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DRDO ने सेना के लिए बनाया चिकन बिस्किट

■ एजेंसियां, नई दिल्ली : डिफेंस रिसर्च डिवेलपमेंट ऑर्गनाइजेशन (डीआरडीओ) ने ऊंचाई और बर्फीले इलाके में तैनात सैन्यकर्मियों के लिए चिकन बिस्किट, थकान से राहत देने वाले तुलसी बार और प्रोटीन युक्त मटन बार बनाया है। सरकार के अनुसार, डीआरडीओ ने भी विभिन्न पौष्टिक और प्रोटीन युक्त समृद्ध खाद्य पदार्थ जैसे अंडे प्रोटीन बिस्कुट, आयरन और प्रोटीन युक्त खाद्य बार, प्रोटीन आधारित चॉकलेट और चिकन काटी रोल विकसित किए हैं। रक्षा राज्य मंत्री सुभाष भामरे ने लोकसभा में लिखित जवाब में यह जानकारी कहा कि डीआरडीओ में कोई खाद्य उत्पादन इकाई नहीं है, लेकिन इन उत्पादों के बाद, टेक्नॉलजी को खाद्य उत्पादक उद्योगों को ट्रांसफर किया जाएगा।

THE  HINDU

Sun, 23 July, 2017

Naval safety wing remains a pipe dream

CAG audit says many such recommendations of the inquiries into naval accidents have not been implemented

The Union government is yet to give formal sanction to a dedicated organisation for dealing with naval accidents despite a series of accidents involving submarines and ships and loss of several lives. An audit by the Comptroller and Auditor-General also says a series of missteps led to the deadly 2013 accident in a submarine off Mumbai in which 18 people were killed.

“The Indian Navy, since inception, has no institutionalised framework to deal with safety issues. A dedicated organisation for dealing with safety issues was set up by the Indian Navy only in 2014; however, it awaits government’s sanction,” the CAG report tabled in Parliament on Friday said.

Submarine accident - The explosion aboard *INS Sindhurakshak* and its sinking off Mumbai in August 2013 resulted from a series of missteps, the audit says.

Quoting the Board of Inquiry proceedings into the sinking, the audit points out that the “operational deployment of the submarine in August 2013 by Indian Navy was not justified due” several reasons. Among them are the laid-down ships operating standards (SHOPS) for the submarine had not achieved the requisite harbour and operational evolutions; complete “work-up” of the submarine was not conducted when the submarine was prepared for operational deployment as the “work-up” was completed within one week instead of prescribed two weeks; the trials and calibration of navigational aids and sensors should be completed prior to deployment of a submarine for “work-up” with any consorts; however, in the case of *INS Sindhurakshak*, the sea acceptance trials of two pieces of critical equipment were not completed even at the time of its preparation for operational deployment; and submarine authorities concerned did not properly assess the crew fatigue, besides the submarine was holding ammunition nearing life expiry.

The audit found that many recommendations of the inquiries into naval accidents had not been implemented. This included installation of smoke and fire detectors in all compartments of submarines and procurement of extended line breathing apparatus (ELBA) sets, carbon composite submarine breathing apparatus (SBA), light weight breathing sets for submarines etc.

Safety organisation - The idea of creating an Indian Navy Safety Organisation was mooted first in 2006 and ultimately promulgated in October 2012, the audit says. “It was set up in February 2014, though it is yet to be sanctioned by Government,” the audit said.

From 2007-08 to 2015-16, a total number of 38 accidents occurred, which led to a loss of 33 lives of service officers and sailors.

The Navy lost two ships (*INS Vindhyagiri* and *TRV A-72*) and one submarine (*INS Sindhurakshak*) in these accidents. Of these accidents, the highest of 12 occurred during 2013-14, followed by six in 2007-08, five in 2014-15 and four each in 2008-09 and 2009-10.

The audit points out that out of 38 accidents, 15 (39%) occurred due to fire/explosion/flooding, six (16%) of vessels touching the bottom, another six (16%) were caused by collision of vessels and remaining 11 (29%) were of miscellaneous nature which included accidental stranding and suspended movements, venting of poisonous gas, damages to sonar while docking and damage to aircraft hangar onboard the vessel.

MAIL TODAY

Sun, 23 July, 2017

This is why Army has critical ammo for just 10 days

By Sudhi Ranjan Sen

Stocks of the as many as 61 types of critical ammunition needed to fight a war by the Indian Army will last only 10 days, a report of the Comptroller and Auditor General of India (CAG) has said in a report that was tabled in the Parliament this week. But how did the stocks of the army drop so low and who exactly is responsible? About 90 per cent of the ammunition for Indian Army is sourced from the various manufacturing units of the Ordnance Factory Board (OFB).

The OFB failed to deliver ammunition on time leading to a mounting shortfall, the CAG has found. The OFB are Defence Public Sector Units. They are controlled by the Department of Defence Production under the Ministry of Defence. Inquiries of the CAG reveal performance of OFB have dipped in the last four years — since 2013. Earlier, from 2009-2013, the shortfall in production of different types of ammunition varied from “54 to 73 per cent.” Subsequently, from 2013 to December 2016, the CAG observes, “the Army’s demand was not met in respect of 64 to 95% of ammunition.”

Closer scrutiny revealed more shocking facts. For as many as 11 to 30 types of ammunition considered critical by the Indian Army, the shortfall varied between 50 to 100 per cent. In other words, certain key ammunition weren’t produced by the OFBs at all between 2013 and December 2016. “Despite the continued slippages in supply of ammunition to the Army by ordnances factories, no mechanism has been introduced by the Board or factories to fix responsibilities,” the CAG has observed.

Not only did the OFB fail to produce critical ammunition, it produced poor quality ammunition. As many as 14 types of ammunition and 7 types of spares were returned between 2013-14 and 2016. Shockingly the CAG has a found ammunition worth nearly `17,000 crore were rejected by the army because of poor quality. Last June, 16 soldiers, including two officers, died when Central Ammunition Depot at Pulgaon, Maharashtra, went up in flames due to defective anti-tank mines. Even during the audit, a fresh case of faulty 7.62 mm bullets — used by the infantry — came to light.

THE HINDU

Sun, 23 July, 2017

Pentagon urges direct talks on Doklam standoff

‘India, China should open dialogue’

India and China should engage in direct dialogue, free of any “coercive aspects” to reduce the tension over a military standoff in Doklam, the Pentagon has said. Chinese and Indian soldiers have been locked in a face-off in the Doklam area at the tri-junction of India, Bhutan and China in an area also claimed by Bhutan for over a month after Indian troops stopped the Chinese army from building a road in the disputed area.

“We encourage India and China to engage in direct dialogue aimed at reducing tensions and free of any coercive aspects,” Gary Ross, a Defence Department spokesman, told PTI.

Mr. Ross, however, refused to take sides on the issue. “We refer you to the governments of India and China for further information... We are not going to speculate on such matters,” he said when asked if the Pentagon fears the tension may escalate between India and China.

The U.S. State Department too made similar statements over the past week.

Earlier this week, a senior Pentagon Commander told U.S. lawmakers that China was exploiting its economic leverage as a way to further its regional political objectives.



Sun, 23 July, 2017

China under pressure as Trump gives US navy more freedom in South China Sea

By Saibal Dasgupta

Beijing: US President Donald Trump approved a plan giving the country's navy greater freedom in operating in the South China Sea and put pressure on China's efforts to enlarge its military presence by artificially building reefs and atolls in the area.

The move is seen as a challenge to Beijing's maritime claims over most of the South China Sea and its attempts to overrule overlapping claims by five other countries, Vietnam, Malaysia, Indonesia, Brunei and the Philippines.

The US move will keep China's expanding navy busy in the South China Sea and make it difficult for Beijing to deal with its territorial disputes with other countries such as India and Japan at a time when the Communist Party is preparing for a conclave which will see major political changes.

The new plan, which was submitted by US defence secretary Jim Mattis, involves a full-year schedule of when US navy ships will sail through contested waters. The US navy will now enjoy a lot more freedom than it did during the Obama administration, which insisted on the National Security Council approving major operational decisions.

The decision came soon after Chinese warships began moving towards the Baltic Sea for a joint naval exercise with Russian navy on Friday. This is seen as an attempt to reassure Moscow that China would stand by it in the case of threats from western powers, analysts said.

"By sending its most advanced guided-missile destroyers, China is expressing its sincerity to Russia and also sends a strong signal to other countries who plan to provoke us," Li Jie, a Beijing-based navy expert told the state-run Global Times.

China lost its case over the South China Sea at the International Court at The Hague, which deemed Beijing's claims as unlawful and excessive. But China has rejected the validity of the verdict. Analysts said China plans to expand its air defense and identification zone into the western Pacific and build a blue water navy to rival that of the US.

Sun, 23 July, 2017

E-threats may wreak havoc by 2020

India's Cyber Security Chief Says Govt Is the Main Target of Such Attacks

In the next few years, India will face increasingly sophisticated “destructive“ cyber threats as compared to the “disruptive“ attacks in the Indian cyberspace that are currently adding up to 200 million malware-related and 1,90,000 “unique“ intrusions in any given week.

India's cyber security chief Gulshan Rai told Parliament's finance standing committee recently that cyber threats had evolved swiftly from viruses and “nuisance“ attacks in the early 2000s to sophisticated malware and advanced denial of service, and could pose the risk of severely destructive attacks by 2020.

The government -the Centre and states -is the main target of cyber attacks, driven by motives ranging from theft, espionage and data extraction to counterfeiting. In 2015 and 2016, the government sector accounted for 27% and 29% of all cyber attacks, the chief of the Indian computer emergency response team (ICERT) informed the committee.

Other sectors high on the priority list of cyber criminals are banking, energy , telecom and defence, which, along with the government, account for three-fourths of all cyber attacks. The emergence of new services and apps, cloud and cognitive technologies, has made cyber security more challenging even as the value of data and its applications in commerce grows by the day , making cyber security a major task.

The incidence of e-transactions is rising with India logging in an estimated 2 billion such dealings a day as compared to around 54 billion worldwide, according to World Payments Report 2016.

Cyber attacks use techniques and tools that help criminals evade detection with increasing refinement, and this has led the government to recognise cyber security as a “strategic domain“ and devise strategies aimed at deepening cooperation at the international level. The PMO and the national security adviser are key elements overseeing a range of civilian and defence agencies with cyber security mandates.

The government has suggested several measures for the financial sector, where the impact of cyber threats can be severe or even catastrophic. Mandatory reporting of cyber incidents, audits and risk assessments, capacity building, and the setting up of a CERT dedicated to the financial sector are some of the initiatives under consideration even as manipulation of information on networks is a worry .

The presentation was made to the committee as part of its study of demonetisation and transformation to a digital economy.

Sun, 23 July, 2017

'PSLV best choice in global mkt for launching small sats'

Not Possible For Our Sats to Scan Entire Country 24x7: ISRO Chairman

Indian Space Research Organisation (Isro) chairman A S Kiran Kumar says the space body is working on new technologies and space programmes, especially for interplanetary missions. In an interview to TOI's Surendra Singh, Kumar explains as to why India, despite having so many remote-sensing satellites in orbit, is taking help from NASA to keep an eye on the Doklam plateau, the site of the standoff with China. Excerpts:

Isro this year has achieved several milestones -starting from the launch of 104 satellites in one go to the launch of heaviest rocket GSLV Mark III on June 5. How do you see these achievements?

We need a lot of payload capacity (satellites) for various activities. We have to make sure we achieve the required capacity as early as possible. Towards that we have been working on.

What are new technologies Isro is working on?

We have done the first development flight test of capacity launcher (GSLV Mk III on June 5). We will repeat its launches. We are also working on semi-cryogenic engine--making use of liquid oxygen and kerosene as fuel. We'll see eight PSLV launches and two GSLV Mk II and Mk III launches in coming months. We are also working on the next phase of the reusable launch vehicle whose test is likely within one to five years. Isro is also building high-throughput satellites like Gsat-11, Gsat-29 and Gsat-20 with high beam (a special kind of transponder that operates on a high frequency) that will increase our communication capabilities. We are also trying to improve weight capability of our satellites with the help of electric propulsion technology (which helps a satellite reduce fuel intake and draw energy from solar energy). Gsat-9 has this technology .

With a space agency launching its first rocket brought on a bicycle in 1963 to one launching the country's heaviest rocket, how do you see this advancement in space technology of ISRO?

Our focus on indigenous development of space technologies helped us come this far. We have been consistently pursuing to achieve these technologies. Persistence definitely pays.

What have been the hardships faced by ISRO?

Initially, Isro had faced the problem of developing cryogenic engine and also witnessed a couple of GSLV failures. This hurdle actually delayed the

GSLV Mk II and Mk III programmes. Isro had launched Mars Orbiter Mission and Chandrayaan in first attempt and at a budget less than that of Nasa for similar missions. Is our technology cost-effective?

We are trying to achieve more within the resources available to us. Our methodology is different from other countries. But we have benefited from what others had done.

With Isro launching 209 satellites of 28 countries since 1999, do you think it has made an impact in the commercial market?

Money that we are earning from satellite launches is small. But what is significant is Isro has made a mark in the small satellite launch market those ranging from less than 100 kg to 500 kg. PSLV-class of launch vehicle is not available everywhere. And as we are engaging in frequent launches and have the capacity to carry small foreign satellites along with our primary satellite, PSLV is the best choice available in the market. By carrying small foreign satellites, we are also able to cut the cost of launches. Globally, small satellites are becoming the order of the day .

What about India's space collaboration with the US and Israel?

Individual space agencies, including NASA, are not getting enough funds from governments for space programmes. Collaboration between space agencies is, therefore, the order of the day. India and NASA are currently working on NISAR (NASA-Isro Synthetic Aperture Radar) project.

With PM Narendra Modi's special focus on technology , do you think the space budget allocated by the Centre is sufficient enough for Isro?

Progressively, the budget for space programmes is being increased. In the last three years, the outlay has been increased. With the resources available to us, we will prioritise missions.

Isro had placed a lot of remotesensing satellites in orbit, then why does India have to depend on high-resolution images from NASA to keep an eye on the India-China military stand-off at Doklam?

It is not possible for Isro to look at all locations of the country 24x7. For example, if one satellite covers an area of 10 km once a day , how will you scan the total area of the country in a day . Therefore, by pooling resources (with images from NASA), we can get what we want.

What are new milestones Isro is striving to achieve in coming years?

We are working to increase the frequency of launches so that we can have more (communication) capabilities. Inter-planetary programmes like Chandrayaan-2 and Aditya (solar) missions are on track. Chandrayaan-2 launch expected in the first quarter of next year and Aditya mission by 2018 end or beginning of 2019.

After the development GSLV Mk III with carrying capacity of a 4-ton satellite, will Isro depend on European spaceport for launching heavier satellite?

During the first development flight of GSLV Mk III, we didn't want to use the full capacity. We therefore launched only a 3.1-ton Gsat19. With a couple of launches, GSLV Mk III will be able to carry the full capacity 4-ton satellite. Isro will go ahead with the launch of its 5.8-ton Gsat-11 from French Guiana by year-end. Thereafter, I don't see any reason for Isro to depend on foreign spaceport for launching our heavier satellites.

Business Standard

Sun, 23 July, 2017

China bets big on artificial intelligence

CSG Smart Science & Technology Co. climbed as much as 9.3%

China aims to make the artificial intelligence industry a “new, important” driver of economic expansion by 2020, according to a development plan issued by the State Council.

Policy makers want to be global leaders, with the AI industry generating more than 400 billion yuan (\$59 billion) of output per year by 2025, according to an announcement from the cabinet late Thursday. Key development areas include AI software and hardware, intelligent robotics and vehicles, virtual reality and augmented reality, it said.

“Artificial intelligence has become the new focus of international competition,” the report said. “We must take the initiative to firmly grasp the next stage of AI development to create a new competitive advantage, open the development of new industries and improve the protection of national security.”

The plan highlights China’s ambition to become a world power backed by its technology business giants, research centres and military, which are investing heavily in AI. Globally, the technology will contribute as much as \$15.7 trillion to output by 2030, according to a PwC report last month. That’s more than the current combined output of China and India.

Economic ripples - “The positive economic ripples could be pretty substantial,” said Kevin Lau, a senior economist at Standard Chartered Bank in Hong Kong. “The simple fact that China is embracing AI and having explicit targets for its development over the next decade is certainly positive for the continued upgrading of the manufacturing sector and overall economic transformation.”

Chinese AI-related stocks advanced Friday. CSG Smart Science & Technology Co. climbed as much as 9.3 per cent in Shenzhen before closing 3.1 per cent higher, while intelligent management software developer Mesnac Co. surged 9.8 per cent after hitting the 10 per cent daily limit in earlier trading.

AI will have a significant influence on society and the international community, according to an opinion piece by East China University of Political Science and Law professor Gao Qiqi published Wednesday in the People’s Daily, the flagship newspaper of the Communist Party.

PwC found that the world’s second-biggest economy stands to gain more than any other from AI because of the high proportion of output derived from manufacturing.

Another report from Accenture and Frontier Economics last month estimated that AI could increase China’s annual growth rate by 1.6 percentage point to 7.9 per cent by 2035 in terms of gross value added, a close proxy for GDP, adding more than \$7 trillion.

Military, civilian initiatives - The State Council directive also called for China’s businesses, universities and armed forces to work more closely in developing the technology.

“We will further implement the strategy of integrating military and civilian developments,” it said. “Scientific research institutes, universities, enterprises and military units should communicate and coordinate.”

More AI professionals and scientists should be trained, the State Council said. It also called for promoting interdisciplinary research to connect AI with other subjects such as cognitive science, psychology, mathematics and economics.



Sun, 23 July, 2017

GST system is robust: Centre

Tells Rajya Sabha that the network is not directly exposed to the Internet

The Goods and Services Tax (GST) system is not exposed directly to the Internet and has a dedicated round-the-clock security operations command centre in its network against cyberthreats, the government has told the Rajya Sabha.

To a question, the government said on Friday that any interaction with the system was only through APIs (application programming interfaces). It had a multi-layered security architecture and had operational segregation through use of a virtual local area network.

Access privileges

There was segregation of duties, least privilege access principles, Internet Protocol (IP) filtering and blocking of rogue IPs, resiliency at each layer, secure coding practices ensuring security of GST software development throughout Software Development Lifecycle, and at-rest and in-transit data encryption, the government said.

The data sharing mechanism ensures that any data transfer from the GST system is in encrypted format. The system banks on thorough security testing and full-system vulnerability assessment and penetration testing of IT infrastructure, besides the apps used licensed tools and customised scripts, said the government.

Security incidents

According to the Indian Computer Emergency Response Team (CERT-In), a total of 44,679, 49,455, 50,362 and 27,482 cybersecurity incidents were observed during 2014, 2015, 2016 and 2017 (till June), respectively, the government said in response to another query.

The types of cybersecurity incidents include phishing, scanning/probing, website intrusions and defacements, virus/malicious code, targeted attacks, ATM malware, ransomware and denial of service attacks among other threats.

The government had taken a series of measures to strengthen the cybersecurity infrastructure. All financial institutions had been advised by CERT-In, through the Reserve Bank of India (RBI) to conduct an audit by empanelled auditors on a priority basis and take immediate steps accordingly.

Crisis plan

All organisations providing digital payment services have been mandated to report cyber security incidents to CERT-In expeditiously. The government has also formulated a Cyber Crisis Management Plan for countering cyber attacks for implementation by all ministries and departments.