DEFENCE AVIATION POST
Your Connect To The World Of Defence And Aviation

Tue, 18 Feb 2020

DRDO missiles abound but are yet to be fielded

With 52 labs & over 7,800 scientists, the Defence Research & Development Organisation [DRDO] has delivered more misses than hits over the decades. DRDO's list of successes is short. Its list of failures is much longer.

Thus, DRDO's record in producing weapon systems has not been encouraging as exemplified by the delayed induction of the TEJAS, the mess-up that is Arjun MBT and the virtual rejection of the INSAS rifle by the Indian Army. But leapfrogging on the success achieved by scientists in space-related technologies, DRDO has excelled in producing potent ballistic missiles that have enhanced India's strategic options.

The Defence Research and Development Organisation (DRDO) was set up in 1958 with a vision to "provide our defence services a decisive edge by equipping them with internationally competitive systems and solutions".

One of India's flagship biennial military exhibitions – DefExpo 2020 (the other being Aero India) – was concluded recently in Lucknow. A wide range of strategic and tactical weapon systems, defence equipment and technologies developed by DRDO were on display at the DefExpo 2020 which was held in Lucknow from February 05-09, 2020.

DRDO highlighted products from its eight technology clusters, Aeronautical Systems, Armament & Combat Engineering (ACE), Electronics and Communication Systems (ECS), Life Sciences (LS), Micro Electronic Devices and Computational Systems (MED & CoS), Missile & Strategic Systems (MSS), Naval Systems & Materials (NS & M) and System Analysis and Modelling (SAM). Technology clusters, each headed by a Director General are entrusted with design and development of systems, products and core defence technologies.

Missile cluster is responsible for the design and development of state-of-the-art Missiles and Strategic Systems required for the deterrence and defence of the nation. India's first ASAT missile used in Mission Shakti to demonstrate anti-satellite precision strike capability will be on display at the DefExpo.

https://www.defenceaviationpost.com/2020/02/drdo-missiles-abound-but-are-yet-to-be-fielded/

DECCAN HERALD

Tue, 18 Feb 2020

DH exclusive: Manpower shortage derails DRDO as govt sits on proposal to increase manpower

Kalyan Ray

Highlights

- ***Final approval for 436 posts from the Cabinet Committee on Security headed by Modi is yet to come***
- ***While authorised strength of scientists is 7,353, the existing strength is 7,107***
- ***Since 2001, DRDO is managing with the same authorisation***
- ***142 scientists le the agency between 2014 and 2018 on personal grounds***

New Delhi: For months, the Narendra Modi government is sitting on a proposal to create 436 new posts for scientists at the Defence Research and Development Organisation, which is in desperate need of additional manpower due to its expanding research mandate. The agency with 52 laboratories has been tasked with several new projects ranging from next generation missiles to unmanned combat drones by the central government, but manpower shortage remains a matter of concern for the top brass.

While the authorized strength of scientists in DRDO is 7,353, the existing held strength of is 7,107.

Since the scientific manpower is insufficient for the committed R&D projects, its own manpower planning board in April 2010 recommended hiring another 4,966 scientists.

The proposal was subsequently toned down by the Union Finance Ministry that slashed the number to 1,316 posts. The Department of Expenditure further lowered the figure and cleared only 436 posts in the first phase.

However, the final approval for those 436 posts from the Cabinet Committee on Security headed by Modi was yet to come, sources told DH.

Reached out for a reaction a DRDO spokesperson, refused to make any comment.

But its officials recently conveyed to a panel of lawmakers that since 2001, DRDO was managing its task with same authorization inspite of more than six times increase in its outlay from the 9th plan period (Rs 13,866 crore) to 13th plan period (Rs 90,000 crore).

The scientific manpower authorisation for all these years was fixed at 7,255 compelling the organisation to "optimally utilise the scientific manpower". To make the matter worse, 142 Scientists left DRDO between 2014 and 2018 on personal grounds.

In a 2018 report, the Parliamentary Standing Committee on Defence noted that there were 93 ongoing major projects in different DRDO labs, including Agni IV and Agni V ballistic missile, Nirbhay cruise missile, submarine-launched K-15 missile, anti-tank Nag missile, beyond visual range Astra missile for the IAF, airborne radar AWACS, Arjun battle tank and Tejas Light Combat Aircraft.

Out of 30 major on-going projects (each costing more than Rs 100 crore), there have been cost revisions in six and time revisions in 16 projects. Besides, 12 projects are more than five years old (sanctioned prior to 2011) while 17 major projects were approved during the 11th five year plan (April 2002 to March 2007). None have been completed.

Several Parliamentary Committees over the years have put in record their dissatisfaction on the "inordinate delay in execution of almost all DRDO projects", which had become a common phenomenon.

https://www.deccanherald.com/national/dh-exclusive-manpower-shortage-derails-drdo-as-govt-sits-on-proposal-to-increase-manpower-805398.html

hindustantimes

Tue, 18 Feb 2020

Karachi-bound ship held in Gujarat over cargo that can be used in missile launch

According to people familiar with the matter, the ship, intercepted on February 3, is undergoing a detailed inspection at Kandla Port in Gujarat

By Shishir Gupta

The spectre of nuclear proliferation between China and its all-weather ally Pakistan was revived this month when Indian Customs officials detained a ship -- bearing a Hong Kong flag and bound for Port Qasim in Karachi -- for wrongly declaring an autoclave, which can be used in the launch process of ballistic missiles, as an industrial dryer.

According to people familiar with the matter, the ship, intercepted on February 3, is undergoing a detailed inspection at Kandla Port in Gujarat. They added that the Defence Research and Development Organisation (DRDO), which has been examining the ship, is sending a second team of nuclear scientists this week to check the large autoclave on board.

The ship, which left Jiangyin port on the Yangtze river in China's Jiangsu province, dropped anchor at Kandla, and was bound for Port Qasim. The detention of the vessel has been brought to the notice of the highest levels of national security establishment and the intelligence agencies.

Though national security officials and the external affairs ministry declined to share details of the ship, HT has learnt that it is named Da Cui Yun and carries a Hong Kong flag. The vessel was intercepted on the basis of intelligence tip-off, and one DRDO team has already inspected the 18x4-metre autoclave on board. The autoclave – a pressure chamber to carry out various industrial and scientific processes -- has been prima facie certified as a "dual-use" item, which means it can be used for civilian and military purposes.

A second high-level DRDO team of missile scientists will go to Kandla port on Monday to further examine the cargo, according to an official who asked not to be named. If this team upholds the findings of the first team, Customs will seize the cargo, and charge the vessel and its owners for violations of Special Chemicals, Organisms, Materials, Equipment and Technologies (Scomet) export regulations.

According to marinetraffic.com, which maps the movement of all listed ships, the Port Mohammed Bin Qasim-bound Da Cui Yun left Jiangyin Port on January 17, 2020, and has been moored at Kandla since February 3, 2020. The 28,341-tonne dead weight vessel measures 166.5x27.4 metres and was built in 2011 in the home port of Hong Kong. Port Qasim is in Karachi, Sindh, where the Space and Upper Atmosphere Research Commission (Suparco), responsible for Pakistan ballistic missile programme, is based.

Indian security officials are concerned because the nuclear nexus between Pakistan and China dates back to 1989, when Islamabad signed a deal with Beijing to purchase 34 solid-fuel M-11 ballistic missiles. The M-11s, which can deliver a 500kg payload over 300km, are at the core of Pakistan's

ballistic missile capability with all its other delivery platforms a derivative of the Chinese weapon. Around the same period, Pakistan purchased 12 to 25 liquid-fuel No-Dong ballistic missiles from North Korea despite not being a signatory to any proliferation regime. The No-Dong system can deliver a 700-1,000kg payload over 1,000-1,300km.

Experts said the autoclave episode revives memory of North Korean ship Ku Wol San, which was seized at Kandla at the height of the 1999 Kargil war. The Pakistan-bound ship had wrongly declared missile components, metal casings and Scud missile manuals as water-purification equipment. The story was first reported by HT at that time.

In the case of Da Cui Yun, DRDO investigators have so far found that the industrial autoclave is used for manufacturing composite lining for the solid-fuel ballistic missiles. The ballistic missile is propelled by a solid-fuel-based booster in its critical Phase I. For this, the solid fuel is placed in a steel alloy casing, which needs a composite material liner to withstand the high pressure and high temperatures during the launch process. An autoclave is used to manufacture sheets of silica under controlled temperature and pressure, so that they can be used as liners.

https://www.hindustantimes.com/india-news/karachi-bound-ship-held-in-kandla-over-cargo-that-can-be-used-in-missile-launch/story-yitIfsajL08Vv3Mi9x3RhK.html