

What are Hang Gliders?

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About Hang Gliders

- A hang glider is a type of aircraft that uses air currents to stay aloft.
- Unlike other aircraft, hang gliders have no engine or propeller.
- Instead, they rely on the wind to keep them in the air.
- How does it work?
 - Since a hang glider is unpowered, it can't take off from low ground. It has to be launched from somewhere high like a hill or mountain.
 - Gravity is the main force on a hang glider. This is the weight of the pilot and the wing.
 - The weight produces the thrust that keeps the aerofoil moving through the air.
 - The aerofoil shape of the wing stops the hang glider from dropping like a stone. It produces lift.

- The aerofoil forces the air flowing over the top of the wing to travel faster, thereby 'stretching' it to produce a low-pressure area.
- Meanwhile, the downward and forward motion of the wing compresses the air flowing under the wing.
- The aerofoil is then drawn up into the area of low pressure, producing lift.
- During the flight, the pilot controls the aircraft by the trapeze, both to change the direction and to vary the speed.
- **Powered Hang Gliders:**
 - A powered hang glider is an aircraft that combines the features of a traditional hang glider with that of a powered aircraft.
 - They typically have a small engine attached to the frame, which allows the pilot to take off and stay in the air without having to rely on thermals or other weather conditions.
 - This can make them a good option for anyone that isn't experienced enough to take advantage of the winds to stay in the air.

DGCA Regulations on Powered Hang Gliders

- No individual is permitted to operate a powered hang glider without prior authorization from a DGCA-approved examiner or instructor.
- The qualified examiner or instructor must have a minimum of 50 hours of experience on powered hang gliders, including at least 10 hours on a dual machine.
- Furthermore, the approved examiner or instructor is responsible for conducting thorough checks and authorizing other individuals for flight.
- Individuals must meet specific criteria before conducting test flights on a powered hang glider. This includes holding a valid Commercial Pilot License (CPL) with at least 25 hours of flying experience on a powered hang glider.
- Alternatively, an individual must possess authorization along with 50 hours of flying experience on a powered hang glider, as stipulated in the revised regulations.
- DGCA has mandated that any transaction involving the sale or transfer of a powered hang glider must be accompanied by a certificate issued by the DGCA. This certificate will only be granted following a thorough background check of prospective buyers conducted by the Ministry of Home Affairs (MHA).
- No owner or operator is allowed to lease, rent, or lend a powered hang glider to any individual or entity.
- The use of any remote sensing equipment, weapons, or photography and video recording devices on a powered hang glider is strictly prohibited without explicit permission from the MHA, unless it is deemed necessary for the safe operation of the aircraft or as specified by the relevant guidelines.
- Security measures approved by the Bureau of Civil Aviation Security (BCAS) shall be adopted at the place of parking as well as at the place of operation before each flight by the owner or operator.

Q1) What is the Directorate General of Civil Aviation (DGCA)?

It is the regulatory body in the field of Civil Aviation, primarily dealing with safety issues. It is responsible for regulation of air transport services to/from/within India and for enforcement of civil air regulations, air safety, and airworthiness standards. The DGCA also coordinates all regulatory functions with the International Civil Aviation

Organisation (ICAO). The headquarters are located in New Delhi with regional offices in various parts of India.

Source: [DGCA issues new guidelines for powered hang gliders for enhanced safety, check details](#)

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