

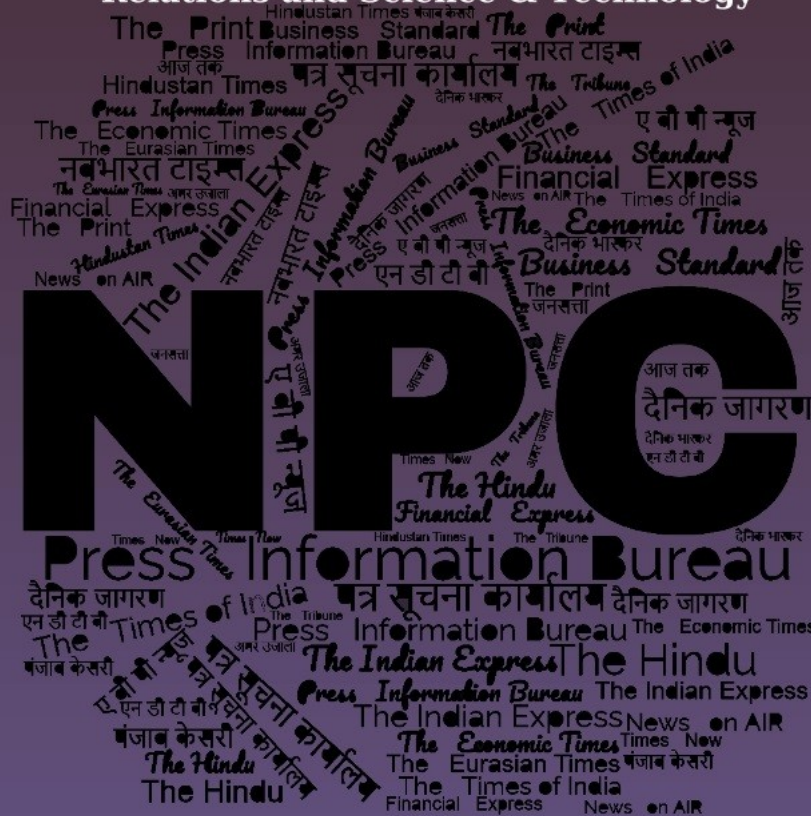
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समाचार पत्रों से चयनित अंश Newspapers Clippings

डीआरडीओ समुदाय को डीआरडीओ प्रौद्योगिकियों, रक्षा प्रौद्योगिकियों, रक्षा नीतियों, अंतर्राष्ट्रीय संबंधों और विज्ञान एवं प्रौद्योगिकी की नूतन जानकारी से अवगत कराने हेतु दैनिक सेवा

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Tues, 23 July 2024

Defence Budget 2024: रक्षा क्षेत्र को करीब 6.22 लाख करोड़ रुपये का हुआ आवंटन, पढ़ें BRO और DRDO को कितना मिला?

केंद्रीय बजट 2024-25 में वित्त मंत्री निर्मला सीतारमण ने रक्षा मंत्रालय को करीब 6.22 लाख करोड़ रुपये का बजटीय आवंटन किया है जो अन्य सभी मंत्रालयों की तुलना में सबसे अधिक है। रक्षा बजट का बड़ा हिस्सा जहां वेतन-पेंशन पर खर्च होगा वहीं पूंजीगत खर्च के लिए करीब 172000 करोड़ रुपये का आवंटन निर्धारित हुआ है। इसमें से 105518 करोड़ रुपये से अधिक की राशि स्वदेशी रक्षा कंपनियों से रक्षा उत्पादों की खरीद पर खर्च की जाएगी।

आत्मनिर्भर भारत को मिलेगी गति

रक्षा मंत्रालय के अनुसार, पूंजीगत खर्च में इस विशेष कोटे का उद्देश्य देश में रक्षा उद्योग को बढ़ावा देना है। रक्षामंत्री राजनाथ सिंह ने रक्षा बजट आवंटन में बढ़ोतरी पर खुशी जाहिर करते हुए कहा भी कि पूंजीगत व्यय तीनों सैन्य बलों की क्षमताओं को और मजबूत करेगा तथा रक्षा क्षेत्र में 'आत्म निर्भर भारत' को और गति मिलेगी।

रक्षा मंत्रालय को करीब 6.22 लाख करोड़ रुपये का हुआ आवंटन

वित्त मंत्री निर्मला सीतारमण ने अपने करीब डेढ़ घंटे के भाषण के दौरान रक्षा बजट के बारे में एक शब्द भी नहीं बोला। हालांकि, बजटीय आवंटन के ब्यौरे में वित्त वर्ष 2024-25 के लिए रक्षा मंत्रालय के आवंटन की जानकारी दी गई। पूर्ण बजट में चालू वित्तीय वर्ष के लिए रक्षा मंत्रालय को कुल 6,21,940.85 करोड़ रुपये आवंटित किए गए हैं जो कुल बजटीय अनुमान का लगभग 12.90 प्रतिशत है।

कहां पर कितना होगा खर्च?

वित्त वर्ष 2022-23 के आवंटन की तुलना में यह लगभग एक लाख करोड़ रुपये अधिक है और पिछले वित्त वर्ष 2023-24 की तुलना में 4.79 प्रतिशत अधिक है। रक्षा बजट के कुल आवंटन में 27.66 प्रतिशत पूंजीगत खर्च, जीविका और सैन्य परिचालन तैयारियों पर व्यय के लिए 14.82 प्रतिशत, वेतन-भत्ते के लिए 30.66 प्रतिशत, पेंशन 22.70 प्रतिशत तथा रक्षा मंत्रालय के तहत नागरिक संगठनों के लिए 4.17 प्रतिशत का आवंटन किया गया है।

रक्षा पेंशन के लिए कुल आवंटन 1,41,205 करोड़ रुपये है जो लगभग 32 लाख पेंशनभोगियों को मासिक पेंशन पर खर्च किया जाएगा। हालांकि सामरिक विशेषज्ञ रक्षा क्षेत्र के बजटीय आवंटन को अपर्याप्त मानते हुए आशंका जता रहे कि इसका सेनाओं के आधुनिकीकरण से लेकर विशिष्ट हथियारों-उपकरणों की खरीद पर प्रतिकूल असर पड़ेगा।

रक्षा विशेषज्ञ ने क्या कहा?

रक्षा विशेषज्ञ पूर्व मेजर जनरल जेकेएस परिहार ने कहा कि वित्त मंत्री के संबोधन में रक्षा शब्द का जिक्र तक नहीं होना दर्शाता है कि उनकी प्राथमिकता सूची में यह कहां है। उन्होंने कहा कि भारत की सेनाएं दोहरे मोर्चे की जटिल चुनौतियों का सामना कर रही हैं। इस लिए सैन्य आधुनिकीकरण तथा विशिष्ट रक्षा उपकरण-हथियारों के अधिग्रहण को गति देना

जरूरी है। ऐसे में रक्षा बजट में आठ फीसद से कम का आवंटन निगेटिव माना जाएगा क्योंकि मुद्रास्फीति फैक्टर से निपटने के लिए यह न्यूनतम बेंचमार्क अपरिहार्य है।

बजट से प्रसन्न नजर आया रक्षा मंत्रालय

परिहार ने कहा कि पांच फीसद से भी कम बढ़ोतरी से साफ है कि रक्षा क्षेत्र फिलहाल सरकार की प्राथमिकता में नहीं है और बजट में इसका किसी रूप में उल्लेख न होने इसका प्रमाण है। हालांकि, रक्षा मंत्रालय बजट से प्रसन्न नजर आया और उसके अनुसार बजट आवंटन में पूंजीगत व्यय की राशि से सैन्य बलों के आधुनिकीकरण पर ध्यान केंद्रित किया जा सकेगा। 1.72 लाख करोड़ रुपये का पूंजीगत आवंटन वर्ष 2023-24 के संशोधित आवंटन से 9.40 प्रतिशत अधिक है।

घातक हथियारों पर खर्च होगी राशि: रक्षा मंत्रालय

रक्षा मंत्रालय के अनुसार, इस आवंटन का मकसद चालू और अगले वित्त वर्ष में बड़े रक्षा खरीद के जरिए महत्वपूर्ण क्षमता निर्माण गैप को भरा जाएगा। साथ ही सशस्त्र सेनाओं को अत्याधुनिक प्रौद्योगिकी, घातक हथियारों, लड़ाकू विमानों, पोतों, पनडुब्बियों, प्लेटफार्मों, मानव रहित हवाई वाहनों, ड्रोनों, विशेषज्ञ वाहनों आदि से लैस करने पर भी यह राशि खर्च होगी।

वहीं सेनाओं की परिचालन तत्परता के लिए अधिक आवंटन का मकसद सैन्य बलों को हर समय युद्ध के लिए तैयार रखना है। इसलिए इस मद में चालू वित्त वर्ष के दौरान रक्षा बजट में से 92,088 करोड़ रुपये इसके लिए आवंटित किए गए हैं जो दो साल पूर्व की तुलना में 48 प्रतिशत अधिक है। इसका उद्देश्य विमान और जहाजों सहित सभी प्लेटफार्मों को सर्वोत्तम रखरखाव सुविधाएं और समर्थन प्रणाली को सुदृढ़ करना है।

बजट में सीमावर्ती क्षेत्रों का भी रखा गया विशेष ध्यान

गोला-बारूद की खरीद की सुविधा के साथ सुरक्षा स्थिति की मांग के अनुसार संसाधनों और सैन्य कर्मियों की गतिशीलता में भी इस आवंटन से मदद मिलेगी और किसी भी अप्रत्याशित स्थिति के लिए अग्रिम क्षेत्रों में सेना की तैनाती को मजबूत करना इसका लक्ष्य है। सीमावर्ती क्षेत्रों में अंतिम मील कनेक्टिविटी प्रदान करने के साथ-साथ रणनीतिक रूप से महत्वपूर्ण परियोजनाओं को पूरा करने में शामिल एजेंसियों को बजट आवंटित करने में प्राथमिकता में रखा गया है।

BRO और **DRDO** को कितने करोड़ रुपये का हुआ आवंटन?

इसके तहत पूंजी व्यय के लिए सीमा सड़क संगठन (BRO) को 6,500 करोड़ रुपये आवंटित किए गए हैं। सीमावर्ती क्षेत्रों में रणनीतिक बुनियादी ढांचे के विकास को बढ़ावा देने के साथ लद्दाख में 13,700 फीट की ऊंचाई पर न्योमा एयरफील्ड के विकास, अंडमान और निकोबार द्वीप समूह में भारत की दक्षिणी पंचायत के लिए स्थायी पुल कनेक्टिविटी, हिमाचल प्रदेश में 4.1 किलोमीटर रणनीतिक रूप से महत्वपूर्ण शिंकू ला सुरंग, अरुणाचल प्रदेश में नेचिफू सुरंग और कई अन्य परियोजनाओं को भी इस आवंटन का फायदा मिलेगा। वहीं, रक्षा अनुसंधान और विकास संगठन यानि डीआरडीओ को 23,855 करोड़ रुपये का बजट आवंटन दिया गया है।

<https://www.jagran.com/news/national-defence-budget-2024-rs-6-22-lakh-crore-allocated-to-defence-ministry-23764317.html>

Govt shifts over 10,000 people in Odisha ahead of missile test

Balasore (Odisha) Odisha's Balasore district administration has temporarily shifted over 10,000 people from 10 villages to another place ahead of Wednesday's scheduled missile test, an official said. The DRDO also completed the required range preparation for the missile test at the Integrated Test Range (ITR) at Chandipur, a defence source said here on Tuesday.

The test will be conducted from launch pad number 3 of the ITR.

Meanwhile, the Balasore district administration has made arrangements to temporarily evacuate 10,581 people belonging to 10 villages residing within 3.5 km radius of the launch pad prior to the test launch of the missile, said a revenue officer.

"As a safety measure these arrangements are being made with adequate compensation to affected people," the official said.

A preparatory meeting was held here Tuesday by the district administration in the presence of the Collector, Ashis Thakare and Superintendent of Police, Sagarika Nath for the smooth shifting of residents falling in this zone to nearby temporary shelter centers, said the revenue officer.

Through the public address system the district administration has alerted people in these villages to leave their house by 4 am of Wednesday and remain in the camp till an announcement is made to return to their houses after the launch is over.

The compensation amount will be credited to their bank account after they report to the camp, said the officer. Balasore district administration has made adequate arrangements for their stay in nearby schools, multipurpose cyclone rehabilitation centers and temporary tent shelters, said a district revenue officer.

At least 10 government officials have been deputed in each camp to assist people and 22 sections (one section comprises nine personnel) of police have been deployed to assist people in the camps.

Drinking water facilities and a temporary health camp for the shifted people have been arranged, said the officer. At the same time, there has been resentment among the villagers who are temporarily being shifted.

They alleged that "inadequate compensation" is being sanctioned for them. They said that the amount of compensation fixed by the district administration for the people evacuating temporarily has not changed for a long time. Fishermen and farm labourers engaged in the fishery pond, which comes under the evacuation range should also be compensated, they said. At present, for one day of temporary shifting, each adult is given a compensation of Rs 300. Each minor gets Rs 150 in addition to Rs 75 for food.

On Monday, a petition in this regard was submitted to the ADM, Balasore, by some villagers.

<https://economictimes.indiatimes.com/news/defence/govt-shifts-over-10000-people-in-odisha-ahead-of-missile-test/articleshow/111967727.cms>



Press Information Bureau
Government of India

Ministry of Defence

Tue, 23 July 2024

Rs 6.22 lakh crore allocated to MoD, highest among Ministries, in Regular Union Budget 2024-25; 4.79% higher than FY 2023-24

In the Regular Union Budget of Financial Year (FY) 2024-25, Ministry of Defence (MoD) has been allocated Rs 6,21,940.85 crore (approx. US \$75 Billion), the highest among the Ministries. While maintaining the allocation made to MoD during interim budget, the Government has made an additional allocation to the tune of Rs 400 crore on innovation in defence through the Acing Development of Innovative Technologies with iDEX (ADITI) scheme.

Through this scheme, MoD is engaging with start-ups/MSMEs and innovators to develop Def-Tech solutions and supply the Indian military with innovative and indigenous technological solutions. A grant of upto 50% of Product Development Budget with enhanced limit (Max) of Rs 25 crore per applicant will be awarded as per extant iDEX guidelines.

The allocation to MoD for FY 2024-25 is higher by approx. Rs one lakh crore (18.43%) over the allocation for FY 2022-23 and 4.79% more than allocation of FY 2023-24. Out of this, a share of 27.66% goes to capital; 14.82% for revenue expenditure on sustenance and operational preparedness; 30.66% for Pay and Allowances; 22.70% for Defence Pensions, and 4.17% for civil organisations under MoD. The total allocation comes out as approx. 12.90% of Budgetary Estimate of Union of India.

The allocation is aimed to promote 'Aatmanirbharta' in defence technology & manufacturing and equipping the Armed Forces with modern weapons/platforms along with creation of job opportunities for the youth.

Modernisation of the forces at the centre

In absolute terms, budgetary allocation under capital head to the Defence Forces for FY 2024-25 is Rs 1.72 lakh crore, which is 20.33% higher than the actual expenditure of FY 2022-23 and 9.40%

more than the Revised Allocation of FY 2023-24. The allocation is aimed to fill the critical capability gaps through big ticket acquisitions in current and subsequent FYs. The enhanced budgetary allocation will fulfill the requirement of annual cash outgo on planned Capital acquisitions aimed at equipping the Armed forces with state-of-the-art niche technology, lethal weapons, fighter aircraft, ships, submarines, platforms, unmanned aerial vehicles, drones, specialist vehicles etc.

Strengthening domestic capacity

MoD has earmarked 75% of modernisation budget amounting to Rs 1,05,518.43 crore for procurement through domestic industries during this FY. This will have a multiplier effect on GDP, employment generation and capital formation, thus providing a stimulus to the economy.

Enhanced allocation for sustenance & operational readiness

The continued higher allocation for operational readiness boosts the morale of the Armed Forces with the sole motive of keeping them battle ready at all times. The Government has allocated Rs 92,088 crore during the current FY under this head, which is 48% higher than the budgetary allocation of FY 2022-23. This is aimed to provide best maintenance facilities and support system to all platforms including aircraft and ships. It will facilitate procurement of ammunition; mobility of resources & personnel as demanded by the security situation, and strengthen the deployment in forward areas for any unforeseen situation.

Ensuring better healthcare facilities to veterans

The Government is committed to provide best healthcare facilities to the veterans and their dependents through enhanced allocation to Ex-Servicemen Contributory Health Scheme (ECHS). In the regular budget for FY 2024-25, Rs 6,968 crore has been allotted to ECHS which is 28% higher than the previous year allocation. This follows the significantly higher allocation at revised estimate stage during the FY 2023-24 when the allocation to ECHS was enhanced by 70 % over BE.

Bolstering Border Infrastructure for strategic requirements

The Government is firm on its commitment to improve border infrastructure through higher allocation to the agencies involved in executing strategically-significant projects along with providing last-mile connectivity in the border areas. In this endeavor, the budgetary allocation to Border Roads Organisations (BRO) under capital for Budget Estimates (BE) 2024-25 has been made as Rs 6,500 crore, which is 30% higher than the allocation for FY 2023-24, and 160% higher over the allocation of FY 21-22.

The financial provision made during the budget this year will promote strategic infrastructure development in border areas, while boosting socio-economic development in that region. Projects such as development of Nyoma Airfield in Ladakh at an altitude of 13,700 feet, permanent bridge connectivity to southernmost Panchayat of India in Andaman and Nicobar Islands, 4.1 km strategically-important Shinku La tunnel in Himachal Pradesh, Nechiphu tunnel in Arunachal Pradesh and many other projects will be funded out of this allocation.

Enhancing the capability of Indian Coast Guard

The allocation to the Indian Coast Guard (ICG) for this FY 2024-25 is Rs 7,651.80 crore, which is 6.31% higher over the allocation of FY 2023-24. Out of this, Rs 3,500 crore is to be incurred only on capital expenditure, adding teeth to the arsenal of ICG for addressing the emerging maritime challenges and providing humanitarian assistance to other nations. The allocation will facilitate the acquisition of fast-moving patrolling vehicles/interceptors, advance electronic surveillance system and weapons.

Self-reliance through research & innovation

The budgetary allocation to Defence Research and Development Organisation (DRDO) has been increased to Rs 23,855 crore in FY 2024-25 from Rs 23,263.89 crore in FY 2023-24. Out of this allocation, a major share of Rs 13,208 crore is allocated for capital expenditure. This will financially strengthen the DRDO in developing new technology with special focus on fundamental research and hand-holding of the private parties through Development-cum-production partner. The allocation to Technology Development Fund (TDF) scheme stands out to be Rs 60 crore which is specially designed for new start-ups, MSMEs and academia attracting the young bright minds interested in innovation and developing niche technology in collaboration with DRDO.

The Government has increased the allocation on innovation in defence through iDEX from Rs 115 crore during FY 2023-24 to Rs 518 crore in the current fiscal year, which will boost start-ups/MSMEs/innovators in developing Def-Tech solutions and invite young ignited minds.

Defence Pension Budget increased to Rs 1.41 lakh crore

Total budgetary allocation on account of defence pensions is Rs 1,41,205 crore which is 2.17% higher than the allocation made during 2023-24. It will be incurred on monthly pension to approx. 32 lakh pensioners through System for Pension Administration (Raksha) or SPARSH and through other pension disbursing authorities.

Raksha Mantri Shri Rajnath Singh has termed the full year Budget for FY 2024-25 as excellent and outstanding, which will help in moving towards a prosperous and self-reliant 'Viksit Bharat'. In a post on X, he stated that inspired by Prime Minister Shri Narendra Modi's vision of inclusive and fast-paced development, the budget will accelerate the country's economic transformation. It will go a long way in making India a \$five trillion economy by 2027, he added.

Congratulations to Finance Minister Smt. @nsitharaman for presenting an excellent and outstanding full year Budget for FY 2024-25 which will help in moving towards making a prosperous and self-reliant 'Viksit Bharat'. Inspired by PM Shri @narendramodi vision of Inclusive and...

— Rajnath Singh (@rajnathsingh) July 23, 2024

On the MoD allocation, Shri Rajnath Singh exuded confidence that the capital outlay of Rs 1,72,000 crore will further strengthen the capabilities of the Armed Forces. He also hoped that the earmarking of Rs 1,05,518.43 crore for domestic capital procurement will provide further impetus to the 'Aatmanibharta' in defence.

As far as the allocation to Ministry of Defence is concerned, I thank the Finance Minister for giving the highest allocation to the tune of Rs 6,21,940.85 Crore, which is 12.9 % of total Budget of GoI for FY 2024-25.

The capital outlay of Rs 1,72,000 Crore will further...

— Rajnath Singh (@rajnathsingh) July 23, 2024

<https://pib.gov.in/PressReleasePage.aspx?PRID=2035748>

नवभारत टाइम्स

Tue, 23 July 2024

भारत, चीन और पाकिस्तान, सेना और हथियारों के लिए खोल रहे खजाना, जानें कौन सा देश कर रहा कितना खर्च

प्रधानमंत्री नरेंद्र मोदी के तीसरे कार्यकाल का पहला केंद्रीय बजट मंगलवार को पेश हुआ। इसमें रक्षा बजट सिर्फ 4.8 फीसदी बढ़ा है। भारत का कुल रक्षा बजट 6.2 लाख करोड़ रुपये (74 बिलियन डॉलर) हो गया है। यह फरवरी के अंतरिम बजट के ही समान है। पाकिस्तान और चीन के बढ़ते खतरों को देखते हुए भारत को मजबूत रक्षा बजट की जरूरत पड़ती है। वित्तीय वर्ष 2024-25 के कुल बजट का यह 12.9 फीसदी है। पाकिस्तान की तुलना में यह बहुत ज्यादा है। आइए जानें चीन और पाकिस्तान का रक्षा बजट भारत के मुकाबले कितना है।

इसी साल जून में पाकिस्तान की शहबाज शरीफ सरकार ने बजट पेश किया था। पाकिस्तान के वित्त मंत्री मोहम्मद औरंगजेब ने देश के रक्षा बजट में 17.5 फीसदी के बढ़ोतरी की घोषणा की थी। देश के भू-राजनीतिक स्थिति का हवाला देते हुए बजट को 6.15 बिलियन डॉलर कर दिया गया था। भारत के बजट की बात करें तो वह पाकिस्तान के बजट से 10 गुना से भी ज्यादा है। पाकिस्तान का बजट पारदर्शिता से जुड़ी चिंताओं को बढ़ाते है। पाकिस्तान की सरकार अधिक जानकारी दिए बिना केवल समग्र आंकड़े का उल्लेख करती है।

भारत से ज्यादा है चीन का रक्षा बजट

चीन के बजट की बात करें तो यह भारत से काफी बड़ा है। हालांकि इसका कारण यह है कि चीन ने अपने आसपास के ज्यादातर देशों के साथ सीमा विवाद कर दुश्मन बना रखे हैं। वहीं चीन लगातार दुनिया भर में अमेरिका का मुकाबला करने के लिए अपनी सेना का विस्तार कर रहा है। मार्च में चीन के बजट से जुड़ी रिपोर्ट सामने आई थी। जिसमें कहा गया था कि 14वें नेशनल पीपुल्स कांग्रेस में चीन ने 2024 के लिए अपने रक्षा बजट की घोषणा की है और दिलचस्प तरीके से इसका सैन्य खर्च पीपुल्स लिबरेशन आर्मी को प्राथमिकता देता है।

सेना पर कितना खर्च करता है चीन?

रिपोर्ट के मुताबिक चीन ने इस साल रक्षा बजट 7.2 फीसदी बढ़ाया है। चीनी मुद्रा में यह 1.66554 ट्रिलियन है जो 231.4 बिलियन डॉलर बनते हैं। भारत के रक्षा बजट की तुलना में यह तीन गुना ज्यादा है। वही चीन ने शिक्षा को लेकर 22.9 बिलियन डॉलर आवंटित किए थे। चीन ने मार्च में जीडीपी में 5 फीसदी की भविष्यवाणी की थी। हालांकि एक्सपर्ट्स का कहना है कि चीनी सेना को एक दशक पहले डबल डिजिट में बजट आवंटित होता था, जो कि अब नहीं हो रहा है।

<https://navbharattimes.indiatimes.com/world/pakistan/india-defence-budget-increase-now-74-million-dollar-comparison-with-china-and-pakistan/articleshow/111966121.cms>

Navy Chief Dinesh K Tripathi to visit Mumbai following severe fire damage to INS Brahmaputra

Indian Navy Chief Admiral Dinesh K Tripathi is scheduled to visit Mumbai today to review the situation after warship INS Brahmaputra got severely damaged in a fire incident.

A fire broke out in the INS Brahmaputra, a multi-role frigate, on the evening of July 21, while she was undergoing refit. Despite all efforts, the ship could not be brought to the upright position. The ship continued to list further alongside her berth and is presently resting on one side.

"In the fire incident onboard the frigate INS Brahmaputra, the warship experienced severe listing to one side (port side). Despite all efforts, the ship could not be brought to an upright position. The ship continued to list further alongside her berth and is presently resting on one side.

All personnel have been accounted for except one junior sailor, for whom the search is in progress," the Indian Navy said. "An inquiry has been ordered by the Indian Navy to investigate the accident.

A fire had broken out onboard the Indian Naval Ship Brahmaputra, a multi-role Frigate, on the evening of July 21 while she was undergoing refit. The fire was brought under control by the ship's crew with the assistance of firefighters from Naval Dockyard, Mumbai {ND (Mbi)} and other ships in the harbour, by the morning of July 22.

Further, follow-on actions, including sanitization checks for assessment of residual risk of fire, were carried out," they added. Admiral Tripathi had briefed Defence Minister Rajnath Singh about the damage caused by the accident yesterday evening.

Union Defence Minister Rajnath Singh has also directed Navy Chief Chied Dinesh K. Tripathi to take appropriate action in the incident. "Chief of the Naval Staff, Admiral Dinesh K Tripathi, has apprised RM Shri @rajnathsinghof of the fire breakout onboard Indian Naval Ship Brahmaputra and the damages caused by the incident. RM Shri @rajnathsingh has directed the Navy Chief to take appropriate action," the Office of the Raksha Mantri posted on X.

<https://economictimes.indiatimes.com/news/defence/navy-chief-dinesh-k-tripathi-to-visit-mumbai-following-severe-fire-damage-to-ins-brahmaputra/articleshow/111944559.cms>

Union Budget 2024: India unveils 10 billion rupee venture capital fund for space sector

India will set up a 10-billion-rupee (\$119 million) venture capital fund to expand its space sector, Finance Minister Nirmala Sitharaman said on Tuesday, as the country sets its sights on a larger share of the global space market.

This was his first visit to the Jammu region after taking charge as the 30th chief of the Indian Army on June 30 and it assumes significance in view of the ongoing Amarnath Yatra and massive anti-terror operations underway, especially in the hilly districts.

The Army chief reached Jammu in the morning and flew to the border district of Poonch to review the security situation and operational preparedness along the LoC, the officials said, adding he was accompanied by General Officer Commanding-in-chief, Northern Command, Lt Gen Suchindra Kumar and General Officer Commanding (GOC) of the Jammu-based White Knight Corps Lt Gen Navin Sachdeva. Gen Dwivedi also chaired a high-level meeting of Army and police officers on his return from Poonch at the Army headquarters in Nagrota.

Director General of J&K Police R R Swain, Additional Director General of Police, Law and Order, Vijay Kumar and ADGP, Jammu zone, Anand Jain attended the meeting. Earlier this year, Prime Minister Narendra Modi's government allowed 100% foreign direct investment in the manufacture of satellite systems without official approval and eased the rules for launch vehicles. "With our continued emphasis on expanding the space economy by five times in the next 10 years, a venture capital fund of 1,000 crore (10 billion rupees) will be set up," Sitharaman said in her budget speech in parliament.

India has privatised space launches and is aiming for a five-fold increase in its share of the global launch market, which some expect to be worth \$47.3 billion by 2032. India currently accounts for about 2% of the space economy.

Private space firms welcomed the setting up of the fund, saying it would catalyse more investment into the sector. "The announcement of a ₹1,000 crore VC fund is a step forward, addressing the funding challenges faced by these nascent ventures in this capital-intensive domain," A.K. Bhatt, director general of the Indian Space Association, said in a statement.

<https://economictimes.indiatimes.com/news/science/union-budget-2024-india-unveils-10-billion-rupee-venture-capital-fund-for-space-sector/articleshow/111956191.cms>

Tue, 23 July 2024

Mysterious Overturning of INS Brahmaputra: An Incident Amidst a String of Naval Accidents

In a perplexing and unfortunate turn of events, the Indian Navy's INS Brahmaputra warship, which was docked at the Mumbai Dockyard for refitting, overturned under mysterious circumstances. The incident, which began with a fire breaking out on Sunday, has led to significant damage to the vessel and a sailor reported missing.

On Sunday evening, a fire broke out aboard the INS Brahmaputra, a multi-role frigate, while it was undergoing refit at the Naval Dockyard in Mumbai. According to Navy spokesperson Commander Vivek Madhwal, the fire was brought under control by Monday morning with the assistance of firefighters stationed at the dockyard and other warships present at the port. However, the damage assessment revealed substantial harm caused by the fire.

The situation worsened on Monday afternoon when the Brahmaputra suddenly overturned towards the port. Despite concerted efforts, the warship could not be righted. While all sailors on board were safely evacuated, one sailor remains unaccounted for, and the search for the missing personnel continues.

The INS Brahmaputra, approximately 125 meters long and weighing about 4,000 tons, was built by the Garden Reach Shipbuilders and Engineers in Kolkata and commissioned into the Indian Navy in 2000. It is equipped with a range of weapons, including surface-to-surface missiles, surface-to-air missiles, medium-range guns, anti-submarine rockets, radars, sonars, and electronic warfare systems. The ship also has the capability to deploy a helicopter and has been involved in numerous long-distance missions and rescue operations, including Operation Sukoon in 2006, which evacuated Indian nationals from Lebanon during the Israel-Hezbollah conflict.

Investigation Ordered

The Indian Navy has ordered an investigation into the latest incident involving INS Brahmaputra. The inquiry aims to uncover the cause of the fire and the subsequent capsizing of the warship. Given the extent of the damage, it appears unlikely that the vessel can be salvaged.

The INS Brahmaputra incident is a stark reminder of the challenges and risks faced by the Indian Navy. Over the past decade, the navy has experienced several high-profile accidents that have raised concerns about safety protocols and the operational readiness of its fleet.

Previous Incidents

This incident is not an isolated one; the Indian Navy has faced a series of accidents involving its vessels over the years.

In 2016, a similar incident occurred when INS Betwa, another frigate of the same class, capsized while undocking at the same naval dockyard. That accident resulted in the tragic loss of two sailors

and injuries to 14 others. INS Betwa had previously run aground and collided with an unidentified object in 2014, adding to the string of mishaps.

In 2011, the frigate INS Vindhyagiri sank after a collision with a merchant vessel, MV Nordlake, while entering the Mumbai dockyard. The collision resulted in a fire that caused the ship to capsize. Similarly, in 2013, a fire broke out on India's only aircraft carrier at the time, INS Viraat, off the coast of Mumbai.

String of Incidents related to frigates, nuclear submarines and other naval ships

The year 2014 was particularly challenging for the Indian Navy, marked by multiple incidents. The tank-landing ship INS Airavat ran aground in Visakhapatnam, causing severe damage to its propellers. Later that year, a fire onboard the Russian-made submarine INS Sindhuratna led to the resignation of the then-Indian Navy chief, Admiral DK Joshi, who took moral responsibility for the string of accidents under his command.

In 2014, another Russian-made submarine, INS Sindhurakshak, exploded and sank while docked in Mumbai, resulting in the loss of 18 crew members. This was one of the worst maritime disasters in India's recent history.

Based on the information available in the public domain, in 2017, India's first indigenously developed nuclear-powered ballistic submarine, INS Arihant, was rendered inoperative after an aft hatch was left open, causing seawater to flood the propulsion area. The submarine was out of operation for 10 months and had to undergo extensive repairs. The incident underscored the critical importance of adhering to stringent safety protocols, especially for strategic assets like nuclear submarines.

It has been reported previously, the INS Chakra, a nuclear submarine leased from Russia, also suffered damage to its sonar domes while entering the Visakhapatnam harbour in 2017. Although the INS Chakra's primary role is training and escorting, the damage highlighted vulnerabilities in the operational deployment of India's naval assets.

The repeated incidents involving naval vessels, from frigates to nuclear submarines, point to a need for robust safety measures and thorough investigations to prevent future mishaps. The Indian Navy's operational capabilities are crucial, not only for national security but also for maintaining its role as a first responder in the Indian Ocean Region and contributing to international maritime security.

In conclusion, the overturning of INS Brahmaputra adds to a troubling list of naval accidents that have plagued the Indian Navy in recent years. The incident calls for immediate and comprehensive investigations to identify and address the root causes. Strengthening safety protocols and ensuring rigorous adherence to operational procedures will be vital in safeguarding the lives of sailors and the integrity of India's naval fleet. As the search continues for the missing sailor and the investigation progresses, the Indian Navy must take decisive steps to enhance its safety culture and operational resilience.

<https://www.financialexpress.com/business/defence-mysterious-overturning-of-ins-brahmaputra-an-incident-amidst-a-string-of-naval-accidents-3562939/>

Turkey’s “Weapons Block” On India: Docs Show Ankara Not Willing To Do Any Defense Business With India

The news about Turkey’s reluctance to export defense equipment to India created a diplomatic furor as both countries denied such a policy. However, the EurAsian Times got access to the meeting minutes where Mustafa Murat Şeker talks about how the Turkish Foreign Affairs Minister does not approve of exporting any defense products to India.

It is another fact that India has never put in any request for any military equipment from Turkey.

The sale of Turkish defense articles abroad requires prior approval from the Turkish military, the SSB, and the Foreign Ministry. Şeker is the deputy chairman of the Presidency of the Defense Industry (SSB) and spoke during a debate at the Foreign Affairs Committee on July 10, 2024.

“India, for example, is one of the world’s top five arms importers, a massive market, importing close to \$100 billion. However, due to our political circumstances and our friendship with Pakistan, our Ministry of Foreign Affairs does not give us positive feedback on exporting any products to India, and consequently, we do not grant any permits to our companies in this regard,” he said according to the minutes of the meeting in possession of the EurAsian Times.

Indian media ‘Times Now’ claimed doing a Fact Check and quoted Turkish Ambassador Firat Sunel who seconded the information. However, it appears that ‘Times Now’ failed to do an in-depth investigation to unravel the truth. The document clearly shows an unofficial policy in place within the Turkish dispensation against defense exports to India.

In response to the claims, Randhir Jaiswal, the official spokesperson of the MEA, said: “As far as my knowledge is concerned and information is concerned, that information is not good. So I will refer you to please take that question to the Turkish Embassy who can for short give you an answer because it is a post which generated in Turkey. To my understanding, to the best of my knowledge, it is disinformation at best.”

Turkey’s defense relationship with Pakistan has seen a sharp upward trajectory following the failed coup attempt in 2016.

Pakistani Air Vice Marshal Ghulam Abbas Ghumman confirmed how the Pakistan Air Force provided fighter pilots to Turkey following the 2016 coup d’état attempt. Turkey has officially denied that Pakistani pilots manned their fighter jets after their Turkish counterparts were purged following the failed coup d’état attempt, which President Recep Tayyip Erdoğan blames on being orchestrated by the Turkish Air Force.

Following the purges, Turkey’s air force disbanded several units and incarcerated a number of personnel, resulting in serious pilot shortages. This closeness resulted in Pakistan inducting Turkish drones into its inventory to complement its Chinese UAVs. In early 2022, the PAF received its first Bayraktar TB-2 UAVs, and as of April 2022, the PAF had deployed them at Murid Airbase.

The PAF is said to have received at least 20 Bayraktar TB-2s, with a larger number still on order.

On August 21, Turkish Aerospace Industries and Pakistan's National Engineering and Science Commission signed a Memorandum of Understanding to jointly produce Anka military drones and their components.

In such a scenario, Turkey has never been an option for India to import defense equipment.

“As far as I understand, there is no ‘blanket ban’. There are issues where reciprocity has yet to be practiced by both sides. In general, they follow a subject-by-subject merit system. Indian exports to Turkey have reached \$10 billion, including exports to Turkey's expanding defense industry. As long as Turkey and India do not have a regular mechanism in place, such issues will remain there,” Professor Omair Anas, Assistant Professor at Ankara Yıldırım Beyazıt Üniversitesi told the EurAsian Times.

Professor Anas says that articles listed as “defense” may not be worth more than 5-10\$ million in the entire export list from India to Turkey. However, heavy machines, steel, aluminum, and nuclear reactors remain among the top items.

Despite Turkey's unwritten policy of refraining from exporting defense equipment to India, New Delhi is unaffected. In April, India's Hindustan Shipyard Limited (HSL) terminated all agreements with Turkish firms to construct the fleet of five support ships for the Indian Navy and decided to go ahead with the construction on its own.

The project, estimated to cost between US \$1.5 billion and \$2 billion, initially envisaged the transfer of technology from Anadolu Shipyard, part of the Turkish TAIS consortium, with which HSL signed an agreement for technical collaboration in 2020.

<https://www.eurasiantimes.com/turkeys-weapons-block-on-india-docs-show/>



Tue, 23 July 2024

India To Modify Su-30 MKI Into “5th-Gen” Fighters Sans Stealth; Plans A Whopping \$7.5B Modernization Drive

The ambitious plan, estimated at around Rs 63,000 crore (\$7.5 billion), aims to significantly enhance the capabilities of Russian-origin Su-30 MKI aircraft, making them much more lethal for modern air combat.

The upgrade initiative will include integrating advanced technologies such as enhanced radars, avionics systems, longer-range weapons, and multi-sensor fusion capabilities while excluding engine enhancements.

The Times of India report said that the extensive modernization efforts will initially be applied to 84 fighter jets, ensuring their operational viability for the next 30 years.

This development follows the Defence Acquisition Council (DAC), the highest decision-making body within the Defence Ministry, granting Acceptance of Necessity (AoN) for the modernization of the Indian Air Force's (IAF) Su-30MKIs by Hindustan Aeronautics Limited (HAL) on November 30, 2023.

The upgrade is crucial as the IAF is currently operating at just 30 fighter squadrons, significantly below the authorized strength of 42, which is necessary to adequately deter threats from both China and Pakistan.

This shortfall has heightened the urgency to enhance the capabilities of existing fleets, particularly the Su-30MKI, which forms the backbone of the IAF's combat fleet.

According to reports, the ongoing phased retirement of the MiG-21 Bisons has already necessitated an increased operational load on the Su-30MKIs to cover the gaps left by decommissioned aircraft. This increased usage has heightened the wear and tear on these jets.

The IAF currently operates 259 Sukhoi jets, most of which have been license-produced by Hindustan Aeronautics Limited (HAL) at a cost of over \$12 billion. To maintain fleet strength, an additional 12 new Sukhois are being ordered to replace those lost in crashes over the years.

The comprehensive upgrade, to be executed by HAL, will span approximately 15 years. After receiving the CCS sanction, development work, and flight testing are projected to take seven years, followed by a progressive upgrade and induction of jets in batches.

Nearly A 5th-Gen Warplane – Expert

Rahul Manohar Yelwe, a Senior Research Fellow at the Center for Security Studies, told EurAsian Times that the new upgrade will encompass state-of-the-art avionics, sensors, weapon integration, electronic warfare capabilities, network-centric warfare capabilities, and enhanced data fusion technologies.

Yelwe added that the ongoing upgrade initiative will equip Sukhois with the Indigenous 'Virupaksha' advanced electronically scanned array (AESA) radars. These radars will significantly boost the detection range by "1.5 to 1.7 times" over the current Russian-made radars.

The upgraded 'Super' Sukhois are expected to be close to fifth-generation fighter capabilities, with the exception of stealth features.

According to the report, these advanced Sukhois will incorporate manned-unmanned teaming capabilities, allowing them to operate in concert with autonomous drones using AI and data links to enhance mission effectiveness.

Yelwe highlighted that the Su-30's two-seat configuration makes it well-suited for incorporating manned-unmanned teaming capabilities. However, he said that no one has demonstrated this technology in practice yet, and it will likely take many years before it can be successfully implemented.

Su-30MKI Upgrade Plan Sans Engine Enhancement

The Indian Air Force (IAF) has opted not to include an upgrade to the Su-30MKI's engines as part of its extensive modernization plan, despite persistent proposals from Moscow to integrate the advanced AL-41F-S1 engine.

For instance, in February 2017, Alexander Artyukhov, then CEO of the Russian United Engine Corporation, suggested that the Indian version of the Su-30MKI could benefit from the AL-41F turbofan engines designed for 4++ generation aircraft.

The upgraded engine is an improved variant of the AL-41F-1S engine, designed to enhance the performance of the Su-30MKI fighter jets.

The AL-41F-S1 engine offers significant advancements over the current AL-31FP engine used in the Su-30MKI. It provides a 16% boost in maximum thrust, reaching 14,500 kgf (kilogram-force), and doubles the engine's service life to 4,000 hours, maintaining the same weight and dimensions.

Additionally, the new engine enhances electrical power generation capabilities, facilitating the integration of more advanced radar and electronic warfare systems.

This, according to the EurAsian Times, could extend the Su-30's detection range for both aerial and ground targets, a feature that would be of significant interest to the IAF.

However, the decision to exclude the engine upgrade might stem from ongoing integration trials of the AL-41F-S1 engine. Currently, the Su-30SM2 variants delivered to Russian forces are equipped with the AL-31FP engines, and the new engine will only begin to be delivered with the Su-30SM model fighters starting in 2025.

Rahul Manohar Yelwe said that upgrading the Su-30MKI with a new engine would require extensive testing. He also questioned Russia's ability to supply these engines, given its ongoing involvement in the Ukraine war and the heavy sanctions imposed by Western countries.

Although the Indian Air Force is not currently planning an engine upgrade for the Su-30MKI, Yelwe examined the potential ramifications if such a decision were made.

He noted that the Tejas light combat aircraft (LCA Mk-1A) program is already experiencing delays due to issues with the supply of F404 engines from GE Aerospace.

Yelwe stated that should the IAF decide to proceed with an engine upgrade for the Su-30MKI, challenges could arise if Russia, already burdened by its ongoing conflict with Ukraine, fails to deliver the engines on schedule.

This scenario could lead to a situation in which a key portion of the IAF's fighter fleet spends more time on the ground rather than in the air, thereby affecting overall operational readiness.

Yelwe further noted that replacing the engines would impose a significant financial burden on the Indian Air Force. He cited the example of the Indian Air Force's Jaguar fighter fleet, which was initially set to receive upgraded Honeywell F-125IN engines for enhanced performance.

However, in 2019, the Indian Air Force decided to abandon this plan. The upgrade involved fitting 80 Jaguar ground-attack fighters with 280 new Honeywell-built F-125IN turbofan engines. The decision to cancel the upgrade was driven by the high cost of approximately \$2.4 billion, which was deemed prohibitively expensive.

Yelwe further pointed out that most of the existing Su-30 engines are license-manufactured in India, which suggests that many of the engine's components, aside from the core, might have been indigenously produced by now.

This local production likely facilitates easier serviceability and maintenance of the engines, streamlining upkeep and reducing reliance on external suppliers.

He also explained that the planned upgrades of Su-30s will likely be applied to a little more than half of the fleet, excluding aircraft that have already surpassed 60-70% of their service lives. This approach aims to maximize the benefits of the upgrades while effectively managing costs.

In a similar line, Vijinder K Thakur, a veteran IAF pilot with expertise in the Russian and Indian defense sectors, previously highlighted that the IAF's choice to proceed without the engine upgrade could be driven by a desire to manage costs and the emphasis on beyond-visual-range (BVR) combat.

In this context, supermaneuverability—enhanced by the new engine—may not be deemed as critical as other aspects of the aircraft's combat capabilities.

Yelwe pointed out that while India is not replacing the engine, it might opt for the Gallium Nitride (GaN)-based AESA radar, which has very low power consumption and helps double the jet's detection distance.

<https://www.eurasiantimes.com/indian-defense-ministry-finalizes-iaf/>

Science & Technology News



Tue, 23 July 2024

Budget 2024: Centre allocates ₹1000 cr venture fund to boost space economy 'five-fold in next decade'

Union finance minister Nirmala Sitharaman on Tuesday announced the creation of a ₹1,000 crore venture capital fund in the Budget 2024 aimed at expanding the space economy “fivefold over the next decade”. This move follows the government's 2020 decision to open the space sector to private companies, which has led to a significant increase in space startups, now exceeding 200.

India has set ambitious goals, including establishing the 'Bharatiya Antariksha Station' by 2035 and sending the first Indian to the Moon by 2040. The new venture capital fund is expected to stimulate private sector involvement in space activities, supporting startups and established firms in advancing innovative space technologies.

Additionally, the creation of 12 industrial parks across India will provide a significant boost to the space and satellite manufacturing industry, addressing longstanding calls for dedicated space parks.

Private companies react

Several stakeholders, including the Indian Space Association (ISpA) and leaders from the Indian National Space Promotion and Authorization Center (IN-SPACe) and Pixxel Space, have welcomed the Budget 2024-25 provisions, noting they will significantly enhance the sector's growth and development.

News agency PTI reported IN-SPACe Chairperson Pawan Goenka as saying that introducing a ₹1,000 crore dedicated venture fund will greatly benefit new entrepreneurs and non-government entities (NGEs) in the space sector. Goenka expressed enthusiasm for supporting the expansion of the space economy and fostering an environment conducive to the growth of NGEs.

Awais Ahmed, CEO of Bengaluru-based startup Pixxel Space, highlighted that the venture capital fund will offer essential financial support to innovative startups and companies, helping them scale their technologies and contribute to India's space goals.

According to news agency PTI, in May, Indian Space Research Organisation (ISRO) chairman S Somanath said that the Indian space industry presents a significant opportunity for the private sector, marking it as a new area for growth and development.

He mentioned that the union government envisions the space sector expanding to a \$9 to \$10 billion industry within the next 5 to 10 years, up from its current value of \$2 billion.

Chandrayaan 3 and Aditya L1 missions

In 2023, India achieved remarkable milestones with the successful soft landing of Chandrayaan-3 on the Moon's South Pole and the launch of Aditya-L1, the country's first solar mission. These accomplishments solidified India's position in the global space economy and energised the country's private space sector.

India was the first nation to land the Chandrayaan-3 spacecraft on the Moon's south pole. Named "Chandrayaan-3," meaning "Mooncraft" in Sanskrit, this mission successfully touched down near the less-explored lunar south pole, following the unsuccessful Chandrayaan-2 mission in 2019.

The Aditya-L1 mission is designed to explore the Sun's upper atmosphere, specifically the chromosphere and corona. Its goals include studying heating mechanisms, ionised plasma physics, coronal mass ejections, and solar flares.

Important ISRO's upcoming space missions

Gaganyaan 1 Human Spaceflight: The initial test flight of the Gaganyaan spacecraft, which is designed to carry three astronauts and includes capabilities for rendezvous and docking.

2024 NISAR Earth Observation: A collaborative project with NASA to launch a dual-frequency synthetic aperture radar satellite for remote sensing. This mission is notable for being the first satellite to use dual-band radar imaging.

Chandrayaan-4 Lunar Exploration: The fourth mission in the Chandrayaan series, aimed at lunar exploration. It is a sample-return mission featuring multiple modules to support various stages of the mission. Catch every big hit, every wicket with Cricket, a one stop destination for Live Scores, Match Stats, Infographics & much more.

<https://www.hindustantimes.com/india-news/budget-2024-centre-allocates-1000-cr-venture-fund-to-boost-space-economy-five-fold-in-next-decade-101721744255259.html>

NASA's Cassini spacecraft uncovered deep mysteries of Saturn's moon Titan, before its final plunge

US space agency NASA's Cassini-Huygens spacecraft launched in October 1997, may have died seven years ago after it was crushed and vaporised as it plunged into the atmosphere of Saturn, it continues to surprise space enthusiasts. The spacecraft reportedly generated reams of data that are still being analysed.

Reportedly, using Cassini's radar data, scientists from Cornell University have discovered some new information about the liquid ocean on Titan which is Saturn's largest moon. Titan is said to be composed of hydrocarbons – organic chemicals consisting of carbon and hydrogen. The astronomers have reportedly located calm seas of methane with a slow tidal current. The latest analysis also lays the groundwork for future investigation into the ocean moons of our solar systems.

The team of researchers have been able to examine the composition and the roughness of the sea in Titan which is located near its north pole. Cassini data used for the new findings have been collected using bistatic radar which required the spacecraft sending a radio beam at Titan which was later reflected towards Earth.

“According to Valerio Poggiali, the main difference is that the bistatic information is a more complete dataset and is sensitive to both the composition of the reflecting surface and to its roughness. Poggiali is a team member and a Cornell Center for Astrophysics and Planetary Science (CCAPS) researcher.

What is Cassini-Huygens mission?

Cassini-Huygens was a space-research mission initiated by NASA, the European Space Agency (ESA), and the Italian Space Agency to study the planet Saturn and its system, its natural satellites and rings. Termed the flagship-class robotic spacecraft, it comprised NASA's Cassini space probe and ESA's Huygens lander. Reportedly, Cassini is the fourth space probe to survey Saturn, and the first to enter its orbit where it stayed between 2004 and 2017. The spacecraft was named after two astronomers Giovanni Cassini and Christiaan Huygens.

Cassini embarked on a seven-year journey to Saturn in 1997. After it reached in 2004, the orbiter along with its European Huygens lander changed the way we perceive Saturn, its fascinating rings, and multiple moons. In 2005, Huygens landed on Saturn's largest moon Titan. Along with the observations from Cassini, the mission found methane clouds, lakes and canyons brimming with hydrocarbons. Besides it also relayed some closer images of Saturn's moons like Prometheus, Mimas, and Enceladus.

After finishing nearly 20 years of operation, the spacecraft ran out of fuel making it difficult to navigate. In its final moments, the spacecraft became an atmospheric probe returning scientific data from Saturn until its demise. Reportedly, the Cassini-Huygens mission has produced around 2,500

scientific papers. On 15 September 2017, the mission came to an end after Cassini was disposed by a controlled fall into Saturn's atmosphere. Moments later it disintegrated and vanished.

<https://indianexpress.com/article/technology/science/nasa-cassini-huygens-spacecraft-saturn-moon-titan-9470546/>

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