



Light Combat Helicopter (LCH): Prachanda

Why in News?

Recently, the [Indian Air Force](#) formally **inducted the indigenously developed multi-role Light Combat Helicopter (LCH), Prachanda** which is suitable for operating in high-altitude battlefields.



What is a Light Combat Helicopter?

- **About:**

- The LCH is the **only attack helicopter in the world** which can land and take off at an

altitude of 5,000 meters with a considerable load of weapons and fuel.

- The **helicopter uses radar-absorbing material to lower radar signature** and has a significantly crash-proof structure and landing gear.
 - A pressurised cabin offers protection from Nuclear, Biological and Chemical (NBC) contingencies.
- The **helicopter is equipped with a countermeasure dispensing system** that protects it from enemy radars or infrared seekers of enemy missiles.
- LCH is powered by **two French-origin Shakti engines** manufactured by the HAL.

▪ **Genesis:**

- It was during the **1999 Kargil war that the need was first felt for a homegrown lightweight assault helicopter** that could hold precision strikes in all Indian battlefield scenarios.
 - This meant a **craft that could operate in very hot deserts** and also in very cold high altitudes, in counter-insurgency scenarios to full-scale battle conditions.
- India has been operating sub 3 ton category French-origin legacy helicopters, **Chetak and Cheetah**, made in India by the **Hindustan Aeronautics Limited (HAL)**.
 - These single engine machines were, primarily, utility helicopters. Indian forces also operate the Lancer, an armed version of Cheetah.
- In addition, the Indian Air Force currently operates the Russian origin Mi-17 and its variants Mi-17 IV and Mi-17 V5, with maximum take-off weight of 13 tonnes, which are to be phased out starting 2028.
- The **government sanctioned the LCH project in October 2006** and HAL was tasked to develop it.

▪ **Significance:**

- The LCH has the **capabilities of combat roles such as destruction of enemy air defence**, counter insurgency warfare, combat search and rescue, anti-tank, and counter surface force operations.

Source: IE

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