Paragliding essay examples

Engineering, Aviation

Paragliding as an activity can take many forms, key among which are recreational and competitive (Noel 10). For the former, paragliders take to the air for the sole purpose of personal enjoyment and leisure. The latter case, on the other hand, involves structured routes and systems of rules in which participants try to defeat each other with regard to speed and distance covered.

Design, Structure and Control

In spite of this activity being largely synonymous with simple aircraft devoid of any sophisticated equipment, some modern designs have revolutionized it giving rise to a wide range of possible designs and modes of utility. Nevertheless, the basic blueprint still resembles the original. A paraglider has a distinct wing, technically called a suspension cone, which greatly resembles a parachute, hence the name “ para-” gliding (Currer 12). As noted earlier, the pilot is not contained within a primary chassis once on board the paraglider but is rather supported within the aircraft by a harness. Finally, the craft has some specialized equipment with which the pilot controls it and uses for navigation. These include global positioning system (GPS) units, radios and variometers (Whittall 30; Currer 23).

The GPS units especially come in handy for pilots during competitions. This is essentially because they them keep track of their location and therefore enable them adhere to the prescribed routes and destinations. They may also prove to be indispensible during recreational paragliding sessions, since they keep the pilot from getting lost, but they may not matter as much in this case since the sole purpose of recreational paragliding is adventure (Currer 7).

Radios, as is their basic function, assist the pilots in communication. This communication can be in the form of training instructions or basic information regarding the pilot’s intent to land. Different venues, being in different jurisdictions, usually prescribe specific sets of frequencies for use by paragliders. This is essentially aimed at keeping the activity within the bounds of legality and it curbs any attempts to the contrary.

Finally, as suggested by the name, variometers are used to detect thermal variations within the air so pilots can determine whether the adjacent air is rising or falling. In essence, this equipment helps the pilots to determine how they can position themselves so as to increase their respective rates of ascent (Whittall 111).

The Basics

As mentioned above, paragliding involves a physical launch pattern that requires the pilot to either run with the aircraft or have it towed into the air. For the former, a pilot can either choose the forward or reverse (backward) launch sequence, depending on wind direction and strength. In the forward launch, the pilot basically runs forward with the suspension cone behind him to gain lift-off sped. This move is inarguably much harder than its backward counterpart, in which case pilots do not align themselves with the direction of the wind and cannot determine if the wing (suspension cone) is in optimal condition before taking off. In the case of the reverse launch, the pilot faces the suspension cone before turning and running to gain lift-off speed.

Works Cited

Currer, Ian. Touching Cloudbase: The Complete Guide to Paragliding. York, UK: Air Supplies, 2011. Print.

Whittall, Noel. Paragliding: The Complete Guide. Guilford, CT: Lyons Press, 2000. Print.