



HIGH FLYER



The Official Newsletter of High Flights Soaring Club, Inc
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High Flyer is mailed free to HFSC members and other soaring associations. Please mail exchange newsletters, letters to the editor, and material for publication to: John Scott, newsletter editor; 885 Northfield Rd, Colorado Springs, Colorado 80919; [jdscott at valleypine dot net](mailto:jdscott@valleypine.net)

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Skies over Morarity first day of Safari.

Club and Member Notes

The club roster and duty schedule are available on-line at the club website. **Members are responsible for knowing when they have duty!** Here are the direct links to key pages on the club website:

[HFSC Rooster and Member Accounts](#)
[Current Duty Schedule](#)
[Glider/Tow reservations](#)

Please remember to **check the online reservation** the evening before your duty assignments to see if we will have early training activity scheduled. If we do, then you will need to be at the field early, 0800, otherwise, you can arrive by 0930 as usual.

Next Board Meetings – July 17th and Aug 14th. All club members are invited (encouraged) to attend. Board meetings are held in the HFSC Ops Trailer.

89H is back and ready to fly. We have tied up the new CG release to protect it until we're ready to use it.

7AS has also returned to flying status. The vario speaker has been replaced.

Lots of news on the badge and licenses:

Kevin Williams has gotten his Glider Private Pilots License.

Benjamin Bookman has Soloed.

Bill Bowman has soloed a glider.

Mike Gallops has completed his BFR and is back flying again.

A Badges have been awarded to:

Benjamin Bookman

Bill Bowman

Mike Gallops

A B Badge has been award to:

Benjamin Bookman (he just missed on his solo flight, so he flew an hour on his second solo flight!)

A Bronze Badge has been awarded to **Kevin Brooks**.

Badge Camp went well this year. No badges were earned and we did lose 2 days to weather, but did get a lot of flights in and some good training.

We are flying on **Wednesdays** again this year. We've gotten off to a little bit of a slow start but we're hoping for better weather thru the rest of the summer.

Here is a link to a new glider promotional video:

<http://www.youtube.com/watch?v=u1WEX2Cxld4>

While we were in Moriarty, Bob Carlton was flying his 2-seat Bonus Jet Glider. **Marty Grove** ran his wing on one launch that was caught on video:

<http://www.youtube.com/watch?v=ocEWmyjWOUM>

While in Moriarty we visited the **South West Soaring Museum**. Many, many interesting things to see. One thing that caught my eye was a Slingsby T21 glider. The T21 is a 2 place, side-by-side open cockpit, high wing trainer. When I looked in the cockpit, I saw my first "pellet vario"



A reminder about **Oxygen** use: I'd like to suggest you consider turning the oxygen on, installing your cannula, and setting the flowmeter as part of your regular pre-flight. It can't hurt. For those of use past 60, it might be a good idea to regularly use oxygen when above 10,000'. You'll probably feel better and it will help keep you sharp.

From Dan Daly

... pics encl - one of my glider just after arrival, ... The snow came before I could complete the import inspections and satisfy our version of the FAA that it was up to snuff. SZD55 is about 43:1, according to Dick Johnson, and the wings are just over 100 lbs (half the Austria wings), and the Avionic trailer makes rigging quick.

Mine is 1990 (first year of production), serial #001 - first production 55. About 650 hrs. Just went through a factory overhaul following a "tree meeting" in Sweden. New left wing, some work on tail, new canopy. I've put new 57mm instruments in, a b500 computer, and will use an IPAQ with pocket strepla - my panel is tight (unless you look at John's). New Avionic trailer.



More from Dan...

Hi John - finally got airborne in my newer szd-55, 2D. Someone broke my TE probe, and I had no variors, but flew 2 hours. I like it, it goes! Wings are light - 110 lbs, so easy for 2 even with bad backs. Next time I'll bring my Volkslogger. After 2 hrs, I also have some seating position changes to make.

Here's a pic a friend took from his LS-6 (note he's looking up at me).



You would have been proud - I turned right a lot as I used all other gliders for vario-substitutes! It was a 90F, 90% humidity day, low ceiling (3,000 agl), and quite tiring (after spring check and annual spin check).

I'm being moved to Ottawa and should arrive there 15 July, so another summer soaring season shot - but I'm going to try a 500 before I go; difficult but not impossible (3-4 kt averages, 4-5,000 ceiling).

New TE probe coming from Paul Remde, so I should be self-sufficient next time.

I only wish the euro had been where it is now when I had bought.

Moriarty Safari – John Scott

Marty Grove, Gil Gildersleeve, Mark Huff, and I traveled to Moriarty, NM in pursuit of Silver and Gold badge legs. We took 22S, 643, and my APIS. While we had much higher than expected winds, strong cross winds, and more “blue” days than we had hoped for, we did get some good flying done.

Moriarty is in a large valley east of the Sandias, east of Albuquerque. They have strong lift and the terrain is very landable for miles in all directions. It is a great place to try cross country.



300hp CalAir Tow Plane



Ramp on Thursday

We made map books for both Silver and Gold badge tasks. The books showed the sectional area near the airport, many selected landable field along the task route with altitude circles, and with Google Earth photos of the landout fields to make identification from the air easier. All in all it was a good trip. We're currently hoping

to go back in early September for another try. If interested in joining us, let me know. Below are write-ups from Marty and Mark about the trip.

Morairty Trip – Mark Huff

I arrived at Meadowlake around 10:00 a.m. June 13 and with the assistance of Marty Grove and Kevin Brooks, we disassembled 22S and loaded it on its trailer while the Board of Directors meeting was occurring. The safari trip to Moriarty New Mexico began with a departure from our club about 2:00 p.m. Sunday June 13. We arrived at the Moriarty airport about 9:00 p.m.; we unhooked our glider trailers at the airport and proceeded to the Super 8 hotel.

We awoke early Monday morning anticipating our first day of soaring with a weather forecast indicating great potential. We ate a hearty breakfast and drove to the airport where we first assembled our gliders. By 11:00 a.m. the gliders were assembled and pre-flight inspected. I took one of the early tows to 1,800 feet and attempted to thermal with only limited success. I quickly took another tow to 2,000 feet and again struggled to stay aloft. My first 2 flights did provide me with enough time aloft to look over the local area and identify any local landing areas if needed. The only drawback I see to flying at Moriarty is the absence of a suitable crosswind runway. The runways are east/west 8 and 26. My third tow however resulted in my longest flight of 2 hours 45 minutes on this safari and I earned my silver badge altitude gain on that flight by thermaling to 13,800 feet.



Tuesday we again had a hearty breakfast and headed to the airport with a forecast for great soaring potential. We waited until around noon for the thermals to start and I took another tow to about 2,000 feet. I again struggled to stay aloft and had a short duration flight. The winds were quartering headwinds from the east with gusts sometimes occurring from the south. I had an uneventful landing on runway 8 and tied 22S to the cable.

Wednesday was windy with a strong crosswind component, so we all decided to not fly that day. We had pre-arranged to meet Steve Smith and Jenny Chiang in Albuquerque for dinner that evening. We departed for Albuquerque so as to have adequate time to visit the National Museum of Nuclear Science and History. I found the museum to be worthwhile and a good refresher of the history of nuclear science.



Thursday was another windy day with a quartering crosswind component. We watched several locals launch in their high performance glass ships and most successfully thermaled to altitudes where they could start a cross country trip. I launched in 22S and was again unsuccessful gaining much altitude and landed with after short flight duration.

Friday we watched the skies and waited for the thermals to develop. By 11:00 the wind was again gusting, and I decided to disassemble 22S, load it on the trailer and head for home.

All in all, the trip was very enjoyable and inexpensive. I hoped to achieve more of the silver badge segments while there, but the weather can be unpredictable and uncooperative. The wind on this trip was shearing the thermals. Moriarty is a soaring Mecca and home to many high performance gliders and their pilots. One glider I found to be the most unique is Bob Carlton's 2 seat glider with a jet engine, and we watched him fly it many times during our visit. Other benefits of a safari to Moriarty are the available other interests if the weather is uncooperative: the Southwest Soaring Museum in Moriarty is worth visiting and Albuquerque is not far away with many attractions.

I enjoyed my safari trip to Moriarty and I hope more club members will join the next safari. My thanks again to Marty Grove, Gil Gildersleeve, John Scott and others for their efforts assisting me.

Gold Badge Attempt at Moriarty New Mexico

Marty Grove, 6/18/2010

On Friday morning, John Scott, Mark Huff, Gil and I all met for our customary breakfast before heading out to the Moriarty airport. Expectations for the day were pretty low since the previous two days had strong winds and broken thermals. We had driven down to Moriarty the previous Sunday on a 5-day soaring safari. Great flights are consistently made in Moriarty and we all had high expectations. Monday and Tuesday were pretty decent days with our flights reaching 15,000 feet MSL, durations reaching 3.5 hours and leg distances up to 50 km. Steve Smith was also there and completed his BFR



in a Grob. Wednesday had 25 knot cross winds out of the South and none of us flew that day (the Moriarty airport runs East and West). We used the day as an opportunity to tour the National Soaring museum in Moriarty and the Nuclear Science museum in Albuquerque. At the end of the day, we met Steve and Jennie in Albuquerque for a wonderful dinner and great conversation. On Thursday, the winds were still strong at 20 knots from the Southwest. Gil and Mark flew, but couldn't stay up. The thermals were broken up by high winds.

Gil and I were alternating days to fly the 1-34 and Friday was my turn. For a Gold distance attempt, you really need the glider for the whole day. The forecast was still showing pretty strong winds out of the Southwest. This time of the year in Moriarty, the thermals peak at around 4:00 PM. During breakfast conversation, we figured that the best chance for the day was to take an early tow before noon, before the winds got too strong, and try to get as high as possible milking early thermals. Then, when the thermals were working well, head out on a distance task. This is exactly what I did. I was able to get high and head out on my first serious attempt at Gold distance.

I found a good thermal near the airport that took me to 16,000 feet. Then I pointed the glider South and headed out towards Claunch, my first turn point, 93.3 km away. The day's forecast on XC Skies showed that no clouds would develop in the valley. Without clouds to indicate thermals, I would have to guess at

where the thermals might be based on other indicators such as dust devils, birds, and land features. That morning I had loaded an upwind Gold distance polygon with three turn points, all South or West of the airport (Moriarty to Claunch to Sandia Estates East to Mountainair and back to Moriarty). The total distance was 316 km and all the turn points had good landing options.

I didn't make great progress bucking the Southwest winds which were 25 knots at 16,000 feet. It took 2 hours and 23 minutes to finally get to Claunch with an average speed of 25 mph. About midway through the leg, I struggled to find lift and got down to 9900 feet MSL. I altered course to the West where there were more ridges that I hoped would kick off thermals. I was correct but it took a lot of extra precious time off course to find a good thermal. There was a good landing option to the West at the Mountainair strip if I had to land. After thermalling to 16,300 feet, I pointed the Glider Southeast and headed to Claunch.

The leg from Claunch to Sandia Estates East was 106.5 km. With the tailwind component, I flew this leg in 1 hour and 7 minutes at an average speed of 60 mph. Boy, a tailwind sure makes a difference! Along the way, I found a thermal good enough for Gold altitude. I had released from tow at 7936 feet MSL (1736 feet AGL), and that was my low point, so I needed to get to 17739 feet for Gold altitude. At 17,800 feet, I pulled the spoilers and quickly lost a couple hundred feet. If you exceed 18,000 feet MSL without authorization from ATC, the badge flight is not accepted by the SSA. So, my margin for error was pretty tight. My logger is out of calibration so I won't know if I earned Gold altitude until I get the calibration data back. In retrospect, I should have sent the logger in for calibration before the soaring season began so that I would know the calibration error at 18000 feet. For altitude claims, you have to correct for pressure and calibration errors. For anyone using a GPS logger and attempting Gold altitude at Meadowlake, you would be wise to look at the calibration data ahead of time. The margin for error is pretty slim. (*Editors Note: During Marty's flight, we learned from the local pilots that a window can be opened with ATC in Albuquerque that would have allowed thermalling above 18,000'. At least now we know for the next trip!*)

My next turn point after reaching Sandia Estates East was Mountainair, 62.5 km to the South. Unfortunately, I couldn't hook a good thermal and lost a lot of altitude. I decided to head East back towards Moriarty in case I needed to land. At this time, Gil was my only ground crew for a retrieval. John was leaving shortly and Mark had already packed up and left earlier in the day. I got down to 8900 feet MSL and had pretty much lost any hope of completing the Gold distance, when all of the sudden, I hooked a strong thermal over the airport that I rode to 17,600 feet. I had new hope and confidence but not much time to work with. It was already 5:00 PM.

I decided not to buck a direct headwind. With Gold distance flight declarations, you only have to make it to one of your turn points. The other turn points can be chosen during the flight. Mountainair was in the direction of the wind, so I headed on a more crosswind course to the South. I still needed to get back to Moriarty so I didn't want to fly downwind. A crosswind course seemed like the best option. I hooked another good thermal just South of Estancia and thought I had Gold distance in the bag. But then something incredibly disappointing happened. The Volkslogger screen went blank. The Gold distance attempt was shattered. I still had hope that the log thus far was intact for a Gold altitude claim. I turned the glider back towards Moriarty and landed after 5 hours and 45 minutes of flying. I had to bleed off about 8000 feet of altitude between Estancia and Moriarty and flew with the dive brakes open part of the way.

After getting home, I discovered that my 2.2AH, 12V battery used to power the Volkslogger, was reading below 9.5 volts under load. I was running both a Volkslogger and an IPAQ off this battery. The Volkslogger won't run below 9.5 volts. Had I done some simple power calculations before the flight, I

would have discovered that the Volkslogger and IPAQ together draw 400mA (the Volkslogger alone draws 120mA). My battery can only source both instruments for a little over 5 hours, which wasn't enough time for my Gold distance flight. Next time, I think I'll leave the IPAQ at home or I'll use a bigger battery.

Fortunately, the log up to 5 hours and 9 minutes was intact and can be submitted for a Gold altitude claim. I was also able to submit the igc log file to the OLC (online contest) and earned 306 points, which is my personal best.

In summary, this was a great flight and I learned some valuable lessons to better prepare me for the next time I try for Gold. Moriarty is a great place to fly with strong lift and excellent landing options up and down the valley. The tows to 2000 feet cost about \$50. The staff at Sundance Aviation is very friendly and very accommodating. The biggest downside to Moriarty is the strong wind that often occurs. That said, I'll definitely go back next year on our June safari. I encourage any of you, who may be interested in badge flying, to go as well. I want to thank John Scott for setting up this safari and Gil for helping me trailer the 1-34 after a long hot day in the sun.

[Editor's Note: Here is the URL to Marty's flight.

<http://www.onlinecontest.org/olc-2.0/gliding/flightinfo.html?dsId=1318406>]

Badge Flight Gotchas

Following are gotchas that will invalidate a badge flight. HFSC members have experienced many of these gotchas.

1. **Flew into class B or C controlled airspace or restricted areas without clearance.** At Meadow Lake, you have to be very careful not to intrude on COS class C airspace. The boundaries of this air space are recorded on a satellite map in the operations trailer.
2. **Flew into class A airspace without ATC clearance.** This is easy to do if you're trying for Gold Altitude above Meadow Lake airport. Class A airspace starts at 18000 feet MSL. Meadow Lake airport elevation is 6874 feet and Gold altitude requires a climb of 3000 meters or 9843 feet. This means that you must get lower than 1283 feet AGL before climbing. Remember that altitude claims use true altitude which has been corrected for non-standard pressure and logger errors (see <http://www.ssa.org/files/member/B&RGuide.pdf>). Also, if you're basing your altitude on the altimeter rather than the logger, you will have to consider the altitude difference between these two instruments. Finally, don't forget that these instruments have lag. If you're in a strong thermal, you can easily overshoot 18000 feet before the altimeter or logger catches up.
3. **Flight declaration didn't meet minimum distance.** Cylinder turn points typically have a 500m radius that will be subtracted from the leg distance. For example, if you've laid out a triangle course, you need to add 3km to the badge distance requirement (see <http://www.ssa.org/files/member/B&RGuide.pdf>).
4. **Didn't actually fly through all of the turn points.** If you're flying with sector turn points, then you need to ensure that you actually enter each sector during the flight. The Volkslogger provides an audio signal when you enter a cylinder turn point. You should always fly just a little further after entering the turn point cylinder for margin. Note that many distance flights don't require you to use all of the declared turn points. However, Diamond Goal does require that you fly through all of the declared turn points in the declared order (see <http://www.ssa.org/files/member/B&RGuide.pdf>).

5. **Forgot to connect the logger to the battery before takeoff.** The logger requires a minimum of 4 satellites for position fixes. This can take up to 5 minutes with the Volkslogger.
6. **Forgot to clear the previous flights from the logger memory.** The Volkslogger has 10 hours of recording memory with 4-second intervals. The recording interval is typically 2 or 1 second near turn points so it actually has a little less than 10 hours of memory with these typical settings. Note that the default setting for the Volkslogger is to sound an audio warning at periodic intervals when the recording memory is less than 8 hours.
7. **Didn't understand how to operate the logger.** If you're using the logger for navigation and turn point validation, some basic operating instruction is recommended before starting the flight.
8. **Forgot to charge the logger battery or the battery didn't have enough capacity.** It's a real bummer when the battery dies before the end of the flight. The Volkslogger uses 120mA at 12V. It shuts down when the voltage drops below 9.5V.
9. **Forgot to charge the glider battery or the battery didn't have enough capacity.** The 1-34 glider does not have a mechanical variometer. If the battery dies, you have no variometer, making it difficult to stay in lift. Also, the current radio in the 1-34 draws a lot of power so you may want to augment it with a handheld radio for long duration flights.
10. **Forgot to test or turn on the oxygen.** In many gliders, you can't access the oxygen bottle while flying.
11. **Flew without a current logger calibration.** This is actually no big deal. You have up to one month after the flight to have the logger calibrated. The logger calibration is valid for 24 months. However, if you're trying for Gold altitude, you may want to look at current logger calibration data to ensure proper altitudes are achieved.
12. **Flight distance wasn't long enough after applying the altitude penalty.** Refer to <http://www.ssa.org/files/member/B&RGuide.pdf> for altitude penalty rules.
13. **Flight declaration was invalid.** When flying with a logger such as the Volkslogger, the flight declaration is recorded within the logger and is date and time stamped when the logger is connected to the battery source. Ensure that the flight declaration loaded into the logger includes your correct name, aircraft identification and turn points. If it doesn't and you don't have access to a computer to change it, you can fill out a written declaration, with a date and time shown after the logger was connected to the battery, that will override the electronic declaration. Flight declaration forms are available from the SSA web site at <http://www.ssa.org/myhome.asp?mbr=5361749529&show=blog&id=938>.
14. **Forgot to identify an official observer before the flight.** An official observer is required for all badge claims. Even when flying with a logger, the official observer ensures that the pilot did not alter or substitute the flight log file (igc file).

Other useful information that might prevent a gotcha is available on the SSA web site at <http://www.ssa.org/myhome.asp?mbr=5361749529>. It's a good idea to use a badge flight checklist to avoid these pitfalls.

Soaring Badge Flight Checklist

Marty Grove

Last Updated: 6/21/2010

Trailer, Ground Crew and Communication

- Make arrangements with ground crew for retrieval.
- Inspect trailer for tire pressure, pins, carpet, lights, license and registration.
- Setup communication arrangements with ground crew.
- Cell phone and phone contact numbers available.

Glider Preparation

- Disassembly tools in cockpit.
- Tie down kit in cockpit.
- Battery charged and in cockpit.
- Oxygen on and tested.
- Oxygen mask in cockpit.
- Microphone in cockpit.
- Radio operating.
- Perform assembly pin inspection and positive control check.

Navigation and GNNS Flight Recorder

- Charge logger battery.
- Select official observer who will be available for flight duration.
- Determine good land out options along route.
- Get the latest soaring forecast along route.
- Clear logger flight track memory.
- Upload flight declaration to logger.
- Put logger in cockpit and turn on within 10 minutes of takeoff.
- Bring sectional chart(s) covering route.

Miscellaneous

- Pilot license.
- Water and snack.
- Money.
- Time watch.
- Rain coat.
- Flash light.
- Pea bags and toilet paper.
- Hat, sun glasses and sun screen.

Current Duty Schedule

Effective Date: 8-Jul-10

Day	Date	Chief	Line	Tow
Wednesday	14-Jul	n/a	n/a	Bruce Mosier
Saturday	17-Jul	Dub Wiltrout	Benjamin Bookman	Jim Densmore
Sunday	18-Jul	Frank Molli	Kevin Williams	Paul Antoinette
Wednesday	21-Jul	n/a	n/a	Bill Bowman
Saturday	24-Jul	Jim Van Namee	John Lingwall	Jim Densmore
Sunday	25-Jul	John Scott	Mark Buist	Paul Antoinette
Wednesday	28-Jul	n/a	n/a	
Saturday	31-Jul	Mark Huff	John Browning	
Sunday	1-Aug	Marty Grove	Mike Bratlien	
Wednesday	4-Aug	n/a	n/a	
Saturday	7-Aug	John Norton	Mike Gallops	
Sunday	8-Aug	Kevin Brooks	Karl Gordon	
Wednesday	11-Aug	n/a	n/a	
Saturday	14-Aug	Jim Van Namee	Benjamin Bookman	
Sunday	15-Aug	Frank Molli	Kevin Williams	
Wednesday	18-Aug	n/a	n/a	
Saturday	21-Aug	Dub Wiltrout	John Lingwall	
Sunday	22-Aug	John Scott	Mark Buist	
Wednesday	25-Aug	n/a	n/a	
Saturday	28-Aug	Mark Huff	John Browning	
Sunday	29-Aug	Marty Grove	Mike Bratlien	
Wednesday	1-Sep	n/a	n/a	
Saturday	4-Sep	John Norton	Mike Gallops	
Sunday	5-Sep	Kevin Brooks	Karl Gordon	
Monday	6-Sep	n/a	n/a	
Wednesday	8-Sep	n/a	n/a	
Saturday	11-Sep	Jim Van Namee	Benjamin Bookman	
Sunday	12-Sep	Frank Molli	Kevin Williams	
Wednesday	15-Sep	n/a	n/a	
Saturday	18-Sep	Dub Wiltrout	John Lingwall	
Sunday	19-Sep	John Scott	Mark Buist	
Wednesday	22-Sep	n/a	n/a	
Saturday	25-Sep	Mark Huff	John Browning	
Sunday	26-Sep	Marty Grove	Mike Bratlien	
Wednesday	29-Sep	n/a	n/a	
Saturday	2-Oct	John Norton	Mike Gallops	
Sunday	3-Oct	Kevin Brooks	Karl Gordon	