CROSS COUNTRY PARAGLIDING

IN EGYPT

Thanks to the developed road infrastructure and sunny weather, Egypt has a good potential for unique desert cross-country paragliding flights.

Sahara is between the Equatorial Hadley and mid-latitude global circulation cells which results in vast and powerful high-pressure systems. The airmass subsidence creates inversions and suppresses cloud production which cause hot and dry desert climate. These subtropical latitudes are favorable for strong westerly winds and jet streams. Unlike Morocco, where winds from Atlantic bring cold and low-level humid air, Egypt is on the other side of Sahara and receives fully transformed dry continental desert air. However, the high mountains at the Sinai and Saudi Arabia coast work like efficient barrier which deflect the westerly winds to the south, along the Red Sea. The prevailing low terrain of Egypt allows easy penetration of geostrophic winds from various directions, but the most typical one are the north-westerly coming from the Mediterranean. They mean airmass advection from cooler areas and good temperature gradient. The northwesterly winds are present all year round, despite the seasonal travel of ETCZ, and are altered with westerly and south-westerly winds. Easterly winds are rare, except the local and limited sea breeze along the Red Sea coast.

Most of Egyptian mountains are near and along the Red Sea coast and help for the creation of a typical convergence line between the prevailing westerly and the sea breeze easterlies. The search of new take offs should be focused close to this convergence line which can offer calmer and less turbulent winds, 3-4-5000 meters high climbs and 2-3-400 kilometers XC flights.

East of Nile river there are two vast plateaus, north and south of St. Antony monastery. The existing takeoffs near Galala and Ain Sockhna are too close to the

sea and oriented for sea breeze winds. However sea breeze is not good for XC as it kills thermals and can produce turbulent conditions. It is better to look for new take offs more inland at the northern parts of these plateaus.

South of these plateaus are the scattered mountains and ranges 50 km west of Ras Gareb and Hurgada which seem promising for XC flights.

East of Nile river there are several 200 meters high ridges which can work for west and southwesterly winds, but the green Nile river basin might be athermic.

The mountain peninsula near Luxor which makes Nile River go around also have good potential for northerly and southerly winds but again the green Nile river basin might be too stable.

Al Fayum area has some 1-200 meter high ridges for southerly and northerly winds.

Generally, flying in Egypt is from low rocky ridges with abrasive and sharp stones which can easily damage a paraglider. Winds are moderate to strong. The dry air makes conditions more turbulent with difficult to catch thermals at low altitudes. Higher up it can be cool and smooth. During initial explorations it might be good to cover take off space with net to prevent lines being cut. Once good and reliable places are identified, then they can be further developed with road and smooth surface.