

The Indian Express, 1 September 2006

**Russia to deliver Sukhoi warplanes ahead of schedule**

Moscow, September 1: In a move to save costs and speed up delivery of Sukhoi fighter aircraft to Indian Air Force from Russia three-years ahead of schedule, Hindustan Aeronautics Limited (HAL) has scrapped initial plans for full indigenisation of the warplane at its facilities in India, media reports said. An agreement signed recently between Russian arms firm Rosoboronexport and Indian Defence Ministry has changed the timeframe of the completion of USD 3.5 billion contract for the licensed production of 140Su-30MKI fighters by HAL, Kommersant daily said. The original Sukhoi license production deal signed in December 2000, the largest single Indo-Russian defence contract in 40 years, had provision for full indigenisation of the multi-role fighter planes at HAL facilities in India and last of the 140 Su-30MKI was to be delivered in 2017. The amendments in the initial deal provide for the completion of delivery of 140 fighters in 2014 three years ahead of schedule with India declining to shift the whole production cycle to HAL facilities as the cost of the indigenously-produced fighter would have doubled, it said.

The Pioneer, 5 September 2006

**India to make MiG-29 engines with Russian help**

Moscow: Russia will help India make modernised engines for the MiG-29 fighters of the Indian Air Force under a USD 250 million deal. Russia's state-run 'Rosoboronexport' arms exporting corporation has just signed the deal with India under which Hindustan Aeronautics Ltd (HAL) will make 120 RD-33 series 3 jet engines at its Koraput plant for the upgradation of MiG-29 fighters. By January 2007 Moscow-based Chernyshev Machine-building plant will supply 20 RD-33 jet engines with extended life-cycle for trials in India, according to Kommersant daily. The engine designer - St. Petersburg-based Klimovv- is also one of the players in the deal with India. Both of them are part of the RAC MiG corporation. In the first stage HAL will make 120 engines, which would cost less than those directly bought from Russia.

The New Indian Express, 11 September 2006

**IAF opens aerospace information room (PTI)**

Bangalore: The Indian Air Force on Sunday opened an aerospace information room at its training college here as part of its efforts to exploit aerospace as a "weapons platform" and to train its engineers in this field. Aerospace as a weapons platform would throw up new challenges in future wars and real time communication and continuous surveillance of the battlefield would be the decisive factor, Air Marshal B N Gokhale, Air Officer Commanding-in-Chief of the training command, said after inaugurating the facility at a function here. B N Rahugnandanwas, the chairman of the department of aerospace, also present.

The Tribune, 12 September 2006

**British fighters to conduct combat manoeuvres from Indian bases (Vijay Mohan)**

Chandigarh, September 11: For the first time since Independence, British fighter aircraft will operate from Indian airbases for undertaking combat manoeuvres, when the joint air exercise with the Royal Air Force (RAF) commences next month. Air Force sources said

the seven-day exercise would be held at the Gwalior Air Force Station in Madhya Pradesh from October 13. Code-named Indradhanush-2006, this would be the first ever joint air exercise with the RAF, to which the Indian Air Force traces its birth in 1932. The IAF's structure, administration and ideology are largely based on what the RAF infused into the then Royal Indian Air Force. A senior IAF officer said although RAF aircraft have flown to India for aerobatic displays and for participation in aero-shows in the past, fighters have never. Last year, the RAF's famed Red Arrows aerobatic team, flying Hawks, had performed in India.

The Hindu, 20 September 2006

### **HAL to build jet fighter engines (Sandeep Dikshit)**

New Delhi: The public sector Hindustan Aeronautics Limited (HAL) has been granted licence to build Russian-origin jet fighter engines under a major overhaul plan for the Indian Air Force fleet, say industry sources. The \$275-million (over Rs. 1,265 crore) deal is to acquire and license-produce Klimov RD-33 turbofan engines for MiG-29 fighters. Under the agreements, finalised during negotiations with Russia's Rosoboron export sales organisation, the Chernyshev Machine-Building Plant — part of Russia's RSK MiG — will supply 20 RD-33 engines from early 2007 under a \$25-million (Rs. 115 crore) deal. HAL will license-build a further 120 engines at its site in Orissa under a follow-on deal worth some \$250 million. The RD-33 deals will support part of an upgrade plan for India's MiG-29 fleet, in service since 1986. The IAF is experiencing problems in acquiring spares for the aircraft from Russian suppliers, impacting its operational effectiveness.

The Indian Express , 20 September 2006

### **IAF for new anti-ship missiles**

New Delhi: The Air Force will invite bids in two months for new long-range anti-ship missiles that will arm its Jaguar deep penetration maritime strike aircraft. The sea-skimming cruise missiles, that will replace the current Sea Eagle missile inventory, will be of a longer range and guided by more advanced multiple target seekers. We're behind attack on Assam Rifles: PLA NID works on new clothing for soldiers in Siachen, other high altitude posts Gen JJ briefs US Army chief on China border Centre clears defence deals to be signed with Germany. With phased retirement of British Sea Eagle missiles, contenders for the IAF's purchase include Boeing's Harpoon, supplied to Pakistan Navy before, the French AM-39 Exocet and the Russian AS-20 Kayak. The Sea Eagle is in service with the navy's Sea Harriers and Tupolev-142 strategic reconnaissance aircraft.

The Tribune, 20 September 2006

### **IAF plans presidential review**

New Delhi, September 19: At least 27 types of aircraft of the Indian Air Force (IAF) will be on display as the force plans to host President A.P.J. Abdul Kalam, the Supreme Commander of the Indian Armed Forces, for the first ever Presidential Fleet Review to mark its platinum jubilee. The review will be conducted in the first week of March in Chandigarh. The biggest land static display has also been planned for the President. The IAF is looking at this fleet review as a unique honour and is preparing in a big way for it. As part of the plans, President Kalam will stand on a specially erected podium and the

frontline fighters of the IAF including SU-30 MKI, Mirage-2000, MiGs 29, 27, 23, 21 and their ungraded version of Bisons will put up an impressive flying display. By early next year, the IAF will also acquire first of its BAe Hawk advance jet trainers and it will form part of a breathtaking aerobatic to be conducted in tandem with the Sukhoi's.

Hindustan Times, 22 September 2006

### **IAF to probe into midair near-collision**

New Delhi, September 22, 2006: The Indian Air Force (IAF) has begun a probe into midair near miss between two of its combat jets and a commercial airliner on a domestic flight, officials said on Friday. "The aim of the inquiry is to find out exactly what happened and to fix responsibility to ensure that such incidents don't recur," an IAF officer said, speaking on condition of anonymity. The incident, involving two IAF Sukhoi Su-30 fighters and a Jet Airways Boeing-737, occurred on Thursday morning. The Boeing was preparing to land at Rajkot airport in Gujarat while the IAF aircraft were participating in a major aerial exercise. According to an IAF statement, "the incident took place at about 8.30 am and involved flying of an IAF fighter formation in proximity of the civil airliner.

The Hindu, 23 September 2006

### **Induction of new combat aircraft unlikely now (Sandeep Dikshit)**

New Delhi: Despite the dwindling strength of Indian Air Force's (IAF) combat fleet, plans to induct 126 multi-role combat aircraft (MRCA) to replace the retiring MiG fighter series and other aircraft are unlikely to materialise in the near future, according to official sources. The combat strength of IAF fighters is expected to dip to 29 squadrons by the end of the next fiscal. With neither the indigenous fighter Tejas nor the MRCA unlikely to be immediately inducted, the IAF is banking on an accelerated production of Sukhoi-30 MKI and the Jaguar to partially make up the numbers. Sources said this depletion has necessitated the IAF designating the soon-to-be-inducted Hawk advanced jet trainer aircraft in the combat category. It has also decided to increase the number of MiG-21s, after providing them with an upgrade to increase their service life. Recently, Chief of Air Staff S. P. Tyagi had said the IAF required the 126 MRCA "now." However, Ministry sources said even if the Government asked companies to send in their proposals — through a process known as request for proposals (RFP) — today, a final decision would not be taken before at least two to three years. This optimistic timeframe would hold unless there are no complications such as the differing opinions among foreign aircraft manufacturers over the off-set clause.

The Indian Express, 23 September 2006

### **Israel to be tech partner for AWACS (Shiv Aroor)**

New Delhi, September 22: Taking bilateral defence ties a step further, India is set to appoint Israel as the principal technical partner for the indigenous Airborne Warning and Control System (AWACS) programme being developed by DRDO. The move comes even as Israel this month began final integrations for the first of the three Phalcon AWACS aircraft to be delivered to the IAF in 2008 under a \$1.1 billion deal. The Indian Express has learnt that Israel's participation in the indigenous programme will be firmed up by both sides by mid-October, though it will not involve a formal agreement.

Following a Rs 1,800 crore government sanction for the AWACS programme two years back, DRDO is looking abroad — principally to Israel — and has invited bids for eight core technologies for the project. Sources at the Centre for Airborne Systems (CABS), which is developing the AWACS, said that the eight critical systems include signal generators, dual frequency receivers with differential GPS (DGPS) reference base stations and attitude options, dual and single frequency antennas, main antennas and identification friend or foe (IFF) transponders with monopulse antenna simulator.

The New Indian Express, 23 September 2006

### **Infiltration through the porous Indo-Myanmar border on rise: Army**

Moreh-Tamu Border: Indian Army personnel guarding the porous Indo Myanmar border in Moreh town in Manipur say that there is rise in infiltration as there is no fencing, which is a matter of great concern. According to a trade treaty between India and Myanmar, a stretch of 40 kilometres on each side of the border is totally open. No visa and other documents are required to cross the Indo-Myanmar border in this area. So much so it is a free-for-all passage. "There is no fencing here and that is problem number one and that is the reason that it is very difficult to control the inflow of people moving in that is moving in from Myanmar or people going across because as per the trade agreement, people can move freely on either side of the border. So that is the first problem and the next problem is of weapon running and the third problem is drug smuggling. These are the three major problems we are facing," said Col Vikash, Commanding Officer, 24 Assam Rifles.

Hindustan Times , 23 September 2006

### **India, UK to hold joint air exercises in Agra**

Agra, September 23, 2006: The skies above this Taj city will reverberate with the sounds of fighter jets, including Tornados and Jaguars, as India and Britain hold joint air exercises in Agra and at Gwalior from October 13. The Royal Air Force (RAF) will send 100 officers for the joint exercise, codenamed Indradhanush, and 100 Indian Air Force (IAF) officers will join them at Agra. Working together under a common command will benefit the two sides, say officials. The image of the IAF personnel, trained to work in the most inhospitable and trying situations and often with dated defence equipment, is internationally very high. Senior US officials, who were in Agra for a similar exercise last time, had spoken very highly of the training given to the IAF cadre.

The New Indian Express, 25 September 2006

### **IAF daredevils paint J&K sky in tricolour (PTI)**

JAMMU: Waltzing to Mozart's tunes, jets and choppers painted the sky in tri-colour here on Sunday as the Indian Air Force displayed its world famous aerobatics show by Suryakiran, Sarang and Akashganga teams for the first time close to Indo-Pak border. While the IAF station at Satwari was packed for the show, local people took all sorts of vantage positions, including tree tops, to watch the IAF daredevils in action. "It was history in itself as our Suryakiran and Sarang teams with their Kiran Mark-II jets and Advance Light Helicopters danced in the skies for nearly one hour at the Jammu Air Force station," station commander Group Captain J.S.Klare said here. "It is an IAF show of power and of their daredevil fighter pilots, as only a few can do so with their

machines,’’ he said.

The Pioneer, 26 September 2006

### **IAF, RAF to hold joint exercises**

New Delhi: The IAF and Royal Air Force (RAF) will hold a bi-lateral exercise from October 2 to October 13 at the Gwalior and Agra air bases as part of the Indo-UK defence co-operation. The exercise named 'Indradhanush' will see both the Air Forces deploying their frontline fighter jets and RAF Chief of Air Staff Air Chief Marshal Glenn Torpy will also attend the exercise. Giving details of the exercise, an IAF spokesman said here on Monday that this was for the first time in over four decades that the two air forces were deploying frontline fighter jets like the SU-30s, Bison and MIG-27s and flight refueling aircraft of the IAF and Tornado F-3 aircraft along with VC-10 tanker and E3-D Airborne Early Warning Radar Systems (AWACS) aircraft of the RAF. RAF chief Glenn Torpy, who will be visiting India from October 7 to 14, will also attend the exercise where the RAF will field six Tornado fighter jets, one AWACS and one mid-air refueling plane and a crew of 245 crew and personnel form part of the RAF team.

The Pioneer , 27 September 2006

### **Hindon airbase's first: IAF Day parade on Oct 8**

New Delhi: Hindon airbase near Ghaziabad will for the first time host the annual IAF Day parade and thrilling air display on October 8 with more than 85 air craft participating in two-hours long aerobatics. Incidentally, this year’s parade will mark the commencement of the platinum jubilee celebrations of the IAF including the first ever fleet review by President APJ Abdul Kalam at Chandigarh in March next year. The IAF decided to hold its annual parade and air display at Hindon instead of Palam air force station, Delhi following consultations between the IAF top brass and other Government authorities to avoid causing inconvenience to the civil air traffic, Western Air Command chief Air Marshal S.K.Singh said here on Tuesday. This year's celebrations at Hindon will not see any restrictions or closure of airspace, he said. Air Marshal Singh said the decision was taken voluntarily by the IAF in larger national interest as civil air traffic was growing and closing of airspace over Delhi used to cause great difficulties for the passengers and also affected tourism. The Hindon air space would now enable the IAF to showcase its prowess to more than 50,000 people at a much larger and grand scale, he added. Giving details of the air display, the Western Command chief said the newly raised commando force of the IAF named Garuda will also display its capabilities in carrying out operations behind the enemy lines after getting inserted into the zone by helicopters.

The Tribune, 30 September 2006

### **Failure of both engines led to MiG crash (Vijay Mohan)**

Chandigarh, September 29: Failure of both engines in the IAF MiG-29 fighter aircraft led to its crash near Ambala yesterday. This has shaken up the Air Force as the engines powering the MiG-29 are of a proven design and considered to be among the safest and most reliable. While the exact cause of the engine trouble would only be established by the court of inquiry ordered into the accident, several possibilities are being talked about within the force. “The MiG-29’s RD-33 engine was of a totally new design and in terms

of technology, it was radically different from engines installed in the earlier generations of MiG fighters,” Wg Cdr D.P. Sabharwal (retd), who trained on the MiG-29 in Russia, said. “The chance of both engines developing technical fault on a single sortie is perhaps one in a million,” he said. After being in use for about 20 years, this engine is to be replaced by a newer, more advanced version to be produced by Hindustan Aeronautics Limited under license from Russia. Also, the MiG-29 is in for a major upgrade.

Hindustan Times , 30 September 2006

**IAF seeks more jets to fly higher than Pakistan**

New Delhi, September 29, 2006: Concerned by Pakistan's plans to induct more F-16 jets and the rapid depletion of the country's fighter fleet, IAF chief Air Chief Marshal SP Tyagi has written to the government asking for more multi-role aircraft so that his force can maintain its superiority. Tyagi, according to highly placed sources, has written a letter to Defence Minister Pranab Mukherjee, drawing attention to the fact that the number of IAF fighting squadrons is set to hit an all-time low. More jets are needed for at least 36 squadrons to maintain the IAF's battle preparedness, sources said. Tyagi, according to sources, recommended to the government the immediate purchase of at least 40 multi-role fighters. He also called for a speedy decision on the proposal to buy 126 combat jets. Five aircraft, including the F-16 and F-18 of the US and Russia's MiG-29, are in the race for the 126-jet deal. However, sources said the government has shot down most of Tyagi's proposals and indicated that the Defence Ministry wants to work on the early induction of the 126 fighters. According to IAF sources, the number of combat squadrons has fallen to an all-time low due to crashes and phasing out of ageing aircraft like certain variants of the MiG-21. IAF top brass is also concerned at Pakistan's plans to buy up to 44 F-16s from the US.