

Helicopters in India



The ubiquitous Chetak, license-built Alouette III which has served with the Indian Armed Forces for over four decades.

The Burgeoning Market

Between the Defence Services and Para military forces of India, there is a massive requirement of up to one thousand rotorcraft to be fulfilled in the decade ahead, perhaps the largest such market outside the United States.

The largest number of these will be the light utility helicopter (LUH), primarily to meet urgent needs of the Indian Army and the Air Force, as replacement of the ageing HAL-built Chetak (Alouette III) and Chetak (Lama). The global tender

for 197 LUHs was re-issued in 2008 after the earlier RFP was withdrawn following “allegations” made by Bell Helicopters, whose 407 *Shen* had lost out to Eurocopter’s AS550C3 Fenec.

Alongside, the Government directed HAL to begin design and development of an indigenous Light Observation Helicopter (LOH) with strict deadlines to be met. Should the HAL LOH be cleared as a programme, some 187 such helicopters will be ordered.

The next large requirement is for medium-lift helicopters for the IAF, for which 80 Mi-17V5s have already been ordered (see separate item). In late May 2009, the Air Force issued RFPs for 22 attack helicopters and 15 heavy lift helicopters, even as 12 AgustaWestland AW 101s have been ordered for the Air Forces VIP Communication Squadron.

The Indian Navy has a requirement for some 58 ship-borne multi-role helicopters to supplant the present force of Westland Sea King Mk.42A/B/Cs as also similar number of light helicopters as a Chetak replacement. The Coast Guard would also replace its HAL Chetaks perhaps with a common type selected. Meanwhile HAL are serial-producing the Dhruv Advanced Light Helicopter (ALH) with the Army and Air Force expected to eventually induct some 300 of these 5-tonne helicopters.

Indian Air Force

The current helicopter inventory of the Indian Air Force is estimated to number nearly 300 aircraft, the bulk of which are the Mi-8/Mi-17 family with another 80



HAL also produced the Aerospatiale Lama under license as the Cheetah and in turn developed the Lancer light attack helicopter for the Army.



MIL Mi-8 medium helicopters have served with the IAF since 1971 including in the VIP transport role.

Mi-17V5s to supplant the ageing Mi-8s. 75 Chetak and Cheetahs and about 30 Mi-25/35 attack helicopters serve with various units. The IAF retains four heavy lift Mi-26 helicopters which are used sparingly as ‘sky cranes’ for special missions. The latest induction into the IAF is the HAL Dhruv Advanced Light Helicopter, about a score of which are currently in service most demonstrably with the *Sarang* formation aerobatic team. The IAF has indicated a requirement for 65 Light Combat Helicopters from HAL.

The AgustaWestland AW101 three-engined helicopter has been selected as replacement for the Mi-8/Mi-17s for VVIP transportation.

Indian Army

The Indian Army operates more than 200 helicopters, essentially Chetak and Cheetahs which were transferred to it from the IAF in 1986 and supplemented by similar, new-build helicopters from HAL plus a number of unmanned aerial vehicles.

The army has been receiving HAL Dhruv Advanced Light Helicopters with over 40 in service, and about another 100 on order including the WSI version. The army has also the intent to order 114 Light Combat Helicopters from HAL which are currently under development.

Indian Navy

The Navy has 145 helicopters, both operating from shore bases and on board warships including the aircraft carrier INS *Viraat* which embarks a complement

Mi-35 attack helicopter over the Punjab plains.



Mi-17V5s for the IAF

First confirmed by Air Marshal Gautam Nayyar, then AOC-in-C Maintenance Command, the Mi-17V5 medium lift helicopters ordered by the IAF would gradually replace the

50 remaining but increasingly weary Mi-8s serving with the Force since the 1970s. The Mi-8s had a lifespan of 35 years but will continue well past that time till 2016, which is a tribute to the inherent skills and innovation of the IAF’s Base Repair Depots.

The IAF had re-ordered 47 Mi-17s in 1986, supplemented by 40 Mi-17Vs in May 2000 and now by 80 Mi-17V5s,



which “will be very effective in the high altitude areas.”

The first Mi-17 Helicopter Unit was No. 127 which was sequentially followed by three others and then Nos 152 and 153 HUs which were operationally deployed during the Kargil operations in 1999. The new Mi-17V5s will equip six new HUs beginning with No. 154 HU and continuing sequentially.

of Sea Harriers and Kamov Ka-31s, Sea King and Chetak helicopters. The Kamov Ka-31s provide AEW support for the fleet. In the anti-submarine role, the Sea King Mk 42A/B and Kamov Ka-25/28 are used. The MARCOS use Sea King Mk 42Cs.

Indian Coast Guard

At present the air arm of India's Coast Guard has an inventory of 17 Chetak helicopters, 24 Dornier 228 aircraft and 3 ALHs all supplied by HAL. Two Requests for Information (RFIs) have been issued by the Indian Coast Guard's Directorate of Aircraft Acquisition covering planned purchase of another 30 helicopters. The ICG has plans for an eventual fleet of 36 light observation helicopters, 12 rescue helicopters, 36 maritime patrol aircraft and 9 long range surveillance aircraft.

Border Security Force

The Helicopter Wing of the BSF got operational after the receipt of six Mi-17KF medium helicopters, to which are being added 8 HAL Dhruv ALHs. The Mi-17s have been deployed for counter insurgency tasks in eastern India.

Pawan Hans Helicopters

The public sector undertaking, Pawan Hans Ltd. (formerly Helicopter Corporation of India) has a fleet of some 40 helicopters which includes the Dauphin SA-365N, Dauphin AS365N3, Bell 206 L4, Bell 407 and Mi-172s.

These are primarily deployed for support of ONGC offshore operations off the western and southern coasts as also for long term lease and charter with several State Governments including the Lakshadweep Administration, Governments of Punjab, Meghalaya, Arunachal, Sikkim, Tripura and the A&N Islands.

PHHL also operates to transport pilgrims to places of worship in the high Himalaya.

General Aviation

There are around 224 helicopters registered with the DGCA in various categories including the private sector, with commercial operators, for medevac, air taxi, heli-tourism and aerial surveys.

The helicopter types include the Eurocopter EC135 and 145s, Bell 230, 407, 412 and 430s, Agusta AW-109 and 139s apart from Dauphin SA 365s and Sikorsky S.76s.



Westland Sea King Mk.42Bs of the Indian Navy at Mumbai.



Kamov Ka-31 AEW helicopter at Goa.



HAL Dhruv advanced light helicopters at Bangalore.



Pawan Hans operates a handful of Mi-172s.