

Loop Flight League Table 2010

Contributed by Dave Evans
 Sunday, 16 May 2010
 Last Updated Saturday, 04 September 2010

The PSC loop flight league is open to all PSC members who complete a loop flight from a pennine club site. To enter, please send your GPS tracklog to the PG competition secretary, preferably as an IGC file, by using the "Contacts" link on the website.

Enter as many flights as you can, the best 6 will count. The contest will end on 31 December

All flight distances are in kilometres, the total column includes the multipliers.

PILOT	TOTAL	FLIGHT 1	FLIGHT 2	FLIGHT 3	FLIGHT 4	FLIGHT 5	FLIGHT 6	Paul Winterbottom
	133.312.72	X38.48	X3					
	X36.42	X35.07	X34.89	X3	Dave Evans	78.910.89	X210.7	X26.16
	X35.76	X3	Mark Wilson	73.511.71	X36.72	X36.06	X3	Cris Miles
	62.920.98	X3	Jonh Murphy	48.68.14	X38.34	X2	5.02	X1.5
	Graham Jones	48.25.83	X1.55.47	X1.55.38	X1.55.15			
	X1.55.14	X1.5	5.13	X1.5	David Southern	35.811.92	X3	Andy Archer
	34.16.08	X35.51	X1.5	5.03	X1.5	Phil Colbert	3411.34	
	X3	Paul Newsham	28.15.33	X1.56.08	X2	5.27	X1.5	Jim Ashley
	2412.01	X2	Michael Endacott	21.8	7.27	X3	Phil Wallbank	17.15.7
	X3	Ian Holland	7.95.27	X1.5	Dale Pickard	7.7	5.12	X1.5

Click on "Read more" for additional rules and information

Type of Loop Flight	Multiplier	Minimum Distance	Maximum Loop Gap	FAI Triangle
315 KM800 metres Out - Return	215			
KM800 metres Flat Triangle	1.515	KM800 metres	FAI Triangle	35 KM200 metres Out - Return
25 KM200 metres Flat Triangle	1.55	KM200 metres	Witness Out-Return	1NoneNone

Additional rules and information

A loop flight is one where the pilot returns to the start after flying off in one or more directions. There are 3 types that can be entered, with varying degrees of difficulty, that each earn their own multiplier. The FAI triangle is a flight with 3 turnpoints in addition to the start/finish point. The shortest leg of the triangle must be at least 28% of the total distance. This type of flight cannot normally be made using ridge lift only and so is more difficult to make than the others and has the highest multiplier. An out-return is a simple flight with only two turnpoints, you must return to the start point after visiting the out-point. The flat triangle is a flight with 3 turnpoints in addition to the start/finish point that doesn't satisfy the 28% rule. This is always the easiest loop flight to make and has the lowest multiplier. The minimum distance for these flights is 5km with a 200 meter loop gap.

An out-return flight can be made without a GPS, you must provide an accurate description or grid reference of the start and finish points (which MUST be in the same place!) and the turnpoint, send by email to the PG competition secretary. There is no minimum distance and no multiplier for this type of flight. Triangle flights must have a GPS tracklog to be valid. GPS flights that do not meet the 5km minimum distance can instead be entered as a witness out-return if the pilot requests this. (They will not be put on automatically, you have to ask)

If you save your flight using GPS Dump it will work out the distances for you. GPS dump can be downloaded from the official website. It is best to save the latest version to your computer. The program can communicate with most models of GPS and extract the tracklog. Highlight the section containing the loop flight and save it as both an IGC file and a KML file. Open the KML with Google Earth to see what the distances are. Send the IGC to the PG competition secretary to enter the flight. Remember to change the loop gap to 200 metres before processing the file, the default is 800 metres.

An easy technique when attempting to fly a closed loop is to pick an area of reliable lift and fly around there first for a bit. This leaves a good amount of track in one place that you can easily find again at the end. After flying off in one, two or three directions, and without landing at any point, return to the start and cross the track somewhere. This is easily achieved by flying about in the same area as at the start, the track is bound to cross somewhere. If there is a gap in the tracklog it can still be entered, but the loop gap will be deducted from the flight distance. The maximum allowed gap is 200 meters for flights between 5km and 15km. Any flight above 15km is allowed a loop gap of 800 meters, in line with the rules for the national XC league. The 5km minimum distance can be met before the loop gap is deducted, hence it is possible to make a valid flight that scores 4.8km with a multiplier.

Provided you do not land during the flight there is no restriction on where you may fly, only the distances between the turnpoints determines the score. This can be useful, especially with a triangle. It is possible to make a valid FAI triangle by flying less than 1km from the hill, by going off in 3 different directions and returning to the reliable lift at the hill between each turnpoint. Add to this the distance made in the ridge lift and it becomes very easy to make a flight that can be entered. Take this imaginary flight in the west bowl at Parlick for example. The triangle is the thin line in blue, the track is in red. The green patches are radio-active trees.

The triangle above uses a couple of thermals to push out at the southern turnpoint and to drift back a bit at the eastern turnpoint before crossing the original track back near take-off. It's about 6km around the blue line, so this would score 18 points for an FAI triangle. A flat triangle would look very similar.

Below is an example of an Out-Return flight on Pendle. It's totally fictitious but gives a good idea of what is possible. The flight starts with a launch on the Pimple and works towards the north end before coming back to land near the car park. The yellow lines are roads.

It's 4km from the launch point to the turnpoint near the north end, so this flight would score 8km of distance with a X2 multiplier for 16 points in total. It would score less as a flat triangle because the multiplier is lower. Most flights will score more as FAI triangles or out-returns but there are some situations when a flat triangle would score higher, for example the flight below on Longridge.

In this case, the take-off area is in the middle of the ridge and neither of the turnpoints at the ends of the ridge has been visited twice, so it cannot be entered as an out-return flight. A flat triangle here would score about 18 points.

I've completed flights similar to those drawn above many times, they are possible on any wing by any level of pilot, without leaving the hill. They are good examples of the types of flights that are needed to get above the minimum distances. It's more difficult to complete a loop flight large enough to put into the national XC league, with a minimum distance of 15km, but it's not impossible. Making a big loop like this will normally involve flying off and finding lift elsewhere, or even crossing from one hill to another and flying back.

Happy loop flying,

Dave