

**What is Orbital manoeuvre?**

Orbital manoeuvre is the use of propulsion systems to change the orbit of a spacecraft.

What is Stratigraphy?

Stratigraphy is a branch of geology in which rock layers and layering are studied.

Which is the hottest planet of solar system?

Even though Mercury is closer to the Sun, Venus is the hottest planet in our solar system.

Coast Guard's Second Air Squadron

The second air squadron of the Indian Coast Guard has been commissioned. This squadron is equipped with the indigenously designed as well as developed advanced light helicopter (ALH) MK-III.

Where has this squadron been commissioned?

The squadron has been commissioned at the Coast Guard Air Enclave, Nedumbassery, Kochi on the 4th of May 2022. Director-General V S Pathania commissioned the 845 squadron (CG) in Kochi.

Who is leading this squadron?

Commandant Kunal Naik is leading this squadron comprising 35 men and 9 officers.

Why has this squadron been commissioned?

The squadron has been commissioned to improve the country's self-reliance in the area of long-range maritime surveillance and search and rescue operations. This commission is in line with the government's "Atmanirbhar Bharat" plan. So far 12 ALH MK-III helicopters have been inducted into the Indian Coast Guard with the latest four helicopters being positioned in Kochi with the aim of covering the entire coast of Kerala, Karnataka, and Lakshadweep.

What are the features of the ALH MK-III helicopters?

This indigenously developed helicopter features a variety of state-of-the-art sensors that will help increase the country's maritime prowess. The helicopters are fitted with:

- the powerful Shakti engines
- a searchlight that has high intensity
- a full-glass cockpit
- collision-avoidance system
- traffic alerts system
- automatic identification system
- advanced communication systems
- automatic flight control system.

The helicopters are also equipped with modern surveillance radar and electro-optical equipment. This enables the helicopters to undertake long-range maritime reconnaissance and can also help provide long-range search and rescue both during day and night. The helicopters have also been fitted with heavy machine guns. A removable medical intensive care unit (MICU) has also been equipped so as to facilitate any critically ill patients during medical evacuation.