

समाचार पत्रों से चयित अंश Newspapers Clippings

दैनिक सामयिक अभिज्ञता सेवा

A Daily Current Awareness Service



रक्षा विज्ञान पुस्तकालय
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Goa hosts India's Largest Defexpo Till-date

The 9th edition of Defexpo India, a biennial exhibition on Land, Naval and Internal Homeland Security Systems is being organised by Defence Exhibition Organisation of Department of Defence Production, Ministry of Defence from 28-31 March 2016 at Naqueri Quitol, Quepem Taluka, South Goa, Goa.

The defexpo was inaugurated by Defence Minister Manohar Parrikar.

India's defence prowess:

India is among a handful of countries in the world with indigenous capabilities in the defence fields such as multi-level strategic deterrence, ballistic missile defence, nuclear powered submarines, main battle tank, stealth destroyers, aircraft carriers and 4th generation fighter aircraft.

With the changes in government policies on defence acquisition and Make in India campaign, considerable impetus is being given to indigenisation in the defence sector.

Defexpo:

The exhibition would be showcasing India's capabilities in Land, Naval and Security Systems as well as its emergence as an attractive destination for investment in Defence Sector.

The event provides a platform for forging alliances and joint ventures in the defence industry. The event also provides an excellent opportunity to the Indian Defence Public Sector Undertakings (DPSUs), Private Sector and other defence related industries to demonstrate their capability to design, develop and deliver a wide range of military and civil products and services.

Spotlight on DRDO as spirit of Make In India is brought alive:

The display of state-of-the-art military systems and technologies by Defence Research & Development Organisation (DRDO) will narrate the saga of self-reliance and national pride with "Make in India" spirit in Defence Expo 2016.

This year the design theme of DRDO Pavilion is "Rise of Futurism". DRDO Futurism emphasises its vision to make India prosperous by establishing world class science and technology base and provide our Defence Services decisive edge by equipping them with internationally competitive systems and solutions.

DRDO's participation in this event is marked with the live demo of star products for first the time at Defexpo which includes Airborne Early Warning & Control System (AEW&C), Light Combat Aircraft Tejas, Arjun MBT MK II & I, Wheeled Armoured Platform (WHAP), AKASH Air Defence System, Pinaka the Multi Barrel Rocket Launcher System, Radars, BLT T-72, Bridging System Sarvatra, Modular Bridge and Mountain Foot Bridge etc., besides, static display of other attractive outdoor exhibits such as Quick Deployable Mobile Communication Terminal; Aslesha, Bharani and Coastal Surveillance Radars (CSR); MRSAM and Nirbhay launcher; Pinaka launcher & Rocket Mk I & Mk II; Advanced Torpedo Defence System (ATDS), Remotely Operated Vehicle Daksh, etc.

The indoor models and exhibits covers nearly the entire gamut of R&D from aeronautics, armaments and combat engineering, missiles, electronics and communication systems, materials, naval systems, life sciences, micro-electronic devices and computational systems.

Some indoor exhibits includes: Model of Akash and Brahmos missiles; Aslesha, Bharani and SWATHI the Weapon Locating Radar, IR Guided Missile Tester, Laser Guided Bomb Kit Tester,

Hand-held Stand-off Explosive Detector, Short Range Laser Dazzler, Advanced Towed Artillery Gun System (ATAGS), Nakshatra the Aerostat System, Combat Free Fall System, Bio-toilet model, Computerised Pilot Selection System (CPSS) model, Multimode Hand Grenade, Family of small Arms, Sonars and Torpedoes, Night Vision and Microwave Devices, Bullet Proof Jacket, Robotics and Unmanned Systems, Telemedicine, Ready to Eat Food Technologies etc.

Focusing on "Make in India" and "Self-Reliance", the DRDO participation will provide a platform for collaboration with industry and academia. DRDO has amply demonstrated capability to design, develop and realise highly complex multidisciplinary weapon platforms for Army, Navy and Air force.

These systems are among the most extensively evaluated systems in harsh environmental conditions, meeting stringent quality requirements of our services.

With the aim of 'Make in India', DRDO's is participating in this event for fruitful collaboration with various industry and research institute towards indigenous development of defence systems and platforms.

How big is Defexpo:

As a clear indicator of India's growing prominence and stature internationally; this year's exhibition is the largest Defexpo held till to date.

In all, over 1000 companies, both foreign and Indian, are taking part in the exhibition this year, which is over one and a half times in number of participants in Defexpo 2014.

Remarkably, with a total of 510 companies, participation by Indian companies has doubled since 2014 which saw a participation by 256 Companies.

A total number of 490 foreign companies are participating this year against 368 in Defexpo 2014.

Around 950 delegations against 511 in 2014 are expected to visit the exhibition this year providing great synergy in business to business (B2B) activities during the short span of 4 days.

The exhibition will thus provide an excellent platform to enhance growth in the sector in the coming years. 204 official delegations from 44 countries and around 750 non official business delegations are attending the show.

The net area sold during this edition is 40725 square meters against 27,515 Square Meters in 2014. The gross area of exhibition has increased over three folds to 150,000 square meters against 45,000 Square Meters in 2014.

Participating countries:

47 countries from different continents will be taking part in the exhibition against 30 countries which participated in the last edition of Defexpo.

These are Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Egypt, Finland, France, Germany, Hong Kong, Hungary, India, Israel, Italy, Japan, Lithuania, Malaysia, Netherlands, New Zealand, Nigeria, Norway, Panama, Poland, Portugal, Republic of Korea, Romania, Russia, Serbia, Singapore, Slovak Republic, South Africa, Spain, Sudan, Sweden, Switzerland, Taiwan, Turkey, UK, Ukraine, United Arab Emirates and United States of America.

Seminars at the Defexpo:

On the side-lines of the exhibition, seminars will provide a platform to showcase developments and opportunities in the defence sector.

The topics of Seminars being conducted on 29 and 30 March are advances in shipbuilding technology, Make in India for defence sector, India - Korea Defence Cooperation, Modernisation Programme of Indian Army and Challenges and opportunities of Defence Offset.

Goa as host for Defexpo:

The strong tourism and hotel industry of Goa allows the defence expo to expand to the scale as it has done this year.

In turn, the exhibition will also provide an enhanced income to the local economy in terms of hotel bookings, taxi services and visits to tourist spots.

Care is being taken to preserve the ecology of the site.

How can people visit the Defexpo: The event will be open to public on 31 March 2016 and by prior registration on other days. People who wish to visit the site on other days may do so by registering on the website www.defexpoindia.in.

Deccan Herald
29 Mar, 2016

First squadron of Tejas LCA to be raised in a year, says Parrikar

Quitol (Goa): The first squadron of the indigenous Tejas Light Combat Aircraft would be raised within a year, Defence Minister Manohar Parrikar said on Monday.

"The first squadron of Tejas is to be raised either late this year or early next year. The production capacity at the HAL would also be doubled to produce 16 aircraft in a year," Parrikar said here on the sidelines of the Def Expo here.

Last year, IAF said it was ready to take about 120 Tejas in the present configuration with some improvements in the radar, missile, refuelling and electronic warfare system.

"We will induct them in the present shape in large number and not insisting on the Mark-II version," IAF chief Air Chief Marshal Arup Raha stated.

Hindustan Aeronautics Limited and Aeronautical Development Agency prepared a road map on the shortcomings that would be addressed in a time-bound manner.

The first set of 4-6 LCA is now expected to be ready by 2016-end to raise the first Tejas squadron.

The aircraft's strike abilities, however, came under question when a laser-guided bomb it fired during the Iron Fist exercise didn't hit the target. But IAF officials said it was the fault of the bomb kit and not the aircraft.

IAF officials mentioned that Tejas was superior to China-made JF-17 aircraft, which will be used by the Pakistani Air Force.

IAF has the government's sanction to raise 42 fighter squadrons by 2027. But on paper, it has 33 squads, almost 10 squadrons of which are outdated MiGs that are to be phased out.

Mail Today
29 Mar, 2016

PAWAN HANS AND HAL SET TO COLLABORATE

Pawan Hans Ltd (PHL) and Hindustan Aeronautics Ltd (HAL) are collaborating to set up MRO business for defence and civil helicopter industry. An MoU was signed on March 16 at India Aviation 2016 for setting up of Helicopter MRO facility for both defence and civil helicopters at Rohini Heliport in Delhi. The facility is expected to be operational by June 2016.

The Pioneer
29 Mar, 2016

INDIA WILLING TO EXPORT MISSILES: PARRIKAR

Panaji: India is willing to export Tejas fighter jets, Akash missile system and even the Brahmos missile, Defence Minister Manohar Parrikar said on Monday, but added that it will happen only after the Indian Air Force's requirements are met.

The Economic Times
29 Mar, 2016

DEFENCE EXPO 2016 - New DPP Released, Key Chapter Missing

New Policy Chapter specifying 'Strategic Partnership' model to be finalised later; minister says detailed policy would be available shortly

After a process that lasted over a year and involved at least two high-powered committees, the defence ministry released its new defence procurement policy (DPP) but with the main annexures and a key chapter, touted as 'a game changer', missing.

While the new policy focuses on promoting Indian-designed and developed products for procurement, the ministry is yet to arrive at a consensus on the 'Strategic Partnership' (SP) model that would involve selecting private sector partners for key manufacturing projects valued at over 10,000 crore. While defence minister Manohar Parrikar announced that the new DPP has been released at the inauguration of the defence expo in Goa, the document shared by the ministry doesn't have all the main annexures that specify the process of procurement, standard documents as well as key timelines that are vital for vendors as well as the services to understand the new process. The minister said that the detailed policy -applicable from April 1 -would be available shortly and the detailed chapter specifying the SP model would be finalised at a later stage, in what is likely to add to the massive delay that the new policy has already suffered.

Responding to an ET query, Parrikar said that his ministry would finalise the SP model within the next three months after which it would go to the council of ministers for approval, but refused to share timelines for the actual implementation of the model.

As first reported by ET, the SP model has faced stiff resistance not only from the industry -which sees it as restrictive -but also from within the defence ministry with various departments such as the army, defence, finance and navy raising objections on several points.

The strongest point has been raised by the finance department that fears that selecting a particular company would be against the policy of competition and could lead to pricing problems. Sources have told ET that the SP chapter, though it has been mentioned in the preamble of the new DPP, would take at least six months before forward movement. The SP model also requires cabinet approval as well as special exception from the Competition Act.

Several major military procurement projects, including a mega contract for new submarines under the P 75 I line and new helicopters for the three services, have been pending for more than a year as the SP model was being finalised by the government. Responding to a query from ET, Parrikar said that the SP model once finalised would crunch timelines and accelerate the projects.

In a relief to companies participating in the ongoing tenders, the DPP 2016 makes it clear that projects for which tenders have already been issued will continue procurement under the older routes and the new policy would be applicable to fresh cases only. "All cases where RFPs have already been issued under earlier versions of DPP would continue to be processed under such earlier versions," it reads.

As reported, the new policy is heavy on industry involvement -more interaction, entry from feasibility stage with a preamble that lays emphasis on MSMEs. The policy as 'Make in India' as the focal point has new categories for procurement to prioritise locally developed equipment. The industry will even be 'involved at the feasibility stage itself' for major weapon buys and services would share details such as preliminary service quality requirements and envisaged quantities at the earliest with the private sector.

The Hindu
29 Mar, 2016

Defence policy to give a push to 'Make in India'

Defence Minister Manohar Parrikar unveils policy document

The Defence Ministry on Monday unveiled the new Defence Procurement Policy, intended primarily to improve indigenous procurement, but left out the most significant reform it had been promising.

The DPP-2016, made public to coincide with the latest edition of DefExpo in Goa, was expected to herald a new era in the way India's private sector participates in defence procurement, but that is not to be.

Speaking at the inauguration of DefExpo, an exhibition of land and naval systems, Defence Minister Manohar Parrikar said the new policy would give top priority to speedy procurement, focus on indigenous design and development and lay emphasis on Make in India.

The expo, being held in Goa for the first time, has the participation of 1,055 companies from 47 countries and 224 delegations from 48 countries.

The Minister said the policy had taken care of some of the issues raised by foreign companies and in another two or three months, the Ministry would take care of a few more issues that were pending. The new DPP can push the agenda of Make in India in a big way, he said.

While the FDI limit remains 49 per cent through the automatic route, a higher percentage can be considered on special cases, he said. The DPP recognises the role of small and medium enterprises in the sector, and a further boost will be given to it.

Pointing out that self-reliance is "a major corner-stone on which the military capability of any nation must rest," the DPP says it is of "utmost importance that the concept of 'Make in India' remains the focal point of the defence acquisition policy/procedure."

New category

Under the new DPP, the government has introduced a newly incorporated procurement class called “Buy (Indian-IDDM)”, where IDDM stands for Indigenous Designed Developed and Manufactured. This would be the first preference in all acquisitions starting April, when the DPP will go into effect. The category refers to the procurement from an Indian vendor of either products that have been indigenously designed, developed and manufactured with a minimum of 40 per cent indigenous content or products having 60 per cent of it on a cost basis but not designed and developed indigenously. The policy has also significantly liberalised the offset liability for foreign vendors, which makes it compulsory for companies to invest, or source, at least 30 per cent of the contract value in India.

While offset was compulsory for all contracts more than Rs. 300 crore earlier, the minimum contract value has now been increased to Rs. 2,000 crore. For that expert groups had drawn up a recommendation on nominating ‘strategic partners’ from among private companies for major defence projects. However, the DPP has omitted the seventh chapter titled ‘Strategic Partners and Partnerships’, which would have details of the government strategy to give preferential treatment to major private sector players in significantly large projects.

रक्षा खरीद से “दलालों” की छुट्टी

पणजी, (भाषा) : रक्षा मंत्री मनोहर पर्रिकर ने आज बहुप्रतीक्षित ‘रक्षा खरीद प्रक्रिया’ जारी की और कहा कि इससे सेनाओं के लिए साजो-सामान की खरीद प्रक्रिया में पारदर्शिता सुनिश्चित होगी, काम तेजी से हो सकेगा तथा इससे सरकार के मेक इन इंडिया अभियान को बल मिलेगा तथा आयात पर निर्भरता कम होगी। पर्रिकर ने यहां से 50 किलोमीटर दूर बेटुल-नाक्यूरी गांवा में चार दिन की रक्षा प्रदर्शनी का उद्घाटन करते हुए कहा कि रक्षा खरीद प्रक्रिया (डीपीपी) से मेक इन इंडिया के एजेंडा को आगे बढ़ाया जा सकेगा और साथ ही इससे भारत के रक्षा उद्योग नेटवर्क के लक्ष्य को हासिल करने में मदद मिलेगी। उन्होंने कहा कि नई डीपीपी से

अधिक पारदर्शिता आएगी और मंजूरीयों में तेजी लाई जा सकेगी। डीपीपी को अभी रक्षा मंत्रालय की वेबसाइट पर आनलाइन डाला



गया और 15 दिन में इसकी मुद्रित प्रतियां उपलब्ध करा दी जाएंगी। पर्रिकर ने कहा कि विदेशी कंपनियों द्वारा पूर्व में जताई गई चिंताओं को इस नीति के जरिये अगले तीन से चार महीने में दूर किया जा सकेगा।

उन्होंने कहा कि नई नीति में एक नई भारतीय डिजाइन, विकसित तथा विनिर्मित (आईडीडीएम) श्रेणी पेश की गई है जिससे स्थानीय इकाइयों को फायदा होगा। मंत्री ने इस बात का उल्लेख किया कि रक्षा क्षेत्र में

स्वतः मंजूर मार्ग से प्रत्यक्ष विदेशी निवेश की सीमा को बढ़ाकर 49 प्रतिशत किया गया है।”

रक्षा मंत्री पर्रिकर ने कहा कि रक्षा निर्यात मंजूरीयां आनलाइन दी जा रही हैं। उन्होंने कहा कि नीति में स्टार्ट अप इंडिया पहल को भी शामिल किया जाएगा। उन्होंने कहा कि प्रौद्योगिकी में हर साल बदलाव आ रहा है और भारत में इसका इस्तेमाल अपने रक्षा उत्पादन में करने की क्षमता है।

उन्होंने कहा कि हमें उम्मीद है कि नई नीति से दुनिया भारत में आ रहे प्रौद्योगिकी बदलाव का फायदा ले पाएगी। इस मौके पर रेल मंत्री सुरेश प्रभु, आयुष मंत्री श्रीपद नाइक, रक्षा राज्यमंत्री राव इंद्रजीत सिंह तथा गोवा के मुख्यमंत्री लक्ष्मीकान्त

पर्सकर भी मौजूद थे। रक्षा राज्यमंत्री ने कहा कि नई डीपीपी से भारत की दूसरे देशों पर निर्भरता कम होगी और हम रक्षा उपकरणों की खरीद देश में ही कर सकेंगे। इस बीच, डेफएक्सपो इंडिया का नौवां द्विवार्षिक संस्करण गोवा में शुरू हो गया है। इसका आयोजन रक्षा मंत्रालय कर रहा है।

डेफएक्सपो में 47 देशों की एक हजार से अधिक कंपनियां भाग ले रही हैं। पर्रिकर ने इससे पहले कहा था कि नई ब्लैकलिस्टिंग नीति (काली सूची में डालने की नीति) अगले महीने अलग से जारी की जाएगी। उन्होंने स्पष्ट किया कि जो पहले से ब्लैकलिस्ट हैं उन्हें कोई रियायत नहीं दी जाएगी और रिश्वत देने वालों को सजा मिलेगी।

A policy environment for defence

On Monday, the Defence Procurement Procedure of 2016 (DPP-2016) was finally released, except for a still-disputed chapter on choosing “strategic partners” from the private sector, which would be granted monopolies for manufacturing complex weapons platforms like ships, aircraft and tanks. These monopolies would be identical to those that defence public sector undertakings (DPSUs) have long enjoyed. Clearly, now, a private sector monopoly is superior to a public sector one.

This ill-conceived notion of private sector “strategic partners” originates from the Dhirendra Singh Committee, which the National Democratic Alliance (NDA) government constituted in 2014 to dovetail Prime Minister Narendra Modi’s ‘Make in India’ slogan into a new DPP. The Dhirendra Singh Committee, consisting of defence ministry mastodons, past and present, chose not to throw open the doors to competition, opting instead for governmental discretion, ignoring the lessons of the spectrum and coal allocation fiascos where market forces were abandoned in favour of the government’s discretionary largesse. In the self-procreating manner of government committees, this led to another committee – designated a Task Force, under former Defence Research & Development Organisation (DRDO) chief, VK Aatre – to specify the criteria for selecting private sector companies as “strategic partners” in six technology areas: aircraft/helicopters, warships/submarines, armoured vehicles, missiles, command & control systems, and critical materials. While the Aatre Task Force recommendations remain nominally classified, this newspaper has already reported that it divided the technology areas into two groups. Each of the seven technology areas in Group 1 – aircraft; helicopters; aero engines; submarines; warships; guns and artillery; and armoured vehicles – would have one designated strategic partner. Meanwhile, two strategic partners would be chosen for each of the three technology segments in Group 2 – metallic material and alloys; non-metallic materials; and ammunition, including smart munitions.

All this effort would not be going into selecting “strategic partners” for designing or developing high-tech weaponry for India. These would be mere production agencies that manufactured equipment to blueprints bought under the ‘Buy & Make’ category of procurement. Earlier, the ministry would have nominated a DPSU to build the product under licence; now a private sector “strategic partner” will build it.

In parallel, the design and development of defence equipment in India would take place in the ‘Make’ category, which would see open competition between private and public sector companies, culminating in the selection of two “development agencies” (DAs). Under DPP-2016, the defence ministry will subsidise 90 per cent of the DA’s development costs, and assure the DA of the lion’s share of the production order. It is unclear whether companies participating in ‘Make’ development projects can simultaneously be chosen as “strategic partners” for manufacturing equipment in ‘Buy & Make’ projects. However, the Aatre Task Force mandates, inexplicably, that a company can be chosen as a strategic partner in no more than one technology area. Predictably, this is being strongly contested by private corporations like Larsen & Toubro and the Tata Group, which have built multi-disciplinary capabilities. They say their capability to build a warship should not be a disqualification in building a tank.

Meanwhile, it remains unclear why the excellent option of selecting private sector companies as Raksha Utpadan Ratnas (RuRs) continues to gather dust. This option, which flowed out of the Vijay Kelkar Committee report in the mid-2000s, requires the defence ministry to select private sector companies as RuRs, based on their financial, technological and infrastructural strengths. These RuRs, which would have the same status as DPSUs, would be eligible to compete for defence ministry contracts to design, develop and manufacture complex weapons systems for the military.

The RuR option allowed the ministry adequate assurance of the technological competence and financial strength of defence company aspirants, while also introducing competition into defence contracting. These fully vetted Indian companies could be relied upon to support products through their service lives, providing maintenance, spares, overhaul and upgrade, which add up over decades to 4-10 times the cost of acquisition.

It remains unclear why the defence ministry is bypassing the free market, and opting for governmental judgment. True, all governments tightly control defence industries, since these are national strategic assets. Yet, every defence economist agrees that market forces enhance efficiency and lower costs. Successive Indian governments, however, have remained woolly-headed about their role vis-à-vis defence industry.

A defence ministry's first role is to keep defence industrial policy ahead of evolving trends in the global defence industry. Mr Modi's 'Make in India' policy, which aims at creating large numbers of low-to-medium-skill defence production jobs, is out of sync with global trends. Paradigm changes under way in manufacturing technology are already seeing low-wage assembly lines being replaced by robotic manufacture, in which computerised machines churn out products faster, cheaper and more precisely than low-wage labour. Germany, a technology hub for robotic manufacturing, refers to this as Industry 4.0. The impact of this is being felt in America, which is experiencing a resurgence of manufacture, but without job growth. As the icing on the cake for defence corporations, robotic manufacture and 3-D printing are giving managers major advantages in dealing with labour unions. The foundational logic of 'Make in India' is already sinking.

The defence ministry, therefore, must focus on creating white-collar jobs through a 'Create in India' policy; in which Indian entities do systems engineering, rather than mere systems integration, in which largely foreign components, sub-systems and systems are assembled in India into what remains essentially a foreign weapons platform. For example, in the Futuristic Infantry Combat Vehicle (FICV) project that is now under way, the defence ministry has defined roles so loosely that Indian vendors can "front" for global giants like, say, General Dynamics or BAE Systems, with whom technology partnerships exist. An "Indian" consortium can adopt an existing FICV, engineering it at the periphery to conform to Indian requirements. However, this would remain a foreign platform on Indian soil, no different from the Russian T-series tanks that were designed for colder climes and different operational doctrines.

Instead of wasting policy mind space on monopolistic "strategic partnership" models that are directed towards blue-collar jobs whose future is uncertain, the defence ministry should focus on creating white-collar, high value-add 'Create in India' jobs. A key element of this is to provide the private sector with incentives and subsidies for research and development, and access to low cost capital that is available to overseas defence companies. This would raise technology levels, generate higher salaries, and create truly Indian platforms that can be supported through their service lives without large additional expenditures for each level of overhaul and upgrade.

The Economic Times
29 Mar, 2016

Don't Expect Significant Jump in Defence Budget: Parrikar

Rafale deal should be concluded soon, pricing sole issue: Minister

The defence budget is unlikely to see a significant increase in the next 2-3 years even as the ministry is keen on pushing through some major modernisation plans that will be driven by the Make in India initiative, defence minister Manohar Parrikar said on Monday. The ministry, however, will reduce 'wasteful expenditure' as the budget increase over the next few years is likely

to be within the 'normal range'. It got a raw deal in the annual budget in February, with an actual increase of just around 1% if pensions were discounted.

Responding to an ET query, Parrikar said that the current allocation that stands to around `3.5.lakh crore is adequate for the modernisation plans of the armed forces provided they cut down on wasteful expenses. "We do not see any reason for a quantum jump in the next 2-3 years. The requirement will be slightly more but would be within the normal range provided that we save money on things that are not required," the minister said.

Parrikar, however, expressed hope that the mega Rafale fighter jet deal, estimated to cost over . 6,000 crore, would be finalised ` shortly. "We are very serious about it but I agree that the speed is not enough. We would very soon come to a conclusion on the deal. I am not putting timelines but ultimately money (pricing) is the problem," the minister said.

The minister also rubbished the statement of Vice Chief of Air Staff Air Marshal BS Dhanoa that the air force was not capable of fighting a two-front war with Pakistan and China due to a deficiency of fighter aircraft. "I can tell you that we are well prepared. Preparation is not necessary decided on the (fighter) strength but many other capabilities beyond fighter aircraft," Parrikar said.

Sharing details on the clearances processed by his ministry over the past two years, the minister said that contracts worth . 1.27 crore have been signed and ` another ` . 44,000 crore worth contracts are in the final stage of process. Sharing his target for the end of this year, the minister said that `up to ` . 2.8 lakh crore orders will be finalised' but there could be a 5-10% difference in this figure if a contract or two does not fructify.

The Economic Times
29 Mar, 2016

Private Sector Drives Indian Defence Exports

While the indigenously-developed Arjun tank and light combat aircraft hogged limelight at the Defence Expo here, it is the smaller products and systems mostly from the private sector that are actually revving up Indian military exports.

From simulation systems to train naval navigators to bullet-proof equipment for western forces and specialist trucks for the United Nations, there has been a significant jump in Indian defence exports in the past year. Defence Minister Manohar Parrikar pegged this figure at Rs. 2,000 crore, up from ` . 500-600 crore a year ago. The share of the private sector is as high as 60% and several companies have made exports their focus as domestic defence orders had remained clogged up over the past 4-5 years. The actual jump in exports could be in the range of Rs. 4,000-5,000 crore as several products under the aerospace category have been delisted from defence export laws and no longer require government clearances.

While delicensing measures and speeding up the clearance process have been responsible for this rise in exports, industry leaders say that a positive image of the country at the international level has also helped. "There is now a greater interest from other nations as Indian products are world standard and come at a good value. Exports are still limited but at least there is an interest," said Vinod Dasari, managing director of Ashok Leyland. The company had recently sold ambulances to Kenya, high-powered trucks to the Thai army as well as mobility solutions for the UN Peacekeeping Force.

Smaller players like ARI, which focussed primarily on export of naval simulation systems in the past are now not only leveraging foreign orders but also looking at the Indian market for orders. "Global markets continue to prefer virtual training over live training. We have had orders in the recent past from the US, UK, South Ko rea and Japan," said Shravan Rewari, CEO of ARI

Simulation. In the last three years, the company exported military systems worth Rs. 150 crore and sees this as a major growth area.

Delhi-based bullet-proof equipment manufacturer MKU is the biggest Indian defence exporter and clocked over Rs. 400 crore from exports in the last financial year. Exports account for 80% of the sales of the company and include, among others, orders from Germany for bulletproofing of a new generation frigate.

“We are planning to invest Rs. 500 crore in the next 2-3 years to augment our infrastructure and set up production lines for electro optics. It is important for the soldier to not only be protected but also to remain connected,” said Neeraj Gupta, managing director of MKU.

Deccan Herald
29 Mar, 2016

High time to look into IAF needs

The recent public statement of Air Marshal B S Dhanoa, Vice-Chief of the Indian Air Force, that the IAF is unable to fight two wars simultaneously on two fronts is another reminder to the government that urgent action is needed to strengthen its capacity in terms of aircraft and equipment. The first test of strength of an air force is the number of aircraft ready for operations. The fact that the air marshal made the statement in public shows how concerned the IAF leadership is about the state of its fleet. It has been pressing the government on the matter since 2009. The UPA government told the armed forces in 2009 to be prepared for a simultaneous two-front war with China and Pakistan. This policy directive has since then defined the forces' estimates of requirements, future projections of strength and deployments. The air force finds itself inadequate and unprepared for a campaign in this respect.

The UPA government was, not without reason, blamed for not moving fast on defence acquisitions. Though the NDA government is alive to the situation, it has not materially changed since it came to power. The most urgent need of the IAF now is the Medium Multi-Role Combat Aircraft. Dassault's Rafale aircraft was identified for that role during the UPA tenure. Prime Minister Narendra Modi signed a government-to-government deal with France for purchase of 36 Rafale aircraft. But the deal is yet to be finalised. Even this is far less than the required strength of 126. Air forces strengthen themselves by upgrade and modernisation of aircraft and by acquisition, through purchase or manufacture, of new aircraft. The IAF has been upgrading its mainstay aircraft in the MiG, Mirage and Jaguar series. Along with introduction of new versions of the aircraft, there is also the need to improve fuel capacity, avionics and other features, and to equip them with better weapons and missiles. Some of them need to be made nuclear-capable too. A fifth generation fighter aircraft is to be developed as part of a joint development plan with Russia.

While all these plans are on the table, the actual movement is slow. While the IAF says it needs 44 fighter squadrons, the sanctioned strength is 39.5 and the actual strength is 33 squadrons. Repairs and maintenance also reduce the availability of aircraft for operations. When a war is to be fought, it is not just fighter aircraft which are needed. Adequate numbers of transport aircraft, helicopters and other equipment are also important. These wider needs should also be attended to.

Indian Air Force facing capacity crisis: U.S

A report by an international security and defence expert notes that as of early 2016, the IAF was weaker than the numbers suggested.

Even as India mulls over what fighter aircraft to invest in following Prime Minister Modi's purchase of 36 French Rafale jets in January, a U.S. expert on India's air capabilities has said that the Indian Air Force's (IAF) "falling end strength and problematic force structure, combined with its troubled acquisition and development programs, threaten India's air superiority over its rapidly modernising rivals, China and Pakistan."

In a report to be unveiled on March 28, Ashley Tellis, senior associate at the Carnegie Endowment for International Peace specialising in international security, defence, and Asian strategic issues said that air dominance was vital for India if it were to have deterrence stability in southern Asia and for preserving the strategic balance in the wider Indo-Pacific region.

Mr. Tellis' report, "*Troubles, they come in Battalions: The Manifest Travails of the Indian Air Force*," is a sharp analysis of the current state of the IAF's preparedness to face down threats from potentially troublesome neighbours and it finds the country's aerial fighting force to be inadequate on a number of parameters.

For example, the report notes that as of early 2016, the IAF was weaker than the numbers suggested, and "At nominally 36.5 squadrons, it is well short of its sanctioned strength, and many of its frontline aircraft are obsolete."

On the other hand China and Pakistan have apparently fielded close to 750 advanced air defence or multirole fighters against the IAF's 450-odd equivalents, and by 2025, China may well be in a position to deploy anywhere between 300 and 400 sophisticated air craft against India, in addition to likely 100 to 200 advanced fighters by Pakistan.

With India facing this regional threat matrix Mr. Tellis argues that the IAF's desire for 42-45 squadrons by 2027, which is the equivalent of around 750-800 aircraft, was "compelling," yet the likelihood of reaching this goal was "poor."

The main barriers to embarking on a successful acquisition and modernisation drive, according to the Carnegie report is the fact that the IAF is "stymied by serious constraints on India's defence budget, the impediments imposed by the acquisition process, the meagre achievements of the country's domestic development organisations, the weaknesses of the higher defence management system, and India's inability to reconcile the need for self-sufficiency in defence production with the necessity of maintaining technological superiority over rivals."

Earlier this month *The Hindu* noted (**Embracing America's war machines**) that a rare offer to produce F-16 fighters on Indian soil may be forthcoming from the aircraft's producer, Lockheed Martin, and that there were several risks but many advantages to considering this option as the IAF presses on with its expansion.

If the IAF chose to avoid this approach it may have to continue relying on the Sukhoi and MiG platforms and the expected incoming 36 Rafale aircraft, and then cover any shortfall in capability with the indigenous Tejas.

While this approach may make sense from a cost perspective in that India could save money for a theoretical future purchase of the F-35 instead, a stealth-capable, fifth generation fighter, it may also slow India's progress in building up its force posture in the manner envisioned by the Medium

Multi-Role Combat Aircraft (MMRCA) tender, under which another 90 advanced fighters are still required.

In the context of the Tejas, the Su-30MKI acquisitions and the PAK-FA co-development programmes, however, the Carnegie report is clear in identifying technical shortcomings, and it notes that “All three tiers of the IAF are currently in trouble.”

Specifically the Tejas Mark 1 was handicapped by significant technological deficiencies; the prospects for expanding the MMRCA component to compensate for the Tejas’s shortcomings are unclear; and the IAF’s reluctance to proceed fully with the PAK-FA program could undermine its fifth generation fighter ambitions, the report argues.

Regarding recommendations for the IAF the report urges that it be “cautious about expanding the Tejas acquisition beyond six squadrons and consider enlarging the MMRCA component with the cheapest fourth-generation-plus Western fighter available;” and India should also seek to expand its investments in advanced munitions, combat support aircraft, electronic warfare, physical infrastructure, and pilot proficiency “while being realistic about its domestic capacity to produce sophisticated combat aircraft.”

The Pioneer
29 Mar, 2016

‘Buy cheaper western fighters instead of expanding Tejas’

Asserting that India’s air superiority is threatened by China and Pakistan, a prominent US think tank has come out with the prescription that the country should opt for cheaper fourth-generation-plus Western fighters instead of expanding the indigenous Tejas programme.

The Washington-based Carnegie Endowment for International Peace released on Monday a 60-page report on what it calls “The Manifold Travails of the Indian Air Force” that essentially urges IAF to “revisit some aspects of its current approach (on acquisition of fighter planes).”

“It (IAF) should be cautious about expanding the Tejas acquisition beyond six squadrons and consider enlarging the MMRCA (Medium Multi-Role Combat Aircraft) component with the cheapest fourth-generation-plus Western fighter available,” says the report, authored by Senior Associate Ashley Tellis.

The Carnegie report also calls upon India to “reassess the decision to develop the Advanced Medium Combat Aircraft indigenously and avoid weakening the collaboration with Russia on the PAK-FA programme”.

Claiming that the IAF is “in crisis” despite being a world-class combat arm, the report argues that “falling end strength and problematic force structure, combined with its troubled acquisition and development programs, threaten India’s air superiority over its rapidly modernizing rivals, China and Pakistan”.

“India needs to safeguard its regional air superiority over both Pakistan and China by mustering the requisite end strength and enhancing its extant operational advantages,” the report says, urging New Delhi to expand its investments in advanced munitions, combat support aircraft, electronic warfare, physical infrastructure, and pilot proficiency “while being realistic about its domestic capacity to produce sophisticated combat aircraft”.

The report casts doubts on IAF’s likelihood of reaching its goal of 42-45 squadrons with some 750-800 aircraft by the year 2027, noting that the plan is “stymied by serious constraints on India’s defence budget, the impediments imposed by the acquisition process, the meagre achievements of the country’s domestic development organizations, the weaknesses of the higher defence

management system, and India's inability to reconcile the need for self-sufficiency in defense production with the necessity of maintaining technological superiority over rivals".

The Pioneer
29 Mar, 2016

IAF Pilots Fly 10,000 Km in Open Cockpit

A team of 14 pilots of the Indian Air Force has created a new national record by completing a 10,000-km-long paramotor adventure expedition.

"It is a no mean feat considering that the pilots flew in an open cockpit remaining unprotected from the vagaries of weather and other elements while traversing through varying terrains ranging from mountains, coasts, forests and desert," an Air Force spokesperson said.

The IAF expedition 'Pradakshina' had set out on a 10,000-km-long flight on February 1 from IAF's Kalaikunda air base in West Bengal and came back to a rousing welcome this Saturday.

The feat by the 'Skyriders' team of 14 Air Warriors led by Wg Cdr MPS Solanki surpassed the existing national record of 9,132 km. As the name of the expedition suggests, the team undertook circumnavigation of India along the periphery.

The Tribune
29 Mar, 2016

Ex-Navy man in Pak to get help

The External Affairs Ministry has been asked to extend all possible help to former Navy official Kulbhushan Jadhav, arrested by Pakistan claiming he was a RAW operative, Defence Minister Manohar Parrikar today said.

"We do agree, to the extent I know, that he is an Indian citizen and we have asked for consular access," Parrikar said, adding that he is concerned about Jadhav since he is a veteran. Giving details, the Minister said he had "indicated" to the MEA that Jadhav is an ex-officer and should be given all assistance and support required.

Praising External Affairs Minister Sushma Swaraj, Parrikar said the MEA was doing its best. He said that Swaraj was very active and one can even reach her at night on Twitter and get a reply with action taken reports usually given by (next) morning.

"Sushmaji has been working vigorously to help Indians abroad who are in problem. In this case, since the other country has made allegations, it may take a longer time," he said.

Parrikar refused to comment more on Jadhav saying "other than paying him One Rank One Pension I cannot talk about anything on an ex-officer".

Jadhav, a 1991 commissioned Naval officer, was arrested earlier this month by Pakistan authorities on the charges that he was dealing with Balochistan freedom fighters. The allegation was that the officer, who retired in 2013, was an active RAW agent, a charge denied by India. Sources in the government say Jadhav is a small businessman.

The Tribune
29 Mar, 2016

Chinese military to end all paid public services in 3 yrs

Chinese military has announced that it will halt all paid public services such as hospitals and hotels to people within three years as part of reform to weed out corruption in the 2.3-million-strong world's largest army. The Central Military Commission (CMC) headed by Chinese President Xi

Jinxing has called for an end to all paid services of the People's Liberation Army (PLA) and the People's Armed Police Force, the PLA Daily reported.

As per the announcement the CMC, which is the supreme body of all the PLA forces planned to completely stop paid services within three years.

"Paid services can sometimes encourage corruption and the military should focus on national defence," Gong Fangbin, a professor at the PLA's National Defence University, told state-run Global Times. Paid public services refer to services provided by the military to the public, such as military-run hospitals, hotels or others that do not pose a security risk, Gong said, adding that such services may be managed by social organisations in the future. Services related to social security can be conducted within the military under the system of civil-military integration, official media here reported.

A large number of high-ranking Generals of the PLA have been either punished or being prosecuted in the massive corruption campaign launched by Xi in the last three years.

The Asian Age
29 Mar, 2016

Japan opens radar station close to disputed isles

Japan on Monday switched on a radar station in the East China Sea, giving it a permanent intelligence gathering post close to Taiwan and a group of islands disputed by Japan and China, drawing an angry response from Beijing.

The new Self Defence Force base on the island of Yonaguni is at the western extreme of a string of Japanese islands in the East China Sea, 150 km (90 miles) south of the disputed islands known as the Senkaku islands in Japan and the Diaoyu in China.

China has raised concerns with its neighbors and in the West with its assertive claim to most of the South China Sea where the Philippines, Vietnam, Malaysia, Taiwan and Brunei have overlapping claims. Japan has long been mired in a territorial dispute with China over the East China Sea islands.

"Until yesterday, there was no coastal observation unit west of the main Okinawa island. It was a vacuum we needed to fill," said Daigo Shiomitsu, a Ground Self Defence Force lieutenant colonel who commands the new base on Yonaguni.

"It means we can keep watch on territory surrounding Japan and respond to all situations."

Shiomitsu on Monday attended a ceremony at the base with 160 military personnel and around 50 dignitaries. Construction of some buildings, which feature white walls and traditional Okinawan red-tiled roofs, is still unfinished.

The 30-sq-km (11-sq-mile) island is home to 1,500 people, who mostly raise cattle and grow sugar cane. The Self Defence Force contingent and family members will increase the population by a fifth.

"This radar station is going to irritate China," said Nozomu Yoshitomi, a professor at Nihon University and a retired major general in the Self Defence Force.

In addition to being a listening post, the facility could be used a base for military operations in the region, he added.

China's defense ministry, in a statement sent to Reuters about the radar station, said the international community needed to be on high alert to Japan's military expansion.

"The Diaoyu Islands are China's inherent territory. We are resolutely opposed to any provocative behavior by Japan aimed at Chinese territory," it said.

"The activities of Chinese ships and aircraft in the relevant waters and airspace are completely appropriate and legal."

The listening post fits into a wider military build-up along the island chain, which stretches 1,400 km (870 miles) from the Japanese mainland.

Policy makers last year told Reuters it was part of a strategy to keep China at bay in the Western Pacific as Beijing gains control of the South China Sea.

Toshi Yoshihara, a U.S. Naval War College professor, said Yonaguni sits next to two potential flashpoints in Asia - Taiwan and the Senkaku/Diaoyu Islands.

"A network of overlapping radar sites along the island chain would boost Japan's ability to monitor the East China Sea," he added.

Yonaguni is only around 100 km (62 miles) east of Taiwan, near the edge of a controversial air defense identification zone set up by China in 2013.

Over the next five years, Japan will increase its Self Defence Force in the East China Sea by about a fifth to almost 10,000 personnel, including missile batteries that will help Japan draw a defensive curtain along the island chain.

Chinese ships sailing from their eastern seaboard must pass through this barrier to reach the Western Pacific, access to which Beijing needs both as a supply line to the rest of the world's oceans and for naval power projection----- "Reuters"

Deccan Herald
29 Mar, 2016

Japan loses track of pricey black hole satellite

Tokyo, AFP: Dozens of space scientists are desperately scouring the skies after losing track of a quarter-of-a-billion-dollar Japanese satellite that was sent to study black holes.

The ultra-high-tech "Hitomi" -- or eye -- satellite was supposed to be busy communicating from orbit by now, the Japan Aerospace Exploration Agency (JAXA) said, but no one can say exactly where it is.

The device briefly made contact with ground crews but has since disappeared, with American researchers reporting that it could have broken into several pieces.

"We're taking the situation seriously," Saku Tsuneta, director of the agency's Institute of Space and Astronautical Science, told a news conference on Sunday.

JAXA has around 40 technicians on the case, trying to locate the spacecraft and establish some kind of communication with it, an agency spokesman told AFP on Monday.

"We know approximately where it is," the spokesman added, but scientists were still trying to work out its precise location.

The satellite, developed in collaboration with NASA, the US space agency, and various other groups, was launched on February 17 and was designed to observe X-rays emanating from black holes and galaxy clusters.

Black holes have never been directly observed, but scientists believe they are huge collapsed stars whose enormous gravitational pull is so strong that nothing can escape.

The announcement last month that gravitational waves had been detected for the first time added to evidence of their existence after scientists found the waves had been caused by two enormous black holes colliding.

The lost satellite, which cost 31 billion yen (\$273 million), including the cost of launching it, was supposed to orbit at an altitude of about 580 kilometres (360 miles).

The Japanese rocket carrying the satellite was launched by the country's mainstay H-IIA rocket from the Tanegashima Space Center in southern Japan.

The Hindu
29 Mar, 2016

ISRO set to launch 22 satellites on one rocket

Multiple satellite launch mission will flag ISRO's capability

When the PSLV C34 rocket blasts off from the Satish Dhawan Space Centre at Sriharikota in May this year, it will signal another giant leap for India's space mission. The trusted launch vehicle will inject 22 satellites into orbit, a first in the history of the Indian Space Research Organisation (ISRO).

Apart from the Indian remote sensing satellite, Cartosat 2C, which constitutes the primary payload, the rocket will carry on board four micro-satellites weighing 85 to 130 kg each and 17 nano-satellites weighing 4 to 30 kg.

As many as 18 satellites are being launched for foreign agencies including those from the U.S., Canada, Germany, and Indonesia. Two of the nano-satellites have been developed by the Pune Engineering College and Sathyabama University.

"The PSLV rocket, in its XL version, will be used for the mission," VSSC Director K. Sivan said here on Monday. "The injection of so many satellites into orbit increases the complexity of the mission many fold," he told reporters.

The micro-satellites include the M3MSAT of Comdev, Canada, to be used for collection and study of automatic identification system signals from low earth orbit, the Indonesian satellite LAPAN A3 for earth surveillance and magnetic field monitoring, the German satellite BIROS to be used for remote sensing of high temperature events and SKYSAT Gen2-1 of Skybox, U.S., for earth imaging.

The nano-satellite payload includes three quadpacks of four earth imaging technology demonstrator satellites each of Spaceflight, U.S., and a package of two Canadian satellites designed to measure greenhouse gases in the atmosphere.

In April 2008, ISRO had launched 10 satellites into orbit using the PSLV C9 rocket.

RLV-TD test flight in May

The first test flight of the Reusable Launch Vehicle (RLV) developed by ISRO is also scheduled for May. The technology demonstration version named RLV- TD is undergoing extensive tests at the VSSC complex here. "It will be transported to Bengaluru next week for acoustic tests before being taken to SHAR for the launch in May when atmospheric conditions are most favourable," Dr. Sivan said.

Designed to drive down the cost of placing satellites in orbit, RLV is expected to enhance India's competitive edge in the launch vehicle market. The first trial involves the hypersonic flight experiment during which the RLV resembling a small winged aircraft will be launched up to an altitude of 70 km from atop a solid booster rocket and released. The thermally insulated RLV will re

enter the atmosphere and travel back to earth in a controlled descent, splashing down in the Bay of Bengal.

Preparations are also underway for the launch of the last of the seven satellites constituting the Indian Regional Navigation Satellite System (IRNSS) constellation to be used for navigation. A PSLV rocket is scheduled to launch the satellite in April, Dr. Sivan said.

Deccan Herald
29 Mar, 2016

New solar cell material can recycle light

Scientists have discovered that a group of perovskite-based materials can recycle light, a finding that could lead to large gains in the efficiency of solar cells, reports PTI from London.

The group of synthetic materials known as hybrid lead halide perovskites appear to promise a revolution in the field of solar energy, researchers said.

Perovskite solar cells are cheap and easy to produce, and have become almost as energy-efficient as silicon - the material currently used in most household solar panels.

Solar cells work by absorbing photons from the Sun to create electrical charges, but the process also works in reverse, because when the electrical charges recombine, they can create a photon.

The research shows that perovskite cells have the extra ability to re-absorb these regenerated photons - a process known as "photon recycling".

This creates a concentration effect inside the cell, as if a lens has been used to focus lots of light in a single spot.

"It's a massive demonstration of the quality of this material and opens the door to maximising the efficiency of solar cells," said Felix Deschler from the University of Cambridge.

"The fabrication methods that would be required to exploit this phenomenon are not complicated, and that should boost the efficiency of this technology significantly beyond what we have been able to achieve until now," said Deschler.

The study involved shining a laser on to one part of a 500 nanometre-thick sample of lead-iodide perovskite.

Perovskites emit light when they come into contact with it, so the team was able to measure photon activity inside the sample based on the light it emitted.