



## e-news

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### READER'S RESPONSE

**The editorial team invites your views, suggestions, to the News  
about Members Column and contributions to the e-news.**

### BAE Systems looking at India's commercial airspace, army

British defence and aerospace company BAE Systems has big plans for India, ranging from commercial aerospace to land defence systems. 'We are looking at India keenly. India is an enormous market and is strategically very important for us,' Guy Douglas, communications director of BAE Systems for Middle East, Africa and India, told IANS at the Dubai Airshow here. His comments came as the first two of BAE Systems' Hawk jet trainer aircraft, part of a 66-aircraft deal, left Britain for India. Douglas said that, of the 66 Hawk aircraft, 42 would be made in India at the HAL (Hindustan Aeronautics Limited) facility in Bangalore.

Source: [Earthtimes.org](http://Earthtimes.org)

### Air safety is either 100% or zero: Patel

There has been no aviation incident in the country in the recent past which could have led to a disaster, civil aviation minister Praful Patel said. Referring to the reporting of nearmisses and other "emergencies", he said "there's not a single incident which would have led to disastrous consequences. It's not that deviations don't occur, but it doesn't mean that these deviations necessarily lead to an accident." Patel said: "In aviation, safety is either 100% or zero. There is nothing called 99.9 % safety in aviation."

Source: [Times of India](http://Times of India)

### Hawks land on Indian soil

Two Hawk aircraft were inducted into the Indian Air Force, when they landed at Air Force Station, Bidar. The arrival of the Hawks created excitement and enthusiasm among the spectators and they received rapturous applause. The Advanced Jet Trainer aircraft were escorted by three Suryakirans. Air Marshal G.S. Chaudhary and Air Commodore Ramesh Rai, oversaw the arrival of the aircraft. Air Marshal Chaudhary, Air Officer Commanding-in-Chief, Training Command, received the aircraft documents from Wing Commander Pankaj Jain and Squadron Leader Tarun Hindwan, signifying the official aspect of the Hawk-132 aircraft being inducted into the Indian Air Force.

Source: [The Hindu](http://The Hindu)

### IAF 'work horse' on its way out

Indian Air Force's 'work horse' for more than 30 years, Antonov-32 transport aircraft is on its way out. India on Monday signed a multi-million dollar deal with Russia to develop a new military transport aircraft that will phase out the ageing An-32 fleet. The agreement was signed in the presence of Prime Minister Manmohan Singh and Russian President Vladimir Putin for developing a new aircraft that will be bigger and better in size and utility. The new multi-role transport aircraft, which will be built from the scratch, is expected to be operational in another six years. Under the agreement inked in Moscow, the project will cost \$600 million, half of which would be borne by India. The Russian component will be adjusted as per the rupee-rouble debt arrangement between the two countries. Under this arrangement, India is estimated to owe about a billion dollars to Russia.

Source: [Indian Express](http://Indian Express)

### 20 new civilian airports to be operational in 2008

Impressed by the unprecedented 40% growth in the domestic air traffic during the first nine months of 2007, civil aviation minister Praful Patel said 20 more aviation airports would go operational next year. Nearly 100 airports in the country would be operational in 2008 as against 80 now, he said on Tuesday while addressing the economic editors conference here. Apart from greenfield projects in Bangalore and Hyderabad, several smaller airports such as Durgapur and Asansol are also expected to go operational next year.

Source: [Economic Times](http://Economic Times)

### Manmohan, Putin may discuss tender for fighter aircraft

During Prime Minister Dr Manmohan Singh's visit to Russia, the two countries are expected to sign several pacts for providing an impetus to trade, joint research and development in the science, space, nuclear and military sectors and energy ties. Dr. Singh will meet Russian President Vladimir Putin and their discussions are likely to touch on the upcoming mega tender for fighter aircraft, for which Moscow is one of the six contenders, and issues associated with joint development of the next generation fighter aircraft and a medium range military aircraft. The two sides are



expected to discuss ways of improving bilateral trade and expanding energy cooperation.

Source: *The Hindu*

### **Kabini core engine tested in Russia**

A team from the Bangalore-based Gas Turbine Research Establishment (GTRE) has just returned after taking Kabini - the core of India's indigenous combat aircraft engine endeavour, the much delayed Kaveri engine - for high altitude testing at the Central Institute of Aviation Motors (CIAM) in Moscow. The team headed by the GTRE's Director Mr T. Mohan Rao generated data to allow a study of the characteristics of the Kabini's components. This is the second time that Kabini, which constitutes the crucial hot end section of the Kaveri engine (primarily the engine's high pressure compressor, high pressure turbine and high pressure combustor), has been taken to Moscow. Sources said the GTRE had made many modifications to the Kabini since it was last tested at Moscow. "These modifications and the parts have to be proved in testing before they are transferred on to the Kaveri engine."

Source: *The Hindu*

### **Tough to lure the young to IAF: Major**

Chief of Air Staff Air Chief Marshal Fali H Major admitted that it was a challenge to attract youngsters to join the Indian Air Force (IAF), as increasing career avenues in the private sector continued to lure talents from the

armed forces. He was speaking to reporters after inaugurating the Cardiac Catheterisation Laboratory at the Command Hospital of the Indian Air Force. He added that lucrative job opportunities in the private sector with fat pay packages were attracting youngsters. He hastened to add that it was not an area of concern. On the Advanced Jet Trainers (AJT) Hawk, he said that two aircraft had already arrived at the IAF Flying School at Bidar airbase from the UK. Eight more would follow by January next year.

Source: *Deccan Herald*

### **Cryogenic stage test successful**

In what Dr G Madhavan Nair, chairman, ISRO described as "significant", the Indian Space Research Organisation has achieved a significant milestone with the successful test of the indigenously developed cryogenic stage. "With this the cryogenic stage has been fully qualified on the ground and allows for a fully indigenous GSLV launch (GSLV-D3), sometime in the middle of next year," he said, speaking on phone from Thiruvananthapuram. Till now, the Indian launch vehicle relied on the Russian cryogenic stage. The cryogenic stage will be employed as the upper stage of the GSLV. The test was conducted for its full flight duration of 720 seconds on Thursday at ISRO's liquid propulsion test facility at Mahendragiri, in TN.

Source: *Deccan Herald*

### **ISRO plans reusable launch vehicles**

The Indian Space Research Organisation (ISRO) plans to flight test a Reusable Launch Vehicle Technology Demonstrator in December 2008, according to Dr B.N. Suresh, Director, Vikram Sarabhai Space Centre (VSSC). This is part of an effort to develop reusable launch vehicles that would slash launch costs. Speaking at a symposium on "Space sciences and applications," organised as part of the 73rd annual meeting of the Indian Academy of Sciences here, Dr. Suresh said that worldwide the current cost of access to space worked out to \$20,000 a kg. The hope was that this cost could be brought down to \$200 or \$500 a kg.

Source: *The Hindu*

### **Dish antenna being readied to track Chandrayaan**

As a tall crane lifts a steel plank called "counter-weight", workers standing on the rampart of the "mount" on top of a pedestal building shout instructions on walkie-talkie to the crane operator where to lodge the counter-weight on the mount. On the ground below are the "petals" which will soon be assembled into a massive dish with a diameter of 32 metres on the mount. A petal has already been hoisted on top. There is activity everywhere, with contraptions arriving and several buildings under construction. In a couple of weeks, this dish antenna will be the center piece of the Deep Space Network (DSN) that is fast coming up at Byalalu village, about 40 km from Bangalore.

Source: *The Hindu*

TECHNOLOGY

### **India, to start study on manned Moon mission**

India will soon take the first exploratory steps towards realising its plan to put an Indian on Moon. Indian Space Research Organisation (ISRO) chairman Dr G Madhavan Nair told TOI that by 2008-end, India plans to start feasibility studies on a manned Moon mission in what is sure to put a seemingly ambitious project on a concrete footing. There is no timeline yet because the project is deemed very expensive. "A manned mission will cost thousands of crores, so we have to consider various options," he said. By 2010-2011, Chandrayaan 2 project - which was signed in Moscow between India and Russia- will be a joint plan which will include a lander and a rover to "walk" around the moon's surface and collect samples and data for analysis.

*Source: Times of India*

### **ISRO, Tata Motors to develop India's first hydrogen car**

India's space agency Indian Space Research Organisation (ISRO) is looking at developing the country's first hydrogen powered car in collaboration with leading automobile maker, Tata Motors. Hydrogen powered vehicles are considered to be the cleanest in terms of air pollution as only water vapour is spewed out as exhaust, which in turn could be utilised for relevant purposes. ISRO chairman Dr G Madhavan Nair told that the first prototype of the vehicle would most likely be launched next year. ISRO and Tata Motors have already signed an agreement for the pilot project to assess the feasibility of the hydrogen run car. "The work has already begun," Nair said. The proposed vehicle, planned to be developed using ISRO's rocket technology, will not have any engine as it would be completely electric-driven.

*Source: Indian Express*

### **Astronauts fix solar panel**

Astronauts successfully unfurled a torn solar power wing at the international space station on Saturday after spacewalker Scott Parazynski cut loose a tangled clump of wires and patched everything up. His emergency surgery saved the solar energy panel - and the space station. In the tense build-up to the spacewalk - one of the most difficult and dangerous ever attempted - NASA repeatedly warned that station construction would have to be halted if the wing could not be fixed. The prospect was so grave that NASA felt it had no choice but to put Parazynski practically right up against the swaying power grid, which "was coursing with more than 100 volts of electricity. No other astronaut had ever been so far away from the safe confines of the cabin.

*Source: The Hindu*

### **Picture the moon from Byalalu village**

Preparations for the much-anticipated moon mission, 'Chandrayaan 1' is in full swing. The work on Deep Space Network (DSN), which will play a crucial role in the mission, is on at Byalalu village on the outskirts of Bangalore. The station is all set to get its second antenna soon. With two massive antennae, the DSN will help track the spacecraft during the moon mission. "We have already installed one antenna at Byalalu. The installation process of the other antenna of 32 m is in the final stages," said the Director of public relations, ISRO, Mr S Satish. "The DSN will consist of 18m and 32 m antenna. These high power, state-of-the-art antennae will be steerable. It will be possible to track spacecrafts which travel as far as the Moon," he added.

*Source: Bangalore Mirror*

### **Livewel Aviation to set up MRO facility in Dubai**

India's Livewel Aviation Services will invest \$ 80 million in a 23,960 square metre MRO facility in Dubai. The new facility which would be operational by 2009, would be located at the newly launched Dubai World Central Aviation City, which will be home to the largest maintenance, repair and overhaul (MRO) centre in the world. "The MRO will focus on cabin interior refurbishment, aircraft painting, meeting international aviation certification

standards," said Livewel Group Chairman and Managing Director M F Daver. "The MRO facility will be a modern state of the art two bay wide-bodied aircraft hangar large enough to accommodate the A-380," he said. "India's expertise in the USD 41 billion global MRO market is highly respected worldwide and our agreement with Livewel will bring in the right resources, and personnel to this region," said DWC Aviation City CEO Abdulla Al Qurashi.

*Source: Hindu*

### Dubai firm plans big investment in India

State-owned Dubai Aerospace Enterprise has decided to invest several billion dollars in India as part of its expansion drive. DAE Chief Executive Bob Johnson said in a statement: "India's aviation sector has great promise and is accelerating with significant growth in domestic and international traffic." Mr. Johnson's statement coincided with the opening of the Dubai Air Show 2007. A high-level Indian delegation, 'comprising Civil Aviation Minister Praful Patel and Minister of State for Defence M.M. Pallam Raju, is attending the show. Top military officers, including the Vice-Chief of the Air Staff, Air Marshal B.N. Gokhale, and the Deputy Chief of the Naval Staff, Vice-Admiral Anup Singh, comprise the delegation. Thirteen Indian companies have put up stalls.

Source: *Hindu*

### Hyderabad firm roped in for Gulbarga, Shimoga airports

The State Cabinet has decided to enter into an agreement with Maytas Infra Ltd., a Hyderabad-based private infrastructure development and construction firm, to build and develop airports in Gulbarga and Shimoga on the private public partnership (PPP) model. Briefing presspersons after the Cabinet meeting here, Minister V.S. Acharya said the airport in Gulbarga would be developed on 567 acres of land while the airport in Shimoga would come up on 662 acres of land. Both the projects were expected to fuel the economic growth of Malnad and Hyderabad-Karnataka regions.

Source: *Hindu*

### IAF orders new Forward Air Controllers

In a move that will dramatically improve its operational capabilities by day and night the Indian Air Force (IAF) has placed an

order for a few dozen state-of-the-art long range Forward Air Controllers (FACs). To be installed at the IAF's forward airfields in the Western Sector, the FACs are ground based systems that can accurately pinpoint a target. Consisting primarily of a laser range finder, night sight and a goniometer (an instrument that measures angles) the FAC accurately provides the target's co-ordinates to a fighter aircraft or observation post which can then engage the target. Costing upwards of \$5 million, the FACs will be delivered and installed in phases starting from next June. For the IAF, given the geographical and strategic location of its forward airfields it is paramount not only to accurately identify and fix the 'grid reference' (location) of various targets in relation to a reference point or line, but also aid in an aircraft's safe landing, especially at night.

Source: *Hindu*

### Raytheon, L&T tie up for combat aircraft programme

The US-based- Raytheon Company has signed a memorandum of understanding with L&T for the MMRCA (medium multi role combat aircraft) programme. It represents a step towards establishing a strong working relationship, encouraging pursuit of emerging business opportunities and providing for in-country offset for the MMRCA programme, an L&T release said. Raytheon Company, with a sales turn of over \$20 billion, specializes in defence, homeland security and other government markets throughout the world. With a history spanning 85 years, Raytheon provides modern electronics, mission systems integration and other capabilities in the areas of sensing, effects and command, control, communications and intelligence systems, as well as a broad range of mission support services.

Source: *Business Line*

### Hyderabad to host India Aviation 2008

Hyderabad will have another feather in its cap next year when it will host the first international exhibition on civil aviation sector, 'India Aviation 2008' in October next. Begumpet airport, with all the operations shifted to the new international airport in Shamshabad by mid-March, will

be the venue for the biennial air show to be conducted on the lines of Defence Air Show of Bangalore. The four-day event beginning October 15,2008 would provide a perfect business platform for aviation companies to leverage on the booming Indian aviation sector, Arun Mishra, Joint Secretary, Ministry of Civil Aviation said.

Source: *Hindu*

## New CSIR chief for focus on R&D

In-house research and development (R&D) should get 25 percent of science expenditure to strengthen India's stand in the global innovation map, the newly appointed Director General of Council of Scientific Research (CSIR) Dr Samir Brahmachari said. Dr Brahmachari, who is also the secretary of Department of Scientific and Industrial Research (DSIR)

said that an aggressive agenda needs to be followed to give a fillip to in-house R&D in industry and position India's innovation efforts in the international arena. He was speaking at the inaugural function of the 21st national conference on inhouse R&D in industry organised here by industry lobby FICCI and DSIR.

Source: [Earthtimes.org](http://Earthtimes.org)

## Aviation sector to create 30 lakh jobs, receive Rs 6 lakh crore investments: Patel

Civil aviation minister, Mr Praful Patel, has said that the aviation sector is the future of the Indian economy, as it is poised to create 30 lakh jobs and also receive investments of nearly Rs 6 lakh crore over the next 10 years. Mr Patel was speaking at a function after inaugurating India's first mobile simulator by Jeet Aerospace Limited for training pilots. He said: "There was a growing demand for training 1,500 pilots every year due to the phenomenal growth in the civil aviation sector." Emphasising that aviation was not a luxury sector and that without connectivity there could be no business anywhere, Mr Patel pointed out that with connectivity even countries such as Dubai and Singapore, which had no heritage compared to India could muster several times India's tourist traffic. Patel also said that with major up-gradation programmes lined up in the aviation sector, India would be the fourth country in the world to operate satellite navigation systems.

Source: [domain-B](http://domain-B)

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