

Flying site Evaluation for Paragliding (hill)

Paragliding is an aero sport in which weather and wind play an important role hence they are important factors to be considered. Paraglider is generally flown from a mountain slope without any obstructions or structures in its flight path which can create air turbulence. The takeoff and landing zones should have reasonably flat and wide open spaces with safe margins for pilot errors. The surrounding terrain should be friendly and easily accessible by road. The minimum height of the hill should be around 250 feet for a smooth transition from ground to air and descent air time and glide range to take control of the flight while heading to the landing zone.

Paragliders are not designed to fly in the rains or rainy season as wind flow is gusty and unpredictable during monsoon. Paraglider are flown in daylight with good visibility, flying in fog or clouds is not advisable.

Involvement of local youth is critical and important for development of the flying site. In fact the initiative should ideally be taken by the local youths for bringing the sport in their area as a hobby and business opportunity.

Choosing the site

Location for flying should be finalised only after studying and observing the wind pattern throughout the year in the region. The ideal wind conditions are from light breeze to maximum wind speed of about 25 to 30 kmph. The pattern of wind flow or wind cycles throughout the day should be predictable. Too much gusts or unpredictable wind conditions are not safe to fly a paraglider. The mountain top should preferably be barren or with enough unobstructed open spaces for takeoff. The shape, slope, size and orientation of the mountain with regards to prevailing wind flow direction should be such that the air is deflected upwards and over the hill without creating too much wind turbulence. An ideal flying site should have a long ridge which can create a good lift band suitable soaring flights.

View, Terrain and Accessibility

Beautiful view and great scenery are the main factors that need to be considered while choosing the site for paragliding. Easy accessibility to the takeoff and landing zone is important not only as a convenience but safety requirement. A tourist destination or a city in close vicinity will always be an advantage.

Test flying

Once the site is found to be suitable and meets the above mentioned requirements; the activity has to be sanctioned by the district authorities for trial flights. A good idea would be to involve and invite an enthusiastic and influential government official when test flights are conducted. Videos and photographs would always be useful. Qualified and experienced pilots will have to be invited for test flights and certifying the site. Experienced pilots will be able to prepare a report which will identify the areas of lift, sink, and turbulence. They will be able to certify if the site is good for beginner level, experienced pilots, tandem flying, cross country flights etc.

No Objection Certificate from local administration and local police

This process becomes easier if the district administration or district tourism department is taken into confidence by making a project report. Their recommendation and push can speed up the process.

The location co-ordinates should be noted and referred to while corresponding for permissions.

First you need to obtain an NOC for use of particular site or location. The location or site may be a private property, public property, forest land, seashore etc.

The district administration has a home department which will generally look into such matters; hence the correspondence has to be addressed to "Home" department in district collector's office. The DC office will refer the case to District police and get their clearance before issuing the NOC for flying activity. For giving the clearance district police will refer the matter to the local police under whose jurisdiction the particular site is located.

AAI clearance

The final and important clearance is from Airport Authority of India. Airspace is managed by AAI with help of ATC. Once NOC's from district authorities are obtained one has to apply to AAI for NOTAM requesting desired radius and height ceiling. Once the NOTAM is published other aircraft pilots get notified about your activities by ATC if they share same airspace during their flight.

Air Defence Clearance

Air defence clearance will be needed from the Indian Air Force to fly at most locations along with clearance from AAI.

Daily permission

For every day flying you need to obtain permission from local ATC over telephone. Local police can also be intimidated by SMS/Whatsapp about the daily flying activities to keep them in loop.

Flying site management during operations

Each popular flying site should have a site manager to look after the safety. He should take responsibility of how many pilots can fly in the air on a given day as per the wind and weather conditions. He should be also monitoring the skill level of the pilots flying on the site during the specific wind window. There should be some means of communication to be in touch with the pilots in the air for safety, preferably via radios.

Notes:

It would be a good idea to consult PAI while scouting for a new flying site. Sites that are verified and certified by PAI Technical Committee will get listed on PAI website.

For tandem operations please refer to PAI guidelines for tandem operators

You can refer to PAI Technical Manual for more information. PAI has formed panels consisting of experience pilots to look into various aspects of paragliding and paramotoring activities. Consult PAI if you need any further assistance.