

## Starting to Soar Cross Country

Beginning this year, High Flights is putting some focus on the Online Contest. The Online Contest is a worldwide contest, developed and maintained in Germany, to encourage glider cross country flying and to provide some challenges beyond badge work.. Flights are recorded using a GPS logger and submitted "online" to be automatically scored for distance, adjusted for the handicap of the glider used. It has been outstandingly successful and is now world wide. There are 6000 participants in Germany. The US had 600 last year.

For the US contest, the logger does not have to be IGC certified, it can be a simple GPS or PDA with a GPS. At the end of day, you upload your log file on the internet to the OLC site, the flight is automatically scored and recorded. Your distance flown in kilometers is multiplied by the handicap for the glider used to arrive at your points for the flight. This means you can be successful flying a SGS 1-26 against a national champion flying the latest Ventus. If you want to know more, please go to the OLC website:

<http://www.ssa.org/members/contestreports/OLC.htm>

There are other aspects to the OLC competition, but the OLC goal is to keep it as simple as possible and to encourage flying. Last year the OLC recorded over 17,000,000 kilometers in glider cross country worldwide.

Dan Daly has provided us with a handsome plaque to record our year end OLC standings for each year. The plaque lists the final club standing for High Flights and the top 3 club members in the individual standings. Dan's plaque represents a challenge to the club to encourage more cross country flying.

Our final standing the last few years has not been particularly distinguished:

2003	Did not participate
2004	37th of 60 with 2645 points
2005	54th of 90 with 2690 points

In 2005 here is how other nearby clubs did:

Albuquerque	153,406 points
Soaring Society of Boulder	78,859 points
Black Forest Soaring Society	68,869 points
Colorado Soaring Association	23,554 points

So far in 2006 the standings are:

Albuquerque	6,635 points
Soaring Society of Boulder	3,869 points
Black Forest Soaring Society	1,214 points
Colorado Soaring Association	348 points
High Flights Soaring Club	0 points

We need as a club to encourage more flying and more cross country flying. In the OLC, for club statistics, all flights count. So you can generate points by either flying far or flying a lot. I'd like to see use have a goal of 10,000 OLC points for 2006 and at least 12 HFSC members participating. Not a huge amount compared to other nearby clubs, but 4 times what we've done the past 2 years.

To encourage members to begin to fly cross country, we have developed a set of tasks for the area around Meadowlake to help you get started. These task start small, only a few kilometers, in order to allow people familiarize themselves with flying a task and flying with the logger. The tasks increase in size to include a couple of 100 km tasks.

**Note: You should learn your logger and it's operation on the ground not in the air. The purpose of the short tasks is to allow you to see how the logger responds in flight as you start a task, make turn points, and finish.**

Below are the handicaps for the HFSC glider fleet. The OLC points awarded for a flight is the optimized distance in kilometers divided by the handicap (or multiplied by the point multiplier in the table). For a flight to count in the rankings, it must score a minimum of 50 points.

<b>HFSC Glider Handicapps</b>					
<b>Glider</b>	<b>OLC Handicapp</b>	<b>Point Multiplier</b>	<b>Distance for OLC 50 point minimum score</b>		
			<b>Km</b>	<b>Miles</b>	<b>NM</b>
SGS 1-26 A,B,C	61	1.64	30.5	18.95	16.47
SGS 1-26 D,E	63	1.59	31.5	19.57	17.01
Blaink L-13	76	1.32	38	23.61	20.52
SGS 1-34	83	1.20	41.5	25.79	22.41
Grob 103 /ASK 21	92	1.09	46	28.58	24.84

Note, the last entry above represents wishful thinking. The SGS 2-33 actually has the best handicap, but its use to fly cross country is strong discouraged!

In order to develop some short tasks in the area of Meadowlake, some additional waypoints were needed. Below is a table of these additional waypoints. You will need to enter these in your logger, flight computer, and/or flight planning and analysis software in order to load the standard tasks.

<b>HFSC Local Way Points</b>					
<b>Name</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Elevation</b>	<b>Style</b>	<b>Code</b>
HFSC-Big R	N38°57'48"	W104°33'58"	6889 ft	Waypoint	HFSC-1
HFSC-Elementary School	N38°58'55"	W104°35'22"	7129 ft	Waypoint	HFSC-2
HFSC-Peyton	N39°01'58"	W104°28'55"	6835 ft	Waypoint	HFSC-3
HFSC-RC Field	N38°57'32"	W104°30'04"	6679 ft	Waypoint	HFSC-4
HFSC-Red Barn	N38°53'39"	W104°29'33"	6404 ft	Waypoint	HFSC-5
HFSC-Safeway	N38°56'27"	W104°36'09"	6881 ft	Waypoint	HFSC-6
HFSC-Trails	N39°01'02"	W104°34'56"	7148 ft	Waypoint	HFSC-7
HFSC-Simla	N39°08'30"	W104°05'08"	5991 ft	Waypoint	HFSC-9

Below is the list of standard tasks that have been laid out for the Meadowlake area. All of the points are either in the table above or are recognized waypoints in the databases from the Worldwide Soaring Turnpoint Exchange, <http://soaring.aerobatics.ws/TP> . The latitude and longitude of all points appear on the task sheets for each task as well as the course (bearing and distance) to the next waypoint.

Meadowlake Area Tasks						
Task Name	Start Turn Points Finsh	OLC Dist.		OLC Points		
		NM	KM	1-26E	1-34	L-13
Task01 Logger Practice Task 1	Safeway Big R - Elem. School Safeway	6.3	11.6	18.44	13.92	15.31
Task02 Logger Practive Task 2	Safeway GW Flanders Ranch - Trails Safeway	10.8	20.0	31.80	24.00	26.40
Task03 Short Cross Country	Safeway Red Barn - RC Field Safeway	14.6	27.1	43.09	32.52	35.77
Task04 Minimal OLC	Safeway Trails - Peyton Safeway	17.3	32.1	<b>51.04</b>	38.52	42.37
Task05 Small OLC Task	GW Flanders Red Barn - Peyton GW Flanders	24.1	44.7	<b>71.07</b>	<b>53.64</b>	<b>59.00</b>
Task06 65 km Tirangle	Colorado1 Ellicot - Calhan Colorado1	35.1	65.0	<b>103.35</b>	<b>78.00</b>	<b>85.80</b>
Task07 100 km Triangle	Colorado1 Peakview - Mountainsview Colorado1	50.5	93.5	<b>148.67</b>	<b>112.20</b>	<b>123.42</b>
Task08 Silver Distance Out &Return	Colorado1 High Mesa Pic Colorado1	55.5	102.8	<b>163.45</b>	<b>123.36</b>	<b>135.70</b>
Task09 Silver Distance Out &Return	Colorado1 Simla Colorado1	54.0	100.0	<b>159.00</b>	<b>120.00</b>	<b>132.00</b>
Task10 Wombat Recovery (Note only Legs to Kelly scored)	Colorado1 Calhan - Kelly (Land) Colorado1	33.8	62.6	<b>99.53</b>	<b>75.12</b>	<b>82.63</b>

Here is a sample of a task sheet with a sectional background. It shows the tasks with Start and Finish lines and turn-point sectors. It is up to you to finish planning the task, determining minimum altitudes to make it to a safe landing site, assuring you have information about potential landing sites, radio frequencies, entering the necessary data in the logger, etc. In the lower right corner of the sectional is a distance scale, accurate for this specific view of the sectional. All of the task sheets will be available online at the HFSC web site as PDF files.

**Type: Triangle - (17.3nm) [32.1pts]** **Minimal OLC Scoring**

**Task distance: 17.3nm**

Style	Code	Points	Latitude	Longitude	Dis.	Order
Take off	COLO1	COLORADO1 SPRING	N38°57'01"	W104°34'25"		0
Start	HFSC-5	HFSC-Safeway	N38°56'27"	W104°36'09"		1
1.Point	Trailam	Trails Horse Barn	N39°01'02"	W104°34'56"	4.7nm	2
2.Point	Peyton	HFSC-Peyton	N39°01'58"	W104°28'55"	4.8nm	3
Finish	HFSC-5	HFSC-Safeway	N38°56'27"	W104°36'09"	7.9nm	4
Landing	COLO1	COLORADO1 SPRING	N38°57'01"	W104°34'25"		5

You don't need to have a task declared for a flight to be eligible to be submitted to OLC. However you do need to fly with a logger and submit a properly formatted file. The file does not have to be secure so a log from a PDA flight computer or possibly a Garmin GPS could be submitted. It must include altitude. It must be complete, i.e., no dropouts, The OLC server will optimize the possible task you might have flown when the log is submitted. Declaring and flying a task allows you to have an idea how many OLC points you might achieve as well as provides practice in declaring and flying a task for silver, gold, and diamond badges or competition.

Club rules require members to have completed the Bronze Badge prior to flying further from Meadowlake than a safe gliding distance back. This means the only the first 2 tasks are really available to folks prior to achieving their Bronze badge.

Once you decided to start down the path to enjoying the challenges and rewards of cross country soaring, you should select a club member or 2 as mentors to assist you in planning your task and learning and setting up the equipment. You should continue your soaring reading program. There are numerous books available on both beginning and advanced cross country soaring. Recommended readings are:

FAA Glider Flying Handbook

Soaring Cross Country by Byars and Holbrook

The Art of Thermaling *Made Easy* by Bob Wander

Glider Polars and Speeds to Fly *Made Easy* by Bob Wander

Winning II by George Moffat

From the Bob Wander Mentor Series:

Breaking The Apron Strings: Soaring Cross Country by Petmecky

Cross Country Manual For Glider Pilots by Dean Carswell

I hope this initial work will get more folks flying and doing more challenging things with their flying than just to seeing what is happening in the backyards of our neighbors!