THE HANS INDIA

Tue, 28 Aug 2018

Minimising imports of military equipment my priority: DRDO Chief

Hyderabad: New Chairman of Defence Research and Development Organisation (DRDO) G Satheesh Reddy said, "producing world class military equipment indigenously and minimising imports of military equipment is my priority. Speaking to The Hans India, he said that he would try his best to turn the DRDO as a centre of excellence for experiments at the international level. He shared his joy for elevating to the position, which was earlier held by missile man of India APJ Abdul Kalam and other eminent personalities.

Minimising imports of Military equipment by promoting Indian industries will save a lot for us, Satheesh Reddy said. "If we go to the level of exporting our military equipment, it will boost revenues for the country," he said. Explaining about his course of action, he said that the organisation will promote basic research at the universities and work jointly with industries in the areas of development and application. He also said that promoting start-ups and supporting innovations and handhold them is also important.

"Our country progressed in various sectors for the past 25 years. We are able to produce war equipment including aircrafts, submarines, radars etc. Even though our military imports are high. We focus on 'Make in India' programme in military needs," he said.

Belonging to a farmer's family and now holding the country's key position, the simple and humble scientist believes that he will get cooperation from all quarters. Terming this as a great responsibility, he thanked the government for the opportunity.

http://www.thehansindia.com/posts/index/Telangana/2018-08-28/Minimising-imports-of-military-equipment-my-priority-DRDO-chief/408125

The EurAsian Times

Tue, 28 Aug 2018

DRDO develops high range Anti-Submarine Rockets for Indian Navy

The subsidiary of DRDO (Defence Research and Development Organisation) has developed High Range Anti-Submarine Rockets in the wake of increasing military challenges for the Indian Navy. These rockets have been developed by the Armament Research and Development Establishment along with the High Energy Materials Lab and will offer a maximum range of 8 kilometres.

Both these lab are subsidiaries of the Defence Research and Development Organisation (DRDO). The director of the Armament Research and Development Establishment stated that the rockets will soon be handed over to the Indian Navy for trials after meeting targets for quality.

The Indian Navy wanted rockets which offered a high range while engaging the enemy submarines and based on the requests the DRDO has developed the high range anti-submarine rockets which will be soon inducted into the Indian Navy. At present work is being done to perfect the quality requirements in line with the prescriptions made by the Indian Navy.

As of now, the Indian Navy uses the vintage Russian rocket, RGB-60 which offers a maximum range of 5.3 km. It is an unguided area weapon for engaging submarines and

warships. The R-Class, Delhi Class and the Talwar Class ships of the Indian Navy are equipped with the RGB-60 rockets which are fired from the RBU 6000 rocket launcher.

While firing torpedos to hit the enemy targets may prove to a deliberate and costly attack, rockets are considered to be 'urgent attack weapons' by the defence personnel. Hence, the rockets are as crucial as the torpedos for any navy of the world. Rockets can be fired singly or in clusters to engage the enemy submarines and disrupt their movement.

India is facing increasing challenges in the Indian Ocean from the naval expansion of other nations. These high range rockets as described by the experts as being the need of the hour to bolster India's capabilities to confront and eliminate threats.

https://eurasiantimes.com/indian-navy-drdo/

THE ASIAN AGE

Tue, 28 Aug 2018

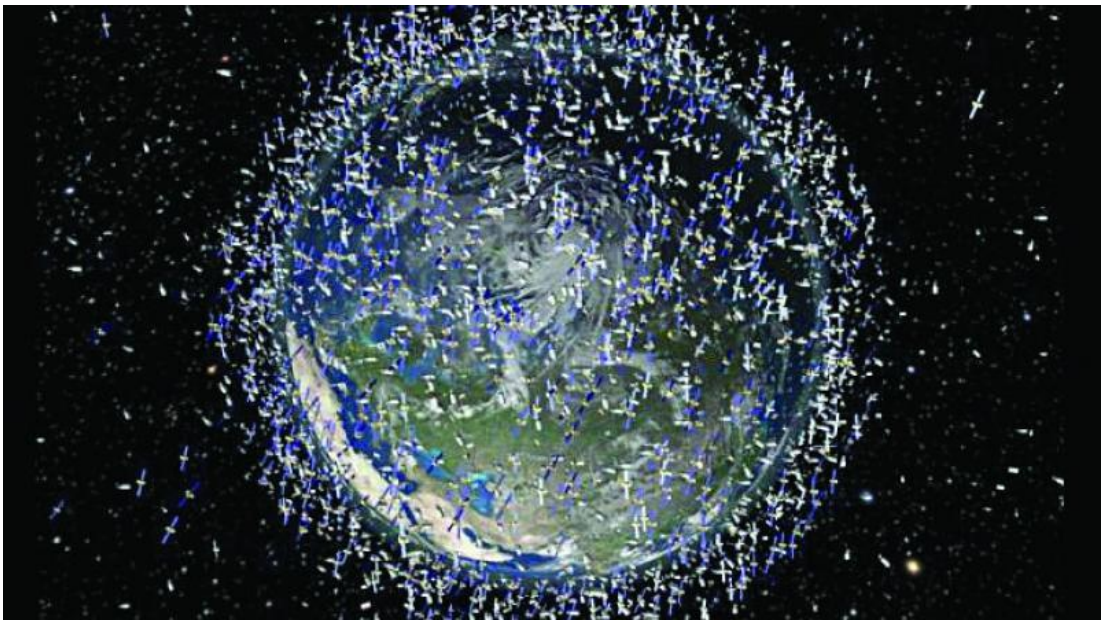
DRDO labs offer assistance for space mission

For long, Defence Bioengineering and Electromedical Laboratory & Defence Food Research Laboratory have been supporting the armed forces

By B R Srikanth

Bengaluru: As Indian space scientists race to fly a couple of Indians to space in four years, two DRDO labs — DEBEL (Defence Bioengineering and Electromedical Laboratory), Bengaluru, and DFRL (Defence Food Research Laboratory), Mysuru, could well chip in with space suits and foodstuff for the crew.

For long, both these laboratories have been supporting the armed forces with DFRL even providing a variety of food packages to Wing Commander Rakesh Sharma (Retd) during his space journey onboard the Soviet Soyuz T-11 spacecraft in 1984. So, experts from these laboratories met the top brass at Isro and presented details of their capability to support the human space flight programme. "We have said we have the technology to make space suits and food for space missions and will make them once specifications are given to us," Dr Upendra Kumar Singh, head of both these labs, told this newspaper.



The packaging material used for space foods must be able to withstand extreme gravity conditions

He said DEBEL has the know-how to design and produce space suits given its long track record of supplying life protecting and life saving systems for all three wings of the armed forces. Pilots of IAF have been using G-suits, oxygen masks, helmets, cold weather suits, while those serving the army have been provided NBC (nuclear, biological and chemical)

protective gear. Dr Singh said DFRL has the expertise in developing food for the armed forces serving in extreme weather conditions and in the process of rolling out in-flight eatables for long endurance fighter. “Food should provide balanced nutrition for the health of those who will be chosen to work in space while being easy and safe to store and consumed under low gravity conditions. The packaging material used for space foods must be able to withstand extreme gravity conditions. So we will be able to play the role of a competent partner in the human space programme,” he added.

All geared up

A formal announcement on all details of Gaganyaan, the human space mission, will be made in New Delhi on Tuesday by Jitendra Singh, MoS in the PMO, even as Isro chairman K. Sivan is set to meet Air Chief Marshal Birender Singh Dhanoa and formally seek the IAF’s support for flying a couple of Indians to space by 2022. Dr Sivan said his organisation would bank on the IAF’s support to a large extent to accomplish the mission.

http://www.asianage.com/india/all-india/280818/drdo-labs-offer-assistance-for-space-mission.html

Outlook
THE FULLY LOADED MAGAZINE

Tue, 28 Aug 2018

DRDO to give Siachen solution to Dal Lake’s solid waste problem

Jammu and Kashmir Government has sought help of the Defence Research and Development Organisation (DRDO) to address problem of sewage management of around 700 houseboats in the Dal and Nageen Lakes of Srinagar

Senior officials of Ministry of Tourism Saturday held meeting with the visiting Scientists of the DRDO here about the issue. The outgoing Governor N N Vohra was concerned about the sewage generated from the houseboats and had conveyed to the Ministry of Tourism to seek scientific solution to it as the waste directly goes in the water bodies.

Director Tourism Department Kashmir Tassaduq Jeelani told Outlook that the DRDO team was in the Valley for a week and they surveyed water bodies and houseboats. He says the DRDO would come up with bio-toilets as possible solution to the solid waste of the houseboats. These bio-toilets, he says, are also being used in the in high-altitude regions like Siachen and Ladakh and have performed very well there.

Azim Tuman, former chairman of the Houseboat Owners Association, says that houseboat owners also held meeting with the DRDO scientists. “They (DRDO scientists) visited our houseboats and examined area around the Dal and Nageen Lakes. They informed us that they would provide a sort of oating tank to each houseboat,” Tuman says.

He says some ten years ago an American company had visited Kashmir and had assured that they have technical knowhow to solve the problem but the then government didn’t show any interest. “We are hopeful that this time government will pursue it with the DRDO and address this issue for ever,” he says.

Environmentalists here accuse houseboat owners of directly throwing liquid and solid waste of the houseboats in the Dal and Nageen lakes and contributing to its pollution. In 2011 the Lakes and Waterways Development Authority, which has been entrusted with conservation of Dal and Nageen Lakes of Srinagar, had sought help of American and German rms to address problem of sewage management houseboats. However, no progress was made on it.

At present there are around 600 houseboats in the Dal Lake and 147 are in the Nageen Lake. “Houseboats are being targeted for polluting water bodies and it hurts us most. It is we

who have kept tourism industry alive in Kashmir in most turbulent times. Any solution to the solid waste of the houseboats will force the government to look toward other much bigger contributing factors that has increased pollution in Dal and Nageen lake," Tuman says.
https://www.outlookindia.com/website/story/drdo-to-give-siachen-solution-to-dal-lakes-solid-waste-problem/315627

THE DIPLOMAT
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Tue, 28 Aug 2018

India's Defense Ministry approves purchase of 150 indigenously made Towed Howitzers

India's Defense Acquisition Council approved the purchase of 150 Advanced Towed Artillery Gun Systems

By Franz-Stefan Gady

On August 25, India's Defense Acquisition Council (DAC), chaired by Indian Minister of Defense Nirmala Sitharaman, approved the procurement of 150 155 millimeter/52 caliber Advanced Towed Artillery Gun Systems (ATAGs), currently under development for the Indian Army by the Indian Ministry of Defense's (MoD) Defense Research and Development Organization (DRDO).

"These guns have been indigenously designed [and] developed by DRDO and will be manufactured by production agencies, as nominated by DRDO," the August 25 MoD statement reads. "They are likely to be the mainstay of artillery in the near future." Total acquisition cost for the 150 artillery guns is estimated at around $490 million.

No contract for the acquisition of the ATAG has been concluded by the MoD to date.

Development of the ATAG started in 2013 and was completed by March 2017. During the design and development phase, the Indian MoD partnered up with India's private sector including Bharat Forge Limited, Tata Power Strategic Engineering Division, and Mahindra Defense Naval System under Indian Prime Minister Narendra Modi's "Make in India" initiative.

User trials of the ATAG have been taking place throughout 2017 and 2018. The howitzer gun is capable of firing five rounds in short duration with an effective range of up to 40 kilometers, depending on the ammunition type. Given its light weight, the new ATAG can be deployed to mountainous regions to support mountain warfare operations.

Six prototypes of the ATAG have been manufactured to date. In 2017, during user trials the ATAG reportedly fired three shells out to a record distance of approximately 47.2 kilometers.

The ATAGS was developed to supplement the indigenously designed and manufactured 155 millimeter/45 caliber artillery gun, Dhanush, an improved derivative of the FH-77B 155 mm/39 caliber towed howitzer manufactured by the Swedish defense contractor Bofors (now BAE Systems) of which the Indian MoD acquired 414 between 1987 and 1991.

"The major upgrade in comparison to the Bofors is the larger caliber," I wrote elsewhere. "Furthermore, the Dhanush reportedly has a new maximum effective range of 38 kilometer in salvo mode compared to the 39-caliber, 27-km range of the original guns. The Dhanush howitzer is capable of firing eight rounds per minutes and needs a crew of six to eight artillerymen."

After years of development and testing, the Dhanush howitzer has been declared ready for induction in June of this year. However, no contract has been signed so far by the Indian MoD, although the Indian Army has expressed an interest in ordering a first batch of 114 guns this year. (It is expected that the MoD will order a total of 414 Dhanush howitzer guns.)

An upgraded variant of the Dhanush howitzer gun, designated Dhanush Version 2 (v2) with a larger caliber (from 45 to 52 millimeter) and a slightly increased range (38 to 42 kilometers) is currently in development by DRDO. The Indian Army is also in the process of inducting 145 M777 Ultra Lightweight Howitzers from BAE Systems at a cost of about $750 million.

https://thediplomat.com/2018/08/indias-defense-ministry-approves-purchase-of-150-indigenously-made-towed-howitzers/

INDIA HERALD

Tue, 28 Aug 2018

Missile Test launch facility soon in Krishna district

By Siba Herald

Krishna sources stated that the Defense Research and Development Organisation (DRDO) is notching up in its efforts to set up the Missile Test Launch Facility in the Krishna Wildlife Sanctuary (KWS) in the district here. Earlier on Friday, an Expert Appraisal Committee of the Ministry of Environment, Forest and Climate Change (MoEFCC) granted environmental clearance for setting up the Facility in 155 hectares in the Sanctuary at Gullalamoda Village of Nagayalanka Mandal here.

Accordingly the Rs 1,000 crore project, after completion, will be a feather in the cap of India's missile launch strength. Already, Andhra Pradesh is home to one of the country's two satellite launch centres, the Satish Dhawan Space Centre in Sriharikota.

https://www.apherald.com/Politics/ViewArticle/317890/Missile-Test-launch-facility-soon-in-Krishna-district/