companies made it to the trials — MBDA of France, Rosoboronexport of Russia and SAAB of Sweden. Four rounds of trials have been held, with the last one in May this year.



*Mon, 20 Nov, 2017*

## **Military art, photo exhibition ends**

Chandigarh: The military art and photography exhibition ended here on Sunday. The two-day exhibition, organised in the run-up to the first Military Literature Festival, scheduled to be held from December 7 to 9, will play an important role in motivating the youth to join the defence services, said Lt Gen TS Shergill (ret'd), senior adviser to the CM.

"We have inherited a glorious legacy of military valour and dedication to duty," he said. A total of 200 exhibits, including pictures, artefacts, medals, ammunition, belongings of officers and the Pakistani Army flags captured during the 1971 war, were displayed, an official release said. PTI



*Mon, 20 Nov, 2017*

## **Army cites price difference, moves pvt vendors for uniforms**

*By Vijay Mohan*

The Army Headquarters' move to source fabric for its combat uniforms from the private sector, ostensibly due to the huge price differential between the uniforms procured from the state-run Ordnance Factory and those available locally, has Ordnance Factory employees up in arms.

The employees are claiming that samples of cloth available with private vendors have failed the requisite quality tests.

The Master General of Ordnance (MGO) at the Army Headquarters had written to the Additional Director General, Ordnance Factories Board, earlier this month that the Army would not like to procure combat uniforms from the Ordnance Factory. It instead wants that a no-objection certificate be issued for procuring uniforms from private vendors.

“A set of combat jacket and trousers provisioned through the Ordnance Factory costs Rs 4,150 where as a combat uniform of the same material stitched locally costs Rs 1,800-1,900, including GST.

“If procured in the same volume as is being done from Ordnance Factory, it is likely to cost Rs 1,200-1,300 per set,” the MGO’s letter states.

The Army had switched to a new combat uniform over a decade ago to standardise the camouflage pattern and check misuse and open sale of such cloth in the market.

The four-colour disruptive pattern of the cloth, called Army Logo Cloth, is inter spread with the Army’s crossed swords and Ashoka Lion logo.

The camouflage design and fabric specifications were developed by the Ordnance Factory. Some private mills have been contracted to produce Army Logo Cloth for the Ordnance Factory, which supplies stitched uniform to the Army. Though the sale of this pattern by mills to private vendors is restricted, it is available in the market. Once the cloth is received from the mills, it undergoes 36 tests to ensure quality standards.

In a letter written to Chief of the Army Staff this week, the All-India Defence Employees Federation has said that if the Army starts purchasing cloth directly from private vendors, there is no guarantee that these standards would be met.

The letter states that Ordnance Factory employees purchased several samples of Army Logo Cloth from different shops in Delhi Cantonment and all samples failed chemical as well as physical tests.

The letter adds the Ministry of Defence has assured Ordnance Factory employees that combat uniform would not be declared a “non-core” item and there was no justification for the MGO seeking a no-objection certificate.

THE ECONOMIC TIMES

Mon, 20 Nov, 2017

## Cong Talking Rafale to Fight Bofors-Agusta Reboot Plan

*Just The Start: Cong likely to intensify its Rafale campaign in Parliament, Gujarat and other states and may allege ‘kickbacks’ and seek House panel probe into the deal*

*Congress allegation that CCS was not kept in loop is aimed at hurting PM himself*

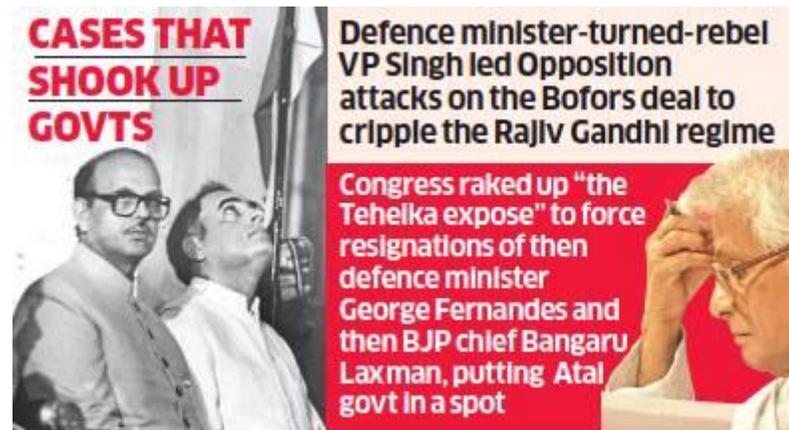
New Delhi: The Congress allegations of “a scam” in the Narendra Modi government’s deal to purchase 36 Rafale fighter aircraft is being seen as a plot to counter the BJP government’s attempts to revive the Bofors ghost and initiate a probe into the AgustaWestland helicopter deal.

The ‘defence scams’ were tapped in the past by political rivals to push many seemingly strong central governments to tight spots. If defence minister-turned-rebel VP Singh led Opposition attacks on the Bofors deal to cripple the Rajiv Gandhi regime, the Congress raked up “the Tehelka expose” to force resignations of then defence minister George Fernandes and then BJP president Bangaru Laxman, putting the Atal Bihari Vajpayee regime in a spot.

Sources said Congress will intensify its Rafale campaign in Parliament, Gujarat elections and across the states and will eventually allege “kickbacks” and Parliamentary committee probe into the aircraft deal.

Incidentally, BJP members in a Parliamentary sub-committee have been seeking a re-look at the Bofors deal, seen part of the Centre's plot to revive the issue that haunted Congress in the past.

Congress leaders are also in touch with some "like-minded Opposition parties" to make the Rafale deal their joint plank against "corruption" and "compromise of national interests". Despite the defence minister rubbishing the Congress charge, the latter insists the ruling establishment has failed to answer three questions:



First, whether the Modi government agreed to purchase the Rafale aircraft at a price higher than what UPA regime had negotiated. Second, did PM take CCS permission before announcing purchase in Paris? And, third, Why PM bypassed experienced HAL?

By alleging the PM had "unilaterally" decided on the deal by "bypassing" the Cabinet committees by "doing away" technology-transfer clause, Congress is clearly targeting Modi himself. It is also questioning the professional credentials of the Indian

company chosen to manufacture the aircraft, making the larger plots clear at a time both the government and Opposition are readying for the coming electoral battles.



Mon, 20 Nov, 2017

## Civil-military equation

By H Khasnobis

The primary responsibility of a sovereign state is to defend its territory. This is precisely the duty of the country's military establishment, security being the major aspect of the national budget. There are, however, more than twenty sovereign countries that do not have either a standing military of its own or, at the most, have a limited military.

These countries are either under an arrangement worked out by their erstwhile occupying powers or their neighbour takes care of their territorial security and protection. In Mauritius, it is the police which is responsible both for military security and police functions. For a country with such an arrangement both for internal and external protection, the advantage is that it can save scarce resources and spend the entire national budget on its economic growth. The government puts in place the military establishment to protect the nation from external aggression and conduct wars according to foreign policy imperatives.

The military can also be used to assist the civil authorities in the event of natural calamities or domestic unrest. The question is; How does the State maintain a strong and effective military that poses no threat to the civilian political authority? In every country, the answer is influenced by its history, sentiments and tradition. It depends on the role of the army as a state institution as defined in laws, constitutional arrangements, safeguards and guidance on political affairs. The very nature of the problem is changing because both society and the military are continuously evolving.

A new dimension has been added after World War II in the context of civil-military relations due to transnational military involvement, political alliances, peacekeeping and humanitarian intervention. It was only in the 20th century that attempts were made by political scientists and sociologists to study the relationship between the military and the society with theoretical and empirical underpinning and arrive at results more precise and accurate than what was available in historical records and philosophical ideas.

Among those influential scholars who realized the importance of civil-military relations in the first half of the 20th century, Max Weber was by far the most prominent. Weber's views were stated explicitly in his seminal treatise, *Theory of Social and Economic Organization*, published posthumously in 1922. Weber, who had served a short military service in Kaiser's Germany, stated that an effective bureaucracy would help promote military professionalism through a formal, neutral, and rationally organized structure and hierarchy. He recommended a supportive bureaucracy for matters military in terms of recruitment, training, deployment, procurement, construction and logistics management. This paradigm was totally different from an old order of patronage and favour that dominated the military in the past.

However, the bureaucracy's red tape could be a source of frustration for the military, more so in times of mobilization not least because the bureaucracy tends to be rigid and resistant to change. Major theories of civil-military relations, as applicable to Western countries, were developed in the 1950s and 1960s by Samuel Huntington and Morris Janowitz. The size of the military in those countries in the latter half of the 20th century was extremely large. It was the era of the Cold War and the world was relatively at peace. The US military alone consisted of about three million personnel. Maintaining such a large force ran the risk of a distinctly military culture being imposed on liberal democratic societies.

Samuel P Huntington in his *The Soldier and the State*, published in 1957, described the differences of the two worlds, military and civilian, as a contrast between attitudes and values. It was necessary to evolve a method to ensure that the political masters would be able to dominate and control the military establishment. Huntington, in the manner of Weber, also recommended that the army should be thorough and professional and restrict itself to its assigned role. Civilian authority should direct the military without unduly intruding into the latter's prerogatives. The civilian authorities must define the national security policy, and the military will implement the same. The civilian leadership will decide the objective of any military action but then leave it to the armed forces to plan the strategy to achieve the objective.

Excessive control over the military could result in weakening the force, and this may result in failure in the battlefield. Too little control would create the possibility of a coup. That may result in failure of the government. Many military experts believed that the United States had lost the Vietnam War because of unnecessary civilian meddling in military matters. Iraq is also a story of humiliating military failure due to excessive civilian control. The political leadership failed to understand the goal, which was victory in the war, and improperly restrained the use of force denying them professional autonomy.

Morris Janowitz in *The Professional Soldier*, published in 1960, agreed with Huntington about the existence of separate military and civilian worlds. Due to their fundamental differences, confrontations could occur, thus undermining the objective of civilian control of the military. His diagnosis was that the military should be ingrained with the norms and expectations of the society that created it. That would ensure a new and higher standard of professional military education in tune with ideals of a civilian society.

Janowitz encouraged conscription and mass military service from various walks of life that would bring a wide cross-section of individuals into the armed forces. However, conscription since World War II did not find political support in the democracies of the West. Writing in *Armed Forces And Society*, 2002, James Burke summarized Huntington and Janowitz thus: "To protect democratic values, the military needs to be subordinate to civilian power. To sustain democratic values, the military must substantively embody the values of the society it defends". Huntington and Janowitz had influenced research on civil-military relations for about sixty years. Samuel E. Finer, in his book, *The Man on Horseback*, published in 1976, observed that many governments that were weak and lacked administrative authority to govern efficiently may open opportunities for military intervention.

Finer's observation was made in the context of political upheavals and military coups that swept Africa and South America in the 1960s and 1970s. Those were extreme cases where the military assumed power. Bolivia witnessed close to 200 military coups in the first 169 years of its existence. He added that in established and mature democracies, the military would never attempt to intervene or overthrow a civilian government. The classical theories of Weber, Huntington and Janowitz, though not comprehensive and

perfect, carry a uniform message. A strong and effective military institution is needed to protect the state in the conflict-ridden world.

But the guardians of a nation's security need masters to guard them. Political scientists agree that the military institution created to protect the polity should not have overwhelming powers to become a threat to the polity but remain subordinate to the political authorities that are chosen by the people in fair and frequent elections. Peter D Feaver stated that "civilians have a right to be wrong". All civilian governments in the world, not only democratic ones, want to follow the principle. Yehuda Ben Meir in *CivilMilitary Relations in Israel*, published in 1995 stated, "True, there can be no democratic government without civilian control of the military, but many totalitarian systems of government are also characterized by a high degree of civilian control ~ in some instances even much more so than in Western democracies".

These strong words reinforce the concept that the State must remain a sovereign power and an appropriate level of civilian control is necessary to bear on the military. The military is a respected profession. In today's world, the domain of civil- military relations has expanded beyond sovereign states. They have now become transnational.

The European Union and NATO are the two contemporary examples. Peacekeeping missions, military observer missions, humanitarian interventions and military cooperation confirm the intensive civilian coordination and support across borders for extremely difficult, complex, and often insurmountable tasks.

*(The writer is a former central civil service officer who retired from the Ministry of Defence)*



Mon, 20 Nov, 2017

## **US General Says Trump Order for Nuclear Strike Can Be Refused**

Halifax, Nova Scotia: The top officer at US Strategic Command said on Saturday that an order from President Donald Trump or any of his successors to launch nuclear weapons can be refused if that order is determined to be illegal.

Air Force General John Hyten, commander of Strategic Command, told a panel at the Halifax International Security Forum on Saturday that he and Trump have had conversations about such a scenario and that he would tell Trump he couldn't carry out an illegal strike.

"If it's illegal, guess what's going to happen. I'm going to say, 'Mr President, that's illegal.' And guess what he's going to do? He's going to say, 'What would be legal?'" Hyten said.

"And we'll come up with options with a mix of capabilities to respond to whatever the situation is, and that's the way it works."

In the event that Trump decided to launch a nuclear attack, Hyten would provide him with strike options that are legal. The command would control nuclear forces in a war.

The comments come as the threat of nuclear attack from North Korea remains a serious concern and Trump's critics question his temperament. Trump's taunting tweets aimed at Pyongyang have sparked concerns primarily among congressional Democrats that he may be inciting a war with North Korea.

During testimony before the Foreign Relations Committee earlier this month, retired General Robert Kehler who served as the head of Strategic Command from January 2011 to November 2013, also said the US armed forces are obligated to follow legal orders, not illegal ones.

Hyten said he's talked it over with Trump.

“I think some people think we’re stupid. We’re not stupid people. We think about these things a lot. When you have this responsibility how do you not think about it?” he said.

He said he would not obey an illegal order.

“You could go to jail for the rest of your life,” he said. **AP**

## Business Standard

Mon, 20 Nov, 2017

# ISRO looks to return to Mars, eyes Venus

*Isro has emerged as the front runner for global space agencies to collaborate to understand earth better*

*By T E Narasimhan & Raghu Krishnan*

India is planning to launch a return mission to Mars and a spacecraft to study asteroids, Venus and the sun, as it looks to build a body of scientific data to encourage more people to take up research.

So far, Indian Space Research Organisation (Isro) has launched missions with Chandrayaan-1 for moon and Mangalyaan-1 for Mars, besides an observatory in space with Astrosat. In March, it is returning to the moon with a lander and a rover that would explore the earth’s satellite for water and helium. Subsequently, it will launch Aditya, a satellite that will carry instruments to understand the sun better.

Besides, Isro is looking at Mangalyaan-2, a follow-on mission to Mars, and launching two satellites that would look at Venus and explore asteroids. The success of Astrosat-1 has also prompted the space agency to launch another telescope in the skies with a follow-on mission. Isro has called on scientists to participate in these missions.

“There is interest for more such exploration. We are preparing mission profiles based on the feedback from the scientific community,” said A S Kiran Kumar, chairman, Isro.

Besides Isro going on its own, there is an enormous interest in joint collaboration from other countries to explore deep space. Last week, Isro and Japan Aerospace Exploration Agency (JAXA) announced they would send a joint mission to the moon that includes landing a rover and bringing samples back to earth. The mission will be the first to attempt to bring samples of the moon back to the earth after four decades.

Isro has emerged as the front runner for global space agencies to collaborate to understand earth better. It has built a South Asian satellite that provides connectivity to neighbouring countries in the region.

The French space agency, CNES, and Isro have jointly built and launched two satellites — Saral and Megha Trophiques, to study oceans and how climate change is impacting the onset of monsoon. CNES has provided the cameras that are used for the lunar rover of Team Indus, the Indian private start-up that is looking to go to the moon next year.

Isro and the National Aeronautics and Space Administration (NASA) are jointly building an imaging satellite that will look at natural resources mapping and monitoring, and estimating agricultural biomass over full duration of crop cycle.

The Chandrayaan-1 mission carried two sensors of NASA, including the moon mineralogy mapper that helped discover traces of water on the moon's surface. The European space agency had three instruments on the spacecraft.

“There are always efforts to jointly collaborate among space agencies. The challenges are enormous and with limited resources, the only way is to cooperate with each other,” said Kumar.